Development of Performance Measurement Instruments in Higher Education

Discussion Paper

December 2011
1. Introduction

In 2008, the Government launched a major review to examine the future direction of the higher education sector, its fitness for purpose in meeting the needs of the Australian community and economy, and options for reform. The review was conducted by an independent expert panel, led by Emeritus Professor Denise Bradley AC. The panel reported its findings to the Government in the Review of Australian Higher Education (the Review) in December 2008. The Review made 46 recommendations to reshape Australia’s higher education system.

In the 2009-10 Budget, the Government responded to the recommendations of the Review with a ten-year plan to reform Australia’s higher education system, outlined in Transforming Australia’s Higher Education System. The Government’s response was based on the need to extend the reach and enhance the quality and performance of Australia’s higher education system to enable it to prosper into the future.

To extend reach, the Government holds an ambition to increase the educational attainment of the population such that by 2025, 40 percent of all 25-34 year olds will have a qualification at bachelor level or above. The Government also seeks to increase the higher education participation of those people who are currently underrepresented in higher education. In particular, by 2020, the Government expects that 20 per cent of higher education enrolments at undergraduate level will be of people from low socio-economic backgrounds.

Reforms announced to achieve these ambitions included the establishment of the Tertiary Education Quality and Standards Agency, the introduction of the demand driven funding system and significantly improved indexation on grants, Performance Funding and mission based Compacts.

The Government’s response to the Review shares a number of features with reform agendas in other areas of “human capital development” such as health, employment services, and disability services that are being implemented in Australia and internationally. These common features include: opportunities for citizens to exercise greater choice between alternative providers; the introduction of funding that “follows the consumer” and thus gives them more power in the service relationship and strengthens incentives for providers to tailor their offerings to citizens’ requirements; improved regulation to ensure minimum quality standards; and improved information on performance to allow citizens to make better informed choices.

The Government’s efforts to improve performance reporting and transparency are aimed at enhancing the quality of information available to students, to give them greater confidence that the choices they make are the right ones for them. The performance of universities has a number of domains, including but not limited to: research, teaching, financial performance, student experience, the quality of learning outcomes and access and equity. Each of these domains has a specific mechanism or tool (sometimes more than one) designed to capture relevant information about performance in that domain. For example, the Excellence in Research for Australia (ERA) process captures information about research performance; access and equity outcomes are captured through student data collections that include markers for low-SES status; and TEQSA will be implementing teaching standards by which the performance of universities will be measured.
Similarly, the three performance indicators that are the subject of this paper are designed to capture information about how universities perform in the domains of student experience and the quality of learning outcomes. There are likely to be synergies and complementarities with other tools, for example, TEQSA’s teaching standards. They therefore should be seen as part of an overarching suite of performance measures and mechanisms that are designed to capture information across the most relevant domains of university performance, necessary for improving the information available to students as they seek to exercise the choices that are now open to them in the demand-driven system. It should be noted that the newly created MyUniversity website will be used for presenting information to students about performance across the various domains.

1.1. Performance Funding

In late 2009, the Department convened an Indicator Development Group comprised of experts in the higher education sector. The group assisted in the development of a draft indicator framework, outlined in the discussion paper, *An Indicator Framework for Higher Education Performance Funding*, which was released for consultation in December 2009. The paper proposed 11 possible performance indicators in four performance categories. 61 submissions from the sector were received in response to the discussion paper.

The Government considered the feedback received and refined the framework to include seven indicators in three performance categories: participation and social inclusion, student experience and the quality of learning and teaching outcomes.

The Government released draft Performance Funding Guidelines for discussion in October 2010. The draft Guidelines provided details on the proposed implementation of the Performance Funding arrangements. The Government received 44 responses to the draft guidelines.

In the 2011-12 Mid Year Economic and Fiscal Outlook (MYEFO) the Government announced that it would retain Reward Funding for universities that meet participation and social inclusion targets. The Government discontinued Reward Funding for student experience and quality of learning outcomes indicators in the context of the Government’s fiscal strategy and on the basis of feedback from the sector that there was no consensus on the issue of whether it is appropriate to use such indicators for Reward Funding.

Universities have acknowledged the need to develop a suite of enhanced performance measures for providing assurance that universities are delivering quality higher education services at a time of rapid expansion. The Government will focus on the development of student experience and quality of learning outcomes indicators for use in the MyUniversity website and to inform continuous improvement by universities. The Government has agreed that three performance measurement instruments will be developed over the duration of the first Compact period: a new University Experience Survey (UES), an Australian version of the Collegiate Learning Assessment (CLA) and a Review of the Australian Graduate Survey (AGS). The Government has removed the composite Teaching Quality Indicator (TQI) from the performance indicator framework since universities have made a reasonable case that university performance is best measured using output rather than input indicators.
Final Facilitation Funding and Reward Funding Guidelines and Administrative and Technical Guidelines will be released on the Department’s website in December 2011. These will provide an outline of the final Performance Indicator Framework and Performance Funding arrangements.

1.2. Advancing Quality in Higher Education

In the 2011-12 Budget, the Government released details of its Advancing Quality in Higher Education (AQHE) initiative designed to assure and strengthen the quality of teaching and learning in higher education. The announcement provided more information on the new performance measurement instruments being developed and the available funding for developing the instruments. The consultation processes for the initiative were also outlined including the establishment of an AQHE Reference Group to advise on the development and cohesiveness of the performance measurement instruments. The AQHE Reference Group will also assist in the development of discussion papers for each of the instruments. Roundtable discussions with universities, business and students will also be held later in 2012.

1.3. Purpose of this paper

This paper discusses key issues in the design of the performance measurement instruments, assesses their fitness for purpose and their ability to operate together in a coherent way to obtain a comprehensive view of the student’s undergraduate university experience and learning outcomes. This paper does not describe in detail how the measurement instruments will be implemented - these issues will be outlined in separate discussion papers on each of the instruments.

The second section of this discussion paper considers some principles to guide the development of new performance measurement instruments. It also proposes that a framework of the student life cycle be used to situate the development of new performance measurement instruments. The third section briefly discusses existing survey instruments. The development of new performance measurement instruments for use in performance reporting and for other purposes is discussed in the fourth section. The fifth section considers key issues that impact on the coherence and balance of performance measures. The final section outlines a proposed implementation strategy for the new performance measures.
2. Principles and the student life cycle framework

2.1. Principles

It is desirable that the development of new performance measurement instruments is guided by principles. The Department has previously published principles underlying the publication of institutional performance indicators (DETYA, 1998 and DEST, 2001). While these focused on existing data and indicators, these principles have been adapted to guide the development of performance measurement instruments as follows:

- **Fit for purpose** – information is used to suit the purposes for which it is designed to be used;
- **Consistency** - information is consistently collected and applied across uses and time;
- **Auditability** – information can be scrutinised;
- **Transparency** – information has clear meaning; and
- **Timeliness** – information readily enables institutions to enhance their quality of teaching and learning.

Questions for Discussion

- Are there other principles that should guide the development of performance measurement instruments?

2.2. Student life cycle framework

This section proposes that the development of new performance measurement instruments is most appropriately situated within a student life cycle framework.

In a globally competitive economy, the demand for highly educated workers is increasing. This is why the Government has set itself the ambition that 40 per cent of all 25-34 year-olds will hold a bachelor level qualification or above by 2025. The move to the new demand-driven funding system will support achievement of this goal and enable universities to respond better to meet the needs of the labour market. As the system expands, there needs to be assurance that universities continue to deliver high quality education services. Given the Government’s ambition, the development of three performance measurement instruments will focus on the quality of undergraduate teaching and learning.

From a life cycle perspective, an undergraduate student can be considered to proceed through three key phases: pre-entry, university study and post-study as shown in Figure 1. Pre-entry refers to when the student first considers entry to university, applying and enrolling in university. There are distinct phases within university study itself, with the first year of study often considered critical followed by the middle years and the final year of study. Post (undergraduate) study includes completion and graduation and post-graduation outcomes, typically focusing on employment and further education.

Within each of these phases, there are different aspects of the undergraduate life cycle as suggested in Figure 1. These aspects may be applicable to other phases, and other years within each phase, than
those identified in Figure 1, however the figure represents when these aspects would be considered most appropriate to measure. For example, retention is not an issue that only relates to first year students, however, data suggests the attrition rate is higher for first years; therefore it is of greater importance to measure retention in first year, as compared to later years.

Readiness to study and pathways to study represent key aspects of the pre-study phase. Similarly, support, engagement, experience and satisfaction are crucial for retention in the first year of study. The student’s university experience, engagement, satisfaction. The quality of teaching and learning and student learning outcomes are all aspects that prevail throughout university study. Possibly more pertinent in the final year of study are the preparedness for employment, further study and achievement of skills. In the post-study phase, key outcomes to be measured include graduate satisfaction, employment and further education and these can be measured at various points in time following graduation.

There are a number of uses and purposes for performance information. These include: institutional strategic planning; teaching and learning plans/frameworks; TEQSA provider, teaching and learning and information standards; the Australian Qualifications Framework; and, the MyUniversity website. It is likely that stakeholders will attach different priority to each of these uses. The different uses for performance information will also lead to different points of emphasis and information requirements. Requirements will vary for quantitative and qualitative information and national, institution, course or subject level information. Figure 2 briefly describes how existing performance measurement instruments currently measure aspects of the student life cycle, though this is by no means intended as a comprehensive coverage of existing instruments. The new performance measurement instruments are also situated within the student life cycle framework, as shown in Figure 3. The new performance measurement instruments have been presented as it is currently proposed for their use. For example, it is proposed that the UES primarily measure the experience of first year students, and potentially final year students. Similarly, the CLA has been proposed as an instrument which will assess first and final year students. The AGS is displayed as it is currently administered, that is, in the year after completion. The actual implementation of each of the instruments throughout the student lifecycle will be a consideration throughout the development of each of the instruments.

There is scope for measurement of other aspects of the student life cycle, for example, through outreach, orientation, placement/fieldwork and employer satisfaction surveys. However, the future development of performance measurement instruments in this area would need to be guided by appropriate cost-benefit evaluations of such activities.

**Questions for Discussion**

- **Is it appropriate to use a student life cycle framework to guide the development of performance measurement instruments?**
- **Are there other aspects that should be included in the student life cycle framework?**
Figure 1: Student life cycle – key aspects to be measured

<table>
<thead>
<tr>
<th>Pre-entry</th>
<th>University (undergraduate) study</th>
<th>Post-study</th>
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<tbody>
<tr>
<td>Application/admissions and enrolment</td>
<td>First year</td>
<td>Middle years</td>
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<td>Readiness for university study</td>
<td>Readiness for university study</td>
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<td>Pathway to study</td>
<td>1st year experience/engagement and satisfaction with study</td>
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<td>Student learning outcomes</td>
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<td>Preparedness for employment and further study</td>
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<td>Achievement of skills</td>
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Figure 2: Student life cycle – measurement instruments commonly in use

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<td>Application/admissions and enrolment</td>
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<td>First year</td>
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<td>Retention and progress</td>
<td>ISB</td>
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<td>Institution course evaluations</td>
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Figure 3: Student life cycle – new instruments for performance reporting

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<th>Pre-entry</th>
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<th>Post-study</th>
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<td>Application/admissions and enrolment</td>
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3. **Existing surveys**

3.1. **National and cross-institution surveys**

Australia is already well served by existing national and cross-institution surveys. National surveys, for example the Course Experience Questionnaire, are administered to at least all Table A higher education providers. Cross-institution surveys, for example the First Year Experience Questionnaire (FYEQ), are narrower in scope and include a selection, but not all, universities. Figure 2 above shows the major existing survey instruments measuring the performance of institutions situated in the student life cycle. As noted earlier, this is not intended as a comprehensive coverage of existing instruments.

**Pre-entry**

The paucity of surveys relating to pre-entry is a notable feature of Figure 2. Though not listed in Figure 2, there is limited information available relating to pre-entry. The National Data Collection does provide sector wide information on trends in applications, offers and acceptances each year, though institution level data are not published. The Higher Education Statistics Collection provides information on the basis of admission of commencing students and the Australian Tertiary Admissions Rank (ATAR) of students admitted on the basis of secondary education and this information is published at sector and institution level. The Higher Education Participation and Partnerships Program (HEPPP), as part of accountability and reporting arrangements, collects information on outreach activities undertaken by institutions. The Longitudinal Survey of Australian Youth (LSAY) is probably the best current source of information available on the pathways of students into higher education.

**University study**

The Australasian Survey of Student Engagement (AUSSE) is probably the most extensive survey measuring the experience of current university students. It is administered to first and final year students at over thirty universities. The survey is based on the United States National Survey of Student Engagement and provides international comparisons with United States and Canadian universities. The First Year Experience Questionnaire (FYEQ), as the name suggests, is focused more on the experiences of first year students and has been conducted every five years among a representative group of around ten to twelve universities. Of more recent origin is the International Student Barometer (ISB) administered for the first time in 2010 to over thirty universities. This survey tracks the decision-making, perceptions, expectations and experiences of international students studying outside of their home country. The survey is also administered to over one hundred and sixty universities in Europe, North America, South Africa, Singapore, New Zealand and UK providing internationally comparable results.

There are a plethora of surveys of teaching and learning conducted within institutions. These are conducted across the institution, at course level and even down to the subject level. These are used extensively to manage the quality of teaching and learning.

In addition, universities make extensive use of data from the Higher Education Student Statistics Collection to monitor key student learning outcomes such as retention and progress rates.

**Post-study**

The Graduate Destination Survey (GDS) is the longest running example of a national survey of institutions. Since 1972, it has measured the employment and further study destinations of recent
graduates four months after they have completed their course. The Course Experience Questionnaire (CEQ) has been conducted in conjunction with the GDS since 1993. It measures graduate satisfaction with aspects of their courses known to be associated with the quality of student learning such as teaching, goals and standards, assessment, workload and generic skills. As such, measures of graduate satisfaction are used to drive improvement in the quality of student learning. The United Kingdom adopted the Course Experience Questionnaire in 2005 and consequently provides points of international comparison. The Beyond Graduation Survey is of more recent origin and has been conducted annually on three occasions in over twenty universities. The survey tracks graduates three years after completion of their studies with a primary focus on the main activity of the graduate at the time of the survey.

For a more comprehensive description of the administration, scope and measures underlying existing survey instruments, see Appendix 5.

3.2. Links with new instruments

This brief description demonstrates that there is a considerable level of activity currently underway in relation to performance measurement instruments and surveys. There is a substantive issue in the development of new performance measurement instruments about their overlap with existing survey instruments, given the potential costs and resource burden. There are key considerations that will influence the need to balance existing and new performance measurement instruments. First, providing international benchmarks of performance is a major pillar of quality assurance both at national and institutional level. Second, performance measures developed at national level can provide a more robust and comprehensive assessment of performance than measures confined to a particular institution or subset of institutions. Third, assessment and reporting leading to continuous improvement is a dynamic process. Existing surveys and established research and evidence provide a basis for the development of enhanced performance measurement instruments for use in quality assurance. Fourth, the many and varied uses of performance measures, for example, reporting on the MyUniversity website and continuous improvement, will guide the balance between existing instruments and development of new performance measurement instruments whilst ensuring at the same time that these are fit for purpose.
4. New instruments

In December 2009 the Department of Education, Employment and Workplace Relations (DEEWR) released the discussion paper *An Indicator Framework for Performance Funding*. As a result of feedback from the sector in response to the performance indicator framework, the Government announced that its performance framework would include two newly developed indicators – the University Experience Survey (UES), and an Australian version of the Collegiate Learning Assessment (CLA). In addition, the Government announced in the 2011-12 Budget that there would be a review of the existing Australian Graduate Survey (AGS).

These instruments are being developed jointly to provide a coherent suite of indicators supporting both performance reporting and achievement of continuous improvement in learning and teaching. In developing the indicators, the Department has been informed by the student lifecycle model discussed in Section 2. Using the student life cycle model, it is readily apparent that the development of new performance measurement instruments will not provide a comprehensive assessment of the quality of higher education. Taken together, the indicators will nevertheless provide an enhanced assessment of the impact universities are having on students' learning as they progress through the higher education system. As noted above, the development of performance measures and their use in quality assurance is a dynamic process.

4.1. University Experience Survey

Purpose
Australia has a rich history in designing survey instruments for higher education, providing a strong foundation and setting high expectations for the UES. The UES will be designed for use in performance reporting on the *MyUniversity* website and for use by universities for continuous improvement purposes. It is intended that the UES will build on existing student experience instruments. It will be a highly-focused instrument that is operationally efficient to implement. The UES could potentially provide a better and more timely measure of student experience.

The development of the UES will have a strong theoretical and empirical underpinning and will consider existing surveys and scales of student experience both within Australia and internationally. Although intended to be initially used with first-year students, the UES has been designed with the potential to also be used with later-year students, and sector feedback to date suggests there is support for this wider application. UES results for first year students will provide an indicator of university experience as students transition into higher education from school or other entry pathways. This initial transition period is known to be crucial in achieving long-term learning outcomes. Administering the UES to later year students would potentially provide universities with a more complete picture of students' learning experience as they progress through the higher education system.
What the UES measures
The UES will measure aspects of student’s university experience associated with high level learning outcomes such as teaching and support, student engagement and educational development. To do this, the UES will measure the most salient aspects of student experience known to be associated with high-level learning outcomes. In this way, the UES allows the sector and individual institutions to monitor and support cycles of improvement in the quality of university teaching and learning.

The UES measures facets of the first-year and later-year experience including learning and education that can be generalised across institutions and contexts, and that can be shaped and influenced by institutions. In doing so the UES uses methods that are scalable and at the same time locally relevant. As well as being generalised in this way, the UES will also be informed by international developments.

How the UES will work
The Department selected a consortium, led by the Australian Council of Educational Research (ACER) and including the University of Melbourne’s Centre for the Study of Higher Education (CSHE) and the Griffith Institute for Higher Education, to develop the UES. The consortium has extensive expertise and knowledge of the Australian higher education sector and in designing and conducting complex national student surveys.

The consortium released a design consultation paper for the UES in April and a national forum attended by representatives from the higher education sector was held on 3 May 2011. A Project Advisory Group, consisting of higher education stakeholders including universities and students has also been consulted throughout the development of the instrument.

The UES has been designed, developed and piloted during 2011 among first year undergraduate students at approximately 25 universities. The consortium will provide the department with a report on the pilot project in late 2011 which will provide direction for the future implementation of the UES and its future use. The department will consult with stakeholders regarding the full implementation of the UES and how it will measure student experience.

It is intended that the UES will be conducted annually from 2012 on. A performance baseline will be established using 2012 and 2013 results. Subject to its successful development and trial, it is intended that universities’ UES results will also be published on the MyUniversity website from 2013 onwards.

4.2. Assessment of Generic Skills: The Collegiate Learning Assessment

Purpose
By assessing students' generic skills at the beginning and end of their university career, the impact of their engagement with higher education on these skill sets can be evaluated. In turn, this will drive improvement in the quality of teaching and learning and provide assurance for employers and the wider community that students have acquired the knowledge and skills expected of them for attainment of their degree. The CEQ currently provides a measure of the self-reporting of graduates’ generic skills. Assessment of generic skills providing a direct measure of learning outcomes could potentially be undertaken using the CLA or some variant of the CLA adapted for the Australian context. The OECD has selected the CLA as the basis for assessment of generic skills in its Assessment of Higher Education Learning Outcomes (AHELO) project. Subject to the successful trialling of the CLA in the Australian higher education environment, this offers the prospect of international benchmarking.
What the CLA measures
The CLA can be administered to first and/or final year undergraduate students to assess their critical thinking, analytic reasoning, problem solving and written communication skills obtained during their university degree. The Government will consult with the AQHE Reference Group and the sector on the best way to measure attainment of generic skills for the purposes of performance reporting and for achieving continuous improvement within universities.

How the CLA will work
The Government will consult with the sector to develop a culturally appropriate version of the CLA for the Australian higher education sector. In addition, consideration will be given to the cost and value of inclusion of discipline-specific assessments. A broader indicator of generic skills has to the potential to increase its relevance and widen its appeal. Securing participation of students and universities in the assessment of generic skills will be of critical importance.

The Department will establish and work with the AQHE Reference Group, universities and higher education stakeholders, including business, to adapt the CLA for the Australian higher education environment.

The Department will release a consultation paper in 2011 to identify key issues that will need to be addressed in developing an indicator of generic skills and seek stakeholder feedback on these issues and how best to develop and implement this instrument. This paper will build on the earlier paper, An Indicator Framework for Performance Funding.

It is proposed the Department will develop and pilot the CLA in 2012. This will be for the purpose of implementing the CLA or some version of the CLA suitable for the Australian higher education sector from 2013. Subject to its successful development and trial, it is intended universities’ CLA results will also be published on the MyUniversity website from 2013 onwards.

4.3. Review of the Australian Graduate Survey

Purpose
The AGS is a national survey of newly qualified higher education graduates. It consists of two distinct survey instruments – the GDS, which examines employment outcomes for graduates, and the CEQ, which asks graduates about their course experience perceptions (see Section 3 on existing surveys for details). The CEQ provides a measure of student satisfaction with their entire university experience. The GDS indicates graduates' outcomes in the labour market shortly after they have exited the higher education sector, providing an indication of the value of the skills and qualifications graduates have attained at university in relation to their transition from education to employment.

The AGS is conducted annually by Graduate Careers Australia (GCA), a not-for-profit company governed by a board of directors. The AGS surveys new graduates from all Australian universities, and a number of higher education institutes and colleges, approximately four months after they complete the requirements for their awards. Detailed results are available in the middle of the following year. For students graduating in 2011, for example, surveys will be conducted in October 2011 and April 2012, with detailed results available in mid-2013. The survey response rate for domestic graduates typically ranges from 60 to 65 per cent.
Issues
A strengthened AGS will form part of the suite of performance measurement instruments developed under the auspices of the AQHE initiative. The review will examine the strategic position of the survey in relation to the other performance indicators, particularly the University Experience Survey which will provide an alternative measure of student satisfaction.

Other aspects which the review will consider include:

- Timeliness of reporting;
- Administrative arrangements, including funding arrangements and the relationship between GCA, universities and third-party service providers;
- Data quality, including response rates and bias;
- Survey methodology, including collection modes and standardisation of the survey instruments across universities; and
- Whether the AGS should be conducted on a census or sample basis.

The review will also consider how to better capture aspects of student experience for external, Indigenous, international and low socio economic status students.

How the review of the AGS will work
The Department is working with GCA and the higher education sector to review the AGS. The Department will be advised by the AQHE Reference Group, which will include representatives from universities and business, as well as experts in survey design and administration. As a first step, the AQHE Reference Group will provide input and guidance on the development of a discussion paper raising issues and options for the future of the AGS. Stakeholders will be able to provide feedback on this discussion paper on the issues relating to the review of the AGS. The AQHE Reference Group will also be responsible for ensuring that adequate stakeholder engagement is conducted and will identify topics for discussion at the AQHE roundtables.
5. Issues

This section discusses key issues that arise from consideration of existing and new performance measurement instruments. This includes the administration of performance measurement instruments, student selection, central sampling of students, uses and the intersection of existing and new instruments. Discussion of these key issues facilitates an assessment of the fitness for purpose of performance measurement instruments and their ability to operate together in a coherent way to obtain as comprehensive view as possible about the student’s undergraduate university experience.

5.1. Administration of new instruments

Student surveys tend to be conducted in Australian universities using one of two broad deployment approaches (ACER, 2011, p.14), specifically:

- an independent (or centralised) deployment, in which most if not all survey activities are conducted by an independent agency; or
- a devolved deployment (or decentralised), in which institutions and a coordinating agency collaborate on survey operations.

An independent deployment approach involves participating universities providing the independent agency with a list of all students in the target sample at their institution, including student’s contact details. After receiving institutions’ population lists, the independent agency would identify the target population, which could be either a census or sample of students, and invite students to participate in the survey. Responses would then be returned directly to the independent agency for analysis.

A devolved approach involves participating universities supplying the independent agency with a de-identified student list that excludes student contact details. A sample of students would be drawn, online survey links would be allocated to student records, and this list would be sent back to universities who would then merge in student contact details. Under a devolved approach, universities manage the deployment of the survey by sending invitations to sampled students and following up with non-respondents. Responses are provided directly to the independent agency for analysis.

Both deployment approaches have benefits and limitations. A devolved approach has benefits in that it can accommodate the needs and circumstances of a diverse array of universities. On the other hand, the fact that universities are primarily responsible for collecting data about their own performance can be seen as a conflict of interest, leading to perceptions that universities may ‘game’ the system. Given the stakes and uses to which the data collected from the new instruments will be used, on balance, an independent approach is favoured since this will promote validity, consistency and efficiency.

A key issue for any independently deployed survey is privacy and the responsibility of universities (and the Department) to preserve the confidentiality of student information they hold. Universities may be required to amend their agreements with students to permit disclosure of personal information to third parties for the purposes of conducting surveys. Providing privacy laws are satisfied in the development of an instrument, this approach has to date received broad support from the higher education sector, as measured through consultation in the development of the UES.
While the deployment approach is a significant consideration in terms of administration of a new survey instrument, there are other issues which should be considered. These include, but are not limited to, the administration method (online, telephone, paper-based), context and timing. These issues will be considered in the context of individual instruments.

Questions for Discussion

- What concerns arise from an independent deployment method?
- What are the obstacles for universities in providing student details (such as email address, first name and phone numbers) to an independent third party?
- Would universities agree to change their privacy agreements with their students to permit disclosure of personal information to third parties for the purposes of undertaking surveys?
- What are the other important issues associated with administration of survey instruments?

5.2. Student selection

The selection of students for the new performance measurement surveys is an issue which has raised a number of concerns. The burden of the existing range of survey instruments on both students and university resources is foremost in the minds of universities and therefore a balance needs to be struck between the need for the collection of new data for the purposes of performance reporting and to assure quality and the requirements on students and universities.

The surveys could be run as a census of all students in scope or by administering the survey to a sample of the students in scope. Deciding between a census and a sample is a complex process that necessarily takes into account many technical, practical and contextual factors.

Two major issues are non-response biases and general confidence in the precision of results, particularly at the sub-institutional level. The advantage of a sample survey approach is that a structured sample can be constructed that deliberately focuses on target groups for which it is necessary to generate meaningful results (for example at the course level or for particular demographic groups) and this may assist in overcoming non-response biases. A sample survey approach would require a relatively sophisticated sampling frame to give adequate coverage across fields of education and demographic characteristics. This process would be simplified if the Higher Education Information Management System (HEIMS) database could be used to construct the sample frame, given that it already records detailed information on student characteristics. Standard techniques to measure the precision of sample survey results could be systematically applied across all results, for example, calculating confidence intervals or standard errors.
On the other hand, given the small student populations sometimes under consideration (for example, courses where only a small number of students are enrolled at a particular institution), sample sizes needed to provide confidence in survey results would approach the total population. The intention to publish data from the new performance measurement instruments on the MyUniversity website disaggregated to subject level may influence the decision on whether to conduct a census or survey since a sufficiently large number of responses will be required to ensure data are suitably robust and reliable. In this case, it may be preferable to continue on a ‘census’ basis where the whole population is approached to participate.

Other issues for consideration in deciding between a census or survey approach include:

- Support by participating institutions;
- The size and characteristics of the population;
- Providing students with opportunities for feedback;
- Relationship with other data collections, in particular other student surveys;
- Analytical and reporting goals, in particular sub-group breakdowns;
- Anticipated response rates and data yield;
- Consistency and transparency across institutions;
- Cost/efficiency of data collection processes; and
- The availability of supplementary data for weighting and verification.

The method of student selection may vary between instruments, and regardless of whether a census or sample approach is used, proper statistical procedures will be used to evaluate the quality and level of response in the long term.

### Questions for Discussion

- What are key considerations in choosing between a sample or census approach to collection of performance data?

#### 5.3. Central sampling of students

As discussed above, an important issue regarding the introduction of new surveys within the higher education sector is the perceived burden on university resources and the students who are required to participate.

One method which has been proposed to assist in the reduction of this burden is the possibility of using DEEWR HEIMS (Higher Education Information Management System) data to better control student sampling and also to use stored student demographic level data to pre-populate survey questions where appropriate.

Using the HEIMS data in this way could potentially improve random sampling and avoid oversampling of students invited to participate in surveys, while also reducing the number of questions students are required to answer per survey through the ability to pre-fill and skip questions where data is already available. In addition, by having the Department involved at this level in the survey process, this could
improve perceptions of the overall integrity of surveys through making clear that samples are independently constructed.

Note there are restrictions regarding the use of HEIMS data in the *Higher Education Support Act*. The Department, therefore, is investigating options for the use of this data in the context of individual performance measurement instruments and also as a suite of instruments.

### Questions for Discussion

- *What are the advantages and disadvantages of central sampling of students?*

### 5.4. Uses of data

The collection of data from the new performance measurement instruments will be of major benefit to universities for continuous improvement and to assure the quality of teaching and learning in the sector. The Government has also indicated that, subject to their successful trial and implementation, it is intended that data from the new instruments will be published on the *MyUniversity* website.

While a number of uses are proposed for the new data collections, other uses may be discovered throughout the development of the new instruments. It will be important, therefore, to consider potential future uses of the data while being aware of the potential for misuse of the data.

By utilising the principles referred to in section 2.1 of this paper in the development of the instruments, the data available should be relevant, reliable, auditable, transparent and timely. These principles will also provide guidance as to the appropriate uses of the data. Further, the range of consultations being undertaken in the development of the new instruments will include roundtables where stakeholders will be able to discuss how the results from the new instruments can be used while raising any concerns regarding the future use of the data. In addition, it may be appropriate to establish codes of practice that guide appropriate uses and interpretation of performance information.

**Continuous improvement**

It will be important that the data collected from the performance measurement instruments is useful for universities, so that they can implement processes and policies for continuous improvement and maintain a high level of quality of teaching and learning.

To ensure the performance measurement instruments collect data that is useful and relevant to universities, the instruments are being developed with significant sector consultation. Stakeholders will be invited to provide feedback throughout the development of the new instruments to allow these to take account of their data and measurement needs.

Using the student life cycle model, consideration needs to be given to what information can and should be collected from the new instruments given their implementation at different stages of the life cycle, and how this information will assist to assure the quality of teaching and learning in Australian universities.
MyUniversity

It is expected that in future releases, the MyUniversity website may include performance data from the new performance measurement instruments. This would allow prospective students additional information with which they can assess the performance and quality of different institutions in the three performance categories. How the data will presented on the MyUniversity website will be a consideration once the instruments have been tested and the level of data analysis is known.

Information regarding the use of performance data on the MyUniversity website will be made available throughout the development process for the instruments and the website itself.

Another issue that arises in consideration of the MyUniversity website is the level of reporting. A major purpose of the website is to inform student choice about courses and subjects. In this environment, more detailed reporting is likely to be desired, for example, at the field of education level. There is likely to be a trade-off between collection and reporting of data from the new performance measurement instruments at a finer level of disaggregation and adding to the complexity and burden of reporting.

Questions for Discussion

• What are appropriate uses of the data collected from the new performance measurement instruments?

5.5. Intersection of existing and new instruments

The development of the University Experience Survey (UES) has raised the issue of whether the new instruments should be focused instruments for the purposes of performance reporting, or whether they could potentially be expanded to replace existing surveys and institution/course specific questionnaires. For example, what is the potential overlap between the newly developed University Experience Survey and the Course Experience Questionnaire in measuring student experience?

This will be a consideration in the development of all new instruments to ensure there is balance between the additional burden on both students and universities of the new instruments and ensuring they are able to capture targeted and purposeful information. Further, there needs to be consideration of the data needs of individual universities and how these differ across the sector.

A key issue in considering the overlap between the new instruments and existing survey instruments is the uses to which performance measurement data will be put as discussed above. It is expected students will benefit from the availability of new data via the MyUniversity website. The new performance measurement instruments will potentially be used to enhance continuous improvement processes within universities. There is also the potential for international benchmarking.

A major dilemma is the need for broad level national data and the requirement for more detailed data to suit universities’ diverse needs and missions. Satisfying both of these goals raises the important issue of costs and resource burden. One suggested solution for the UES is that there could be a core set of items which would be asked of students at all universities, and an optional set of non-core items which universities could select to suit their individual requirements.
Ultimately, universities will decide in which instruments they participate, and this will hinge on a range of factors not limited to the type of data collected. By considering, however, the range of existing surveys, what data is most useful to universities, and what additional data universities would like to collect from the new performance measurement instruments, the development of the new instruments has the potential to make this decision by universities considerably easier.

**Questions for Discussion**

- *Are there other issues that arise when considering the overlap of existing and new instruments?*
6. Next Steps

The Government will work closely with higher education stakeholders, including universities, business and students during the continued implementation of the Advancing Quality in Higher Education (AQHE) initiative. To ensure that comprehensive feedback is received, the Government will consult through a variety of means including through the release of discussion papers for sector feedback and holding a series of roundtable discussions.

6.1. The AQHE Reference Group

The Government has established the AQHE Reference Group to provide advice on the design, development and implementation of the new measurement instruments.

A key role of the AQHE Reference Group is to share ideas and contribute expertise in discussions about the suite of performance measurement instruments and provide advice about the cohesiveness of the instruments to develop a comprehensive picture of teaching and learning performance in the Australian higher education sector.

The Reference Group will:

- advise the Department on the coherence and balance of the measures derived from instruments, consistent with meeting the Government’s stated objectives;
- advise on the approach to implementation of the instruments as a suite;
- guide consultation and synthesise feedback on the Review of the Australian Graduate Survey;
- provide input and guidance on the development of a discussion paper on a vision for the future of student surveys in Australia, and lead consultation on the paper with the sector; and
- advise on the development and implementation of new performance measurement instruments.

The full Terms of Reference for the AQHE Reference Group are shown in Appendix 3 and are available on the Department’s website.

The Reference Group will also provide advice and guidance around the detailed design and implementation issues for each instrument. This includes providing advice on the methods, timeliness and costs of data collection. The Reference Group will also advise on stakeholder engagement. This includes providing input and guidance on the development of Discussion Papers for each of the measurement instruments, identifying key issues for discussion at the roundtables and advising on the feedback received at the roundtable sessions.

The Reference Group includes representatives from universities, business, unions and students who are highly regarded for their expertise in relevant fields. The Department will provide secretariat support to the Reference Group. The advice of the Reference Group will inform the Department’s advice to the Minister for Tertiary Education, Skills, Jobs and Workplace Relations. The first meeting of the AQHE Reference Group was held in late August 2011. The Group provided direction and guidance for developing this discussion paper and also advised on the upcoming roundtable discussions.
6.2. **Discussion papers**

A number of discussion papers will be released for public consultation in December 2011. These papers will be developed in consultation with the AQHE Reference Group. These papers include:

- the Development of Performance Measurement Instruments in Higher Education;
- the Review of the Australian Graduate Survey; and
- Assessment of Generic Skills.

A consultation paper on the design of the University Experience Survey was released in April 2011 to higher education stakeholders. A report presenting details of the development, design and trial of the UES and findings will be published in December 2011.

6.3. **Roundtable discussions**

Roundtable discussions will be held to provide a forum for higher education stakeholders, including universities, business/industry and students, to debate and contribute to the development of strategies designed to further advance quality in Australian higher education. The principle focus of the roundtables will be the development of an integrated suite of performance measurement instruments that will improve transparency in university performance.

One-day roundtables will be held in major capital cities and will be based on the information and issues outlined in the discussion papers. The roundtables may include presentations, an open forum or a combination of the two.

6.4. **Next steps**

The consultation mechanisms outlined above will be used to gather sector feedback which will inform advice provided to the Minister for Tertiary Education, Skills, Jobs and Workforce Development.

The Government welcomes feedback on the discussion questions outlined in this paper. Instructions for how to lodge submissions can be found in Appendix 2 to this paper.

The instruments will be developed during 2012 and 2013. It is envisaged this will enable university performance baselines to be established by the end of 2013. Subject to successful development and trial, it is intended that universities’ results against each of the indicators will be published on the MyUniversity website from 2013.
Appendix 1 - References


Appendix 2 – How to make a submission

We would welcome your comments on the questions and issues raised in this discussion paper. Developing and implementing the new performance measurement instruments requires a strong evidence base and we would ask that you provide any evidence you have to support your views. Submissions received through this process will be used to inform deliberations of the Advancing Quality in Higher Education Reference Group and subsequent advice to the Minister for Tertiary Education, Skills, Jobs and Workplace Relations, the Hon Christopher Evans MP.

Submissions should be lodged by close of business 17 February 2012.

By email: AQHE@deewr.gov.au

By post: Andrew Taylor, Branch Manager
Policy and Analysis Branch
Higher Education Group
Department of Education, Employment and Workplace Relations
PO Box 9880
CANBERRA CITY ACT 2601

Please clearly identify your submission showing

- Name of Organisation or Individual
- If an Organisation, please indicate the name of a contact person
- Address
- Email
- Phone

Please note that all submissions will be published on the DEEWR’s Higher Education website.

DEEWR will not accept submissions from individuals submitted on a wholly confidential basis; however, submissions may include appended material that is marked as ‘confidential’ and severable from the covering submission. DEEWR will accept confidential submissions from individuals where those individuals can argue credibly that publication might compromise their ability to express a particular view.

Please note that any request made under the Freedom of Information Act 1982 for access to any material marked confidential will be determined in accordance with that Act.
Appendix 3 – Terms of Reference for the AQHE Reference Group

Context

The Australian Government is strongly committed to ensuring that growth in university enrolments is underpinned by a focus on quality.

The Government’s Advancing Quality in Higher Education initiative will assure and strengthen the quality of teaching and learning in higher education. As part of this initiative, the Government has announced that an integrated suite of performance measurement instruments will be developed during the first Compact period from 2011 to 2013 for use in performance reporting - the University Experience Questionnaire, an Australian version of the Collegiate Learning Assessment, and the Review of the Australian Graduate Survey.

The Government’s performance indicator framework is to include indicators of the quality of student experience and learning outcomes. It is intended that indicators of performance drawn from the new instruments will also be published on the MyUniversity website.

Collaboration and consultation with sector on the development and implementation of the new instruments is a high priority for Government. It wishes to ensure that the knowledge and expertise of the sector is applied to Australia having the best possible measures of teaching and learning excellence.

The Reference Group

The Government will establish a Reference Group to provide advice to the Department on the development and implementation of the performance measurement instruments.

The Reference Group will:

- advise the Department on the coherence and balance of the measures derived from instruments, consistent with meeting the Government’s stated objectives;
- advise on the approach to implementation of the instruments as a suite;
- guide consultation and synthesise feedback on the Review of the Australian Graduate Survey;
- provide input and guidance on the development of a discussion paper on a vision for the future of student surveys in Australia, and lead consultation on the paper with the sector; and
- advise on the development and implementation of new performance measurement instruments.

The Department will provide secretariat support to the Reference Group.

The advice of the Reference Group will inform the Department’s advice to the Minister for Tertiary Education, Skills, Jobs and Workplace Relations.
# Appendix 4 – Membership of the AQHE Reference Group

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
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</thead>
<tbody>
<tr>
<td>Professor Ian O’Connor (Chair)</td>
<td>Vice-Chancellor – Griffith University</td>
</tr>
<tr>
<td>Professor Richard Henry AM</td>
<td>Deputy Vice-Chancellor (Academic) – UNSW</td>
</tr>
<tr>
<td>Professor Carole Kayrooz</td>
<td>Deputy Vice-Chancellor (Academic) – University of Canberra</td>
</tr>
<tr>
<td>Professor Judyth Sachs</td>
<td>Deputy Vice-Chancellor (Provost) – Macquarie University</td>
</tr>
<tr>
<td>Professor Jim Barber</td>
<td>Vice-Chancellor – University of New England</td>
</tr>
<tr>
<td>Professor Richard James</td>
<td>Pro Vice-Chancellor (Participation and Engagement), Director of the Centre for Studies in Higher Education, University of Melbourne</td>
</tr>
<tr>
<td>Ms Sue Mikilewicz</td>
<td>Director Planning and Institutional Performance, UniSA</td>
</tr>
<tr>
<td>TBA</td>
<td>Chair, Tertiary Education Quality Standards Agency (TEQSA) Teaching and Learning Standards Panel</td>
</tr>
<tr>
<td>Ms Claire Thomas</td>
<td>Policy Director, Business Council of Australia (BCA)</td>
</tr>
<tr>
<td>Mr Jesse Marshall</td>
<td>President, National Union of Students</td>
</tr>
<tr>
<td>Ms Jeannie Rea</td>
<td>National President, National Tertiary Education Union</td>
</tr>
</tbody>
</table>
# Appendix 5 – Summary of existing surveys

<table>
<thead>
<tr>
<th>Survey</th>
<th>Who runs it?</th>
<th>Who participates?</th>
<th>What does it measure?</th>
<th>How does it operate?</th>
</tr>
</thead>
</table>
| Course Experience Questionnaire (CEQ)      | Graduate Careers Australia | Recent graduates (domestic and international students) from all Australian Universities – four months after completion | The CEQ surveys recent graduates on perceptions of their university experience. In the CEQ, respondents are asked to rate the extent to which they agree or disagree with core items and a subset of optional items, the latter varying by institution. The core CEQ items constitute:  
- Good Teaching Scale (GTS)  
- Generic Skills Scale (GSS)  
- Overall Satisfaction Item (OSI).  
The eight optional CEQ scales comprise:  
- Clear Goals and Standards Scale (CGS)  
- Appropriate Workload Scale (AWS)  
- Appropriate Assessment Scale (AAS)  
- Intellectual Motivation Scale (IMS)  
- Student Support Scale (SSS)  
- Graduate Qualities Scale (GQS)  
- Learning Resources Scale (LRS)  
- Learning Community Scale (LCS).  
While the CEQ is designed to measure the most significant aspects of the student learning experience, it is not designed as a measure of all aspects of the student experience. Rather than seeking to measure | Annual survey completed by recent graduates four months after completion of a degree. GCA manages the AGS nationally, while institutions generally conduct the surveys of their own graduates and return survey forms and/or data files to GCA for processing. This method of management can be characterised as partially decentralised in that while a great deal of the work is managed centrally by GCA, key tasks such as the distribution of survey instruments and collection of responses are managed by the institutions. |
| Survey                                      | Who runs it?                        | Who participates?                                                                 | What does it measure?                                                                                                                                                                                                                                                                                                                                 | How does it operate?                                                                                                                                                                                                 |
|---------------------------------------------|-------------------------------------|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------
| Graduate Destinations Survey (GDS)          | Graduate Careers Australia          | Recent graduates (domestic and international students) from all Australian Universities – four months after completion | the full range of factors that combine to form student experience, the development of the CEQ was premised on the association between the quality of student learning and student perceptions of teaching as reflected in formal student evaluation.                                                                                                                                                                                                 | Annual survey completed by recent graduates four months after completion of a degree. GCA manages the AGS nationally, while institutions generally conduct the surveys of their own graduates and return survey forms and/or data files to GCA for processing. This method of management can be characterised as partially decentralised in that while a great deal of the work is managed centrally by GCA, key tasks such as the distribution of survey instruments and collection of responses are managed by the institutions. |
| Australasian Survey of Student Engagement (AUSSE) | Australian Council for Educational Research | First-year and third-year onshore students from higher education providers who choose to participate | The AUSSE focuses on what students are actually doing rather than a focus on student satisfaction and agreement. The AUSSE surveys students on around 100 specific learning activities and conditions along with information on individual demographics and educational contexts. The instrument contains items grouped by six student engagement scales:  
• Academic Challenge – the extent to which |
<p>|                                             |                                     |                                                                                   |                                                                                                                                                                                                                                                                                                                                                         | The AUSSE is undertaken annually and survey administration is managed centrally by ACER and key activities are conducted by institutions.                                                                                                                                                                           |</p>
<table>
<thead>
<tr>
<th>Survey</th>
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</table>
| First Year Experience Questionnaire (FYEQ) | Centre for Study in Higher Education (University of Melbourne) | First year students at selected institutions | expectations and assessments challenge students to learn;  
- Active Learning – students' efforts to actively construct knowledge;  
- Student and Staff Interactions – the level and nature of students' contact and interaction with teaching staff;  
- Enriching Educational Experiences – students' participation in broadening educational activities;  
- Supportive Learning Environment – students' feelings of support within the university community; and  
- Work Integrated Learning – integration of employment-focused work experiences into study. | The FYEQ is undertaken every five years. Survey administration is managed centrally by CSHE with assistance from institutions.  
Institutions had the choice of mailing out the surveys themselves or providing the CSHE with an electronic list of the sample to be mailed out by a Melbourne-based mailing-house. |
<table>
<thead>
<tr>
<th>Survey</th>
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<th>What does it measure?</th>
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<tbody>
<tr>
<td>International Student Barometer (ISB)</td>
<td>i-graduate</td>
<td>All international students at participating universities</td>
<td>The ISB tracks the decision-making, perceptions, expectations and experiences of students studying outside their home country. The dimensions of the international student experience which are covered include decision-making, arrival, learning, living and support services. Within these sections, students are asked to rate the importance of and satisfaction with a number of elements, including for example, the quality of teaching; social activities and facilities; the surroundings outside the university; the library facilities; internet access; accommodation quality and cost; and making friends with local people and students as well as students from other countries.</td>
<td>Undertaken in 2010 only in Australia at this stage. International students were invited to participate in the survey via email alerts sent by their institutions and they were able to complete the online survey questionnaire. The survey was conducted in English. Responses were collected and analysed by i-graduate.</td>
</tr>
<tr>
<td>Beyond Graduation Careers Survey (BGS)</td>
<td>Graduate Careers</td>
<td>All Australian tertiary graduates from all award levels approximately three years after the completion of their studies (at participating universities)</td>
<td>The primary focus of the BGS is the main activity of the graduate at the time of the survey—be it work, study or something else entirely—although information concerning the various other activities in which the graduate has been engaged in the years between course completion and the present is also collected. In addition to detailing their activities, graduates are invited to make a retrospective assessment of both their course experience and the contribution that their higher education experience has made to their lives.</td>
<td>Annual survey undertaken three times to date. Of the 23 universities that participated in the 2009 BGS, nine opted to conduct their own data collection fieldwork while the remaining 14 elected to have GCA conduct the survey on their behalf.</td>
</tr>
</tbody>
</table>