

# **Development of Performance Measures**

## **Report of the Advancing Quality in Higher Education Reference Group**

**June 2012**

## *Executive Summary*

The Advancing Quality in Higher Education Reference Group, having considered advice and suggestions from discussion papers, submissions and roundtables, proposes the following recommendations for the development of performance measurement instruments.

## *Recommendations*

The AQHE Reference Group recommends:

### *Principles and Student Life Cycle Framework*

- 1.1 On the basis of feedback received, that three additional principles guide the development of performance measures including:
  - i) *Validity and reliability* – the instruments should be robust and measure what is intended to be measured.
  - ii) *Efficiency* – duplication and excessively burdensome processes should be minimised.
  - iii) *Cost effectiveness* – the cost of measurement should be justified by the value it yields.
- 1.2 That the student life cycle framework is a broad conceptual model which aims to encompass the diversity of student pathways. In addition, the Reference Group affirms the importance of ensuring that the experiences and circumstances of non-traditional students are adequately measured by the new performance measurement instruments.
- 1.3 There should be scope within Compacts for the nomination of an institution specific performance indicator to account for diversity among institutions.

### *Centralised Administration of Performance Measurement Instruments*

- 2.1 The Department contract an independent and centralised administrative body to co-ordinate the Government endorsed suite of performance measurement instruments.
- 2.2 The Department use a competitive tender process to select a third-party provider to fulfil this centralised administration role for the period 2012-13 to 2014-15.
- 2.3 The work program of the centralised administrative body in the first contract period should consist of:
  - The University Experience Survey
  - A survey of employer satisfaction with graduates
  - A Graduate Outcomes Survey
- 2.4 In principle, that stratified sampling techniques should be used across all the performance measurement instruments, subject to further investigation as to the statistical validity of such an approach for each individual instrument, particularly in regards to the labour market information required in the Graduate Outcomes Survey.
- 2.5 The following timetable for the development and implementation of the performance measurement suite be adopted;

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|                       | Jul-Dec 2012                | Jan-Jun 2013  | Jul-Dec 2013 | Jan-Jun 2014 | Jul-Dec 2014 | Jan-Jun 2015 |
|-----------------------|-----------------------------|---------------|--------------|--------------|--------------|--------------|
| <b>Instruments</b>    |                             |               |              |              |              |              |
| UES                   | Full scale trial deployment |               | Full survey  |              | Full survey  |              |
| GOS                   | Development                 | Development   | Full survey  | Full survey  | Full survey  | Full survey  |
| AGS                   | October round               | April round   |              |              |              |              |
| <b>Administrators</b> |                             |               |              |              |              |              |
| New central body      | Establishment               | Establishment | UES/GOS      | UES/GOS      | UES/GOS      | UES/GOS      |
| GCA                   | AGS                         | AGS           |              |              |              |              |
| ACER                  | UES                         |               |              |              |              |              |

Timelines for the development and implementation of the survey of employer satisfaction with graduates requires further consideration.

- 2.6 A centralised sample frame be constructed by the central administrative body, based on student data provided by institutions and that the HEIMS database and CHESSN student indicator be used for post facto quality control of sampling.
- 2.7 Institutions be afforded adequate lead time to modify internal privacy policies and practices to meet the requirements of the sampling system.
- 2.8 Onshore international students be considered in scope for the performance measurement instruments. The possible inclusion of offshore international students requires further consideration as to both conceptual and practical issues, noting that co-ordination with TEQSA will be required.
- 2.9 The responsibilities of the AQHE Reference Group between 2012-2015 will be to:
  - Provide consolidated advice on behalf of Universities to the Department and to Ministers on the development of performance measurement instruments up to and including the implementation of those instruments during 2015
  - Provide advice to the Department and to Ministers on other matters relevant to performance measurement that may arise during that time.
- 2.10 That a representative of private higher education providers be included in the AQHE Reference Group.
- 2.11 That a Code of Conduct governing access and use of data resulting from the performance measurement suite be developed with a view to allowing universities full access to the new datasets.

### *University Experience Survey*

- 3.1 The Department approach the UES Consortium led by ACER to administer and further develop the UES in 2012 in accordance with recommendations in the 2011 UES report.
- 3.2 The scope of the 2012 UES include all Table A providers, first and final year undergraduate bachelor pass students and domestic and onshore international undergraduate bachelor pass students.
- 3.3 A response rate strategy be developed for the 2012 UES to provide an appropriate number and range of responses given the proposed uses of the instrument.
- 3.4 The UES Consortium investigate the conceptual and empirical relationship between UES scales and CEQ scales and advise on options for deployment of these scales across the student life cycle.

### *A Redesigned Graduate Outcomes Survey*

- 4.1 A redesigned Graduate Outcomes Survey (GOS) be developed and included in the centrally co-ordinated suite of Government endorsed performance management instruments.
- 4.2 The GOS be administered on a 'hybrid' sample basis, with an initial email approach to all graduates supplemented by targeted telephone follow-up based on stratified sampling techniques. The Reference Group advises that achievement of the required granularity of data will in many cases require very high response rates.
- 4.3 The GOS should take as its core the current Graduate Destinations Survey (GDS), (subject to review of data items), and also include the current Postgraduate Research Experience Questionnaire (PREQ) for postgraduate research students (subject to review of data items and scales) and the current Course Experience Questionnaire (CEQ) for undergraduate students (on a transitional basis until at least 2014-15).
- 4.4 The timelines be adopted for the GOS development and deployment, and transitional arrangements for the Australian Graduate Survey, as outlined in the Centralised Administration of Performance Measurement Instruments section.
- 4.5 The GOS should continue to be administered approximately four months after graduation, but noting there is substantial divergence in the precise timing of the current instrument, and as such administration at six or even twelve months post-graduation would be acceptable if this was seen as desirable for practical reasons.
- 4.6 A longitudinal graduate outcomes survey be established, subject to budget and time constraints.
- 4.7 The detail of the GDS instrument be reviewed as part of the contractual requirements for the centralised administration project.
- 4.8 The transitional arrangements regarding overlap between data items and scales in the University Experience Survey and the CEQ be adopted, as outlined in the University Experience Survey section.
- 4.9 Detailed proposals for the delivery of the GOS to international students should be submitted by parties tendering for the role of centralised administrative body, including evaluating the possible administration of a separate survey vehicle for international students.

### *Assessment of Generic Skills*

- 5.1 In view of widespread concerns expressed in the sector about the validity and reliability of the Collegiate Learning Assessment (CLA) instrument and that it is not fit for purposes currently proposed for its use in Australia, the development of a CLA pilot study in Australia not be continued.
- 5.2 That consultations with TEQSA, the Higher Education Standards Panel and the Office for Teaching and Learning commence to achieve coherence and consistency to assure the quality of higher education outcomes, in particular with regard to the development of teaching and learning standards focusing on learning outcomes.
- 5.3 That to obtain assurance that the generic skills of graduates are meeting the needs of the economy, a literature review and scoping study be undertaken to examine the practical feasibility and value of a survey of employer needs and satisfaction with graduates as part of the suite of Government endorsed performance measures.

## 1. Advancing Quality in Higher Education

### AQHE initiative

In the 2011-12 Mid Year Economic and Fiscal Outlook (MYEFO), the Government announced that it would discontinue performance funding for student experience and quality of learning outcomes indicators. This was in support of achievement of the Government's fiscal objectives and on the basis of feedback from the sector that there was no consensus on whether it is appropriate to use such indicators for performance funding (noting that performance funding was retained for participation and social inclusion indicators). Universities provided feedback that survey data is unlikely to provide sufficiently robust and valid measures of performance on which to set quantitative performance targets for universities due to survey measurement error and potential survey bias. On this basis, and in the context of the Government's fiscal strategy, the Government decided that it would no longer proceed with performance funding for student experience and quality of learning outcomes indicators.

Universities have acknowledged the need to develop a suite of enhanced performance measures for providing assurance that universities are delivering high quality higher education services at a time of rapid expansion. The Government indicated that it would proceed with developing performance measures for student experience and quality of learning outcomes (with the exception of the composite Teaching Quality Indicator) for use in the *MyUniversity* website and to inform continuous improvement by universities.

### AQHE Reference Group

The Australian Government has consulted the higher education sector regarding the AQHE initiative. This consultation included the establishment of an AQHE Reference Group to advise on the cohesiveness of the instruments and the specific development and implementation issues associated with each of the new instruments. The Reference Group is chaired by Professor Ian O'Connor, Vice-Chancellor, Griffith University and comprises representatives from the higher education sector, students, business and unions who have been selected by Government in consultation with Universities Australia.

In December 2011 the Government published three discussion papers, *Development of Performance Measurement Instruments in Higher Education*, *Review of the Australian Graduate Survey (AGS)* and *Assessment of Generic Skills*. In addition, in February 2012 the Government published the *Report on the Development of the University Experience Survey*. The aim of the discussion papers was to canvass the views of universities and other stakeholders in relation to issues and options concerning the development and implementation of the new performance measures. The Department received 48 submissions from universities, peak bodies, other organisations and individuals in response to the discussion papers. The Government met with university groupings in December 2011 and held a series of roundtable discussions with universities, students, business and unions in January and February 2012. The discussion papers and submissions are available from:

<http://www.deewr.gov.au/HigherEducation/Policy/Pages/AdvancingQuality.aspx>

The remainder of this report focuses on different aspects of the development of performance measurement instruments. The second section provides an overview of the the submission process and considers the principles and student life cycle framework underpinning the performance measures. The third section discusses the centralised administration of performance measurement instruments. The fourth section considers the University Experience Survey. The fifth survey discusses the Review of the Australian Graduate Survey. The sixth section considers the Assessment of Generic Skills. In each of these sections, in broad terms, there is a presentation of key issues, followed by feedback from

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submissions, the Reference Group's advice in response to the discussion papers and submissions and concluding with recommendations from the AQHE Reference Group.

## 2. Overview of Submissions Including Principles and Student Life Cycle Framework

### Overview

In total the Department received 48 submissions from universities, peak bodies, other organisations and individuals. A list of those who provided submissions is provided in the Appendix.

Submissions were received from 33 universities, 6 peak bodies, 4 professional organisations, 3 business or industry groups and 2 individuals.

Submissions addressed a number of major themes raised in each of the discussion papers. The tables below identify the number of responses that addressed each of these major themes.

### *Development of Performance Measurement Instruments in Higher Education*

Of the 48 submissions received in response to the AQHE discussion papers, 41 provided feedback to the *Development of Performance Measurement Instruments in Higher Education* discussion paper. Of those submissions, the main issues that were commented on were the principles and student life cycle framework. The suite of performance measures and their administration and deployment were also commented on by a majority of respondents suggesting these issues are also of high importance.

| Theme   | Number of submissions |
|---|-----------------------|
| Principles and Student Life Cycle Framework                       | 31                    |
| Overlap and duplication; suite as a coherent whole; survey burden | 26                    |
| Survey Administration and Deployment                              | 29                    |
| Census versus Sample  | 26                    |
| Centralised Sampling (including privacy)                          | 27                    |
| Uses of Data  | 23                    |
| MyUniversity  | 16                    |
| Other Issues  | 22                    |

The category 'Other issues' captures a range of issues including: governance, sector diversity, interaction with TEQSA, access to data, costs and funding.

### *Review of the Australian Graduate Survey*

Of the 48 submissions received in response to the AQHE discussion papers, 37 provided feedback to the *Review of the AGS* discussion paper. A large number of responses commented on the overlap of the CEQ and the UES suggesting this is a key issue raised in this paper. There were also a significant number of submissions commenting on sample versus census, response rates and data quality and administration issues.

| Theme  | Number of submissions |
|--|-----------------------|
| Joint administration of CEQ and GDS                    | 18                    |
| Overlap with UES/continuation of CEQ                   | 31                    |
| Centralisation of administration                       | 23                    |
| Sample versus Census, 50% response rate, data quality  | 26                    |
| Other administration, including timeliness and funding | 23                    |
| Aspects of student experience                          | 17                    |
| MyUniversity   | 5                     |
| Other Issues   | 10                    |

The category 'Other issues' focuses on areas of improvement for the GDS data: employability, career improvement and diversity.

### *Assessment of Generic Skills*

Of the 48 submissions received in response to the AQHE discussion papers, 39 provided feedback to the *Assessment of Generic Skills* discussion paper. The key issue raised in these submissions was the validity, reliability and use of the CLA in Australia, with 37 of the 39 submissions commenting on this topic. How the CLA would be used to measure performance and the use of discipline specific assessments were the next most responded to issues.

| Theme                           | Number of submissions |
|---------------------------------|-----------------------|
| Validity/adaptation             | 37                    |
| AHELO                           | 6                     |
| Standards                       | 10                    |
| Discipline specific assessments | 26                    |
| Participation                   | 12                    |
| Measurement                     | 27                    |
| MyUniversity                    | 7                     |
| Other Issues                    | 15                    |

The category 'Other issues' includes a range of issues: other uses for the data, alternative approaches, potential impact on curriculum design and survey burden.

### *Principles*

Approximately 21 of the submissions commented on the principles proposed to guide the development of the new performance measurement instruments. Most submissions supported the proposed principles; however, many submissions suggested the list was incomplete.

*"Regarding the principles given in the papers, these appear useful but, from an institutional point of view, it is important that these principles explicitly include validity and reliability."* -

The Australian National University

*"Three additional fundamental principles should be validity as the primary driving indicator, and cost-effectiveness for institutions and government; and non-duplication and non-proliferation of instruments (both for reasons of student survey fatigue and the utility of instruments to universities)."* - Council of Australian Directors of Academic Development

While a significant number of additional principles were suggested, three in particular were raised by a range of submissions providing feedback – validity and reliability, efficiency and cost-effectiveness. The Reference Group therefore recommends that these three principles, in addition to those described in the *Development of Performance Measurement Instruments in Higher Education* discussion paper, should guide the development of the new performance measurement instruments.

### *Student life cycle framework*

Approximately 18 submissions provided feedback on the proposed student life cycle framework, and while many were supportive of its use there were some concerns about the linear nature of the framework.

*"In principle the notion of measuring different kinds of performance at different points of the student lifecycle is sound. However, we note that, in reality, there are multiple student lifecycles and that it is desirable to recognise the limitations of assuming any typical lifecycle."* The University of Melbourne

*“The student life cycle model in the discussion paper is extremely simple. This simplicity makes the model readily accessible; however, it also risks encouraging a naive view of the student life cycle as a linear progression of homogenous cohorts from course entry to successful course outcome. Reality is far more complex.” - Queensland University of Technology*

*“The validity of an idealised linear student life cycle model is questionable. Deferments, disruptions, part-time options, course changes and many other anomalies are tolerated to a far greater degree than in previous student generations. Accounting for the effects of these anomalies in the design and dissemination of surveys across this varied student body needs deeper consideration.” – The University of Adelaide*

The feedback received stressed the need to ensure the instruments are designed to take into account non-traditional (school leaver) students. Some particular issues which arose in the submissions were that of different pathways into universities, and that some students do not enter through the first year. In this vein, it is also acknowledged that students move between universities and may transition from one institution to another after their first year.

*“The student life cycle framework should acknowledge that students enter university via many pathways and may articulate into a second year of a program. More focus on pre-entry characteristics of student cohorts and how that is changing over time may help the sector better support students in their transition to higher education.” – The University of Newcastle*

Another issue raised was that of where the life cycle starts and ends, and whether more focus is required on the pre-entry and post-study aspects of the framework.

*“A more realistic depiction of the student lifecycle would include reference to engagement with university well before the application/admissions and enrolment stage; that is, in the early years of schooling and in community contexts. This is particularly important in supporting the early engagement of under-represented students in higher education.” - University of Western Sydney*

*“...CSU considers that information on graduate employment some years beyond graduation is very useful as is feedback from graduates at such a point in time. The University devotes substantial resources to analysing long term retention of its graduates in rural and regional Australia.” – Charles Sturt University*

*“However, while a generic lifecycle framework is an appropriate to guide sector-wide measurement, for many students the undergraduate degree is only a necessary precondition for further or postgraduate study to gain accreditation for professional membership or an occupation... “Completion” is not always therefore a precise event in time. In this sense undergraduate study is not the total of many students’ experience, nor necessarily captures their expectations about what completing their studies means for them. The longer a student studies, the more nuanced will become their expectations and capacity for critical reflection on what they have experienced and are experiencing as well as their broader life experience outside the University.” – Griffith University*

### Reference Group advice

The student life cycle framework is a broad conceptual model which aims to encompass the diversity of student pathways. The Reference Group believes it is important to consider non-traditional students in the development of the new performance measurement instruments and to ensure the experiences and circumstances of these students are adequately measured by the new performance measurement instruments.

### *Institution specific indicators*

The Government announced in the 2011-12 MYEFO that it would retain Reward Funding for participation and social inclusion indicators, discontinue Reward Funding for student experience and quality of learning outcomes indicators and that it would proceed with the development of student experience and quality of learning outcomes indicators for use in the *MyUniversity* website and to inform continuous improvement by universities.

Universities have commented that the development of a suite of sector wide performance indicators may not provide sufficient scope to demonstrate the diversity of institutional settings. In this context, it has been proposed that institution specific indicators more suited to institution's missions and circumstances be developed to augment sector wide performance indicators. In consideration of these views, the Reference Group proposes that there should be scope within Compacts for the nomination of an institution specific performance indicator to account for the diversity among institutions.

### *Recommendations*

The AQHE Reference Group recommends:

- 1.1 On the basis of feedback received, that three additional principles guide the development of performance measures including:
  - i) Validity and reliability – the instruments should be robust and measure what is intended to be measured.*
  - ii) Efficiency – duplication and excessively burdensome processes should be minimised.*
  - iii) Cost effectiveness – the cost of measurement should be justified by the value it yields.*
- 1.2 That the student life cycle framework is a broad conceptual model which aims to encompass the diversity of student pathways. In addition, the Reference Group affirms the importance of ensuring that the experiences and circumstances of non-traditional students are adequately measured by the new performance measurement instruments.
- 1.3 There should be scope within Compacts for the nomination of an institution specific performance indicator to account for diversity among institutions.

### 3 Centralised Administration of Performance Measurement Instruments

#### Issues

The Advancing Quality in Higher Education initiative aims to improve outcomes for students and pursue national quality, participation and attainment objectives. This will ensure that quality remains high at a time of rapid growth in the sector. A suite of performance measurement instruments that will improve transparency in university performance and provide quality information across the student life cycle is a key aspect of this initiative. The Government has proposed that results from these instruments will be published on the *MyUniversity* website, providing students with more information about the quality of teaching and learning at universities, thereby allowing students to make more informed choices about their education.

In December 2009 the Government published 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. Development of the indicators has been informed by the student life cycle framework. Using the student life cycle framework, 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.

The suite of performance measurement instruments needs to provide data which is transparent and of high quality, as well as be based on efficient administrative arrangements (including minimising survey burden on institutions and students). In this light, the *Development of Performance Measurement Instruments in Higher Education* discussion paper stated

*“Given the stakes and uses to which the data collected from the new instruments will be used, on balance, an independent [or centralised] approach [to instrument administration] is favoured since this will promote validity, consistency and efficiency.”*

Advantages to administering the instruments through a central organisation include:

- Central administration would focus efforts to develop and administer the suite of instruments as a coherent whole which is informed by the student life cycle. This would help minimise survey burden and identifying points in the student life cycle where further work is required to meet the information needs of the sector.
- A central, independent organisation would ensure equitable implementation of the instruments and remove room for “gaming” by universities, thereby increasing the quality of the data and sector confidence.

- Central administration would be more efficient in terms of resource use, as the bulk of the administration will be conducted by a single organisation, rather than by each individual university.
- By drawing on the Commonwealth Higher Education Student Support Number (CHESSN) from the Government's Higher Education Information Management System (HEIMS), the central body would be able check on the lists of student contact details provided by institutions, providing transparency for the system. It would also allow the use of more sophisticated statistical techniques such as calculation of non-response bias.

To give effect to the centralised administration of survey instruments, the Reference Group proposes that the Department engage a single body to co-ordinate the suite of Government endorsed performance measurement instruments. In principle, performance instruments would be based on stratified sample techniques, based on a single sample frame administered by the central body, although the appropriateness of this approach would need to be investigated in detail for each individual instrument.

### Sector feedback

In December 2011 the Government published the discussion paper *Development of Performance Measurement Instruments in Higher Education*. This paper invited submissions on the issue of centralised instrument administration. Of the 48 submissions received in response to the AQHE discussion papers, 41 submissions provided feedback on the *Development of Performance Measurement Instruments in Higher Education* discussion paper. 29 submissions provided feedback on the issue of centralised instrument administration, 26 submissions provided feedback on the use of census as against sample surveys and 27 submissions provided feedback on the issue of the construction of a centralised sampling frame based on HEIMS/CHESSN.

### Centralised administration

The majority of respondents were in favour of the performance measurement instruments being administered on a centralised, independent basis. The main reasons put forward for doing so were data quality and integrity, and sector confidence in instrument outputs.

*"Sector-wide trust in the rigour of the process is paramount. Universities need to be assured of the transparency, consistency and independence of the process."* –University of Western Sydney

*"Monash's own experience indicates there is a case for the adoption of a centralised survey administration process. Our experience is that centralised AGS administration has resulted in improvements in data quality and consistency, fairly consistent response rate at the faculty and campus level, and a much decreased time span between the start of the survey period and the availability of a consistently coded dataset."* – Monash University

Some concerns were, however, expressed regarding the use of a centralised administrative model. These focused on the possibility that centrally administered instruments may not provide institutions with timely results, or may not be responsive to sector needs because it would foster an homogenous approach.

*"An independent deployment method could:*

- *result in survey conditions becoming 'one size fits all' in a sector that is increasingly diverse, e.g. some higher education providers have chosen to adopt a trimester schedule;...*

- *reduce capacity to respond to queries, follow ups and to amend timelines.*” - Edith Cowan University

On the other hand, some submissions suggested that centralising survey administration might in fact improve timeliness by streamlining operations. Some submissions raised the issue of whether a centralised administration might lower response rates.

*“A key issue to consider before committing to independent deployment is whether students respond better to the institutions they attend or to third parties.”* – Universities Australia

A number of submissions stressed that if a central body were to administer the instruments, then an increased focus on engagement with institutions and other stakeholders would be necessary.

Although there are varying views regarding specific proposals, all of these submissions highlight the key priorities for the sector from performance measurement instruments, regardless of administrative model; the timeliness, accessibility and quality of data produced.

### **Sample versus census approach**

Sector feedback on this issue was mixed. Respondents recognised the potential of a sample survey to reduce survey burden and costs, and to produce higher quality data for targeted sub-populations. At the same time, there were concerns that sample surveys might not deliver the detailed information universities require for internal purposes. Smaller institutions in particular expressed concern over the level of results provided by a sample methodology. The sector’s ambivalence is encapsulated in the following comment: submission, which stated

*“Surveys that serve multiple purposes and where a diverse set of outcomes is possible such as Graduate Destinations (employment status, occupations, industries, employers etc) are likely better suited to a census approach... For other surveys, a sampling approach is likely to suffice. In either case, institutions must have data collected at a level which provides meaningful information to monitor and improve the quality and suitability of their courses, programs and student support.”* – University of Melbourne

Overall, the choice between a sample and census approach is seen as a pragmatic rather than principled decision, and one which needs to take into account the circumstances of each individual instrument. Institutions are clearly of the view that whichever approach is adopted, to be of any use for internal improvement and quality assurance purposes, data needs to be provided to them in as much detail as possible, and certainly at the course level.

### **Centralised sampling frame**

There was no in principal opposition to the use of a centralised sampling frame, if instruments were to be administered on a sample basis. Some institutions noted that the use of a single sample frame based on HEIMS/CHESSN could have positive effects on data quality and could reduce survey burden.

*“There is potential to make more productive use of the unique student identifiers that have been created (the CHESSN) to track student and institutional performance in a way that ensures individual privacy and confidentiality is preserved, while also allowing greater understanding of the student life cycle.”*- University of Newcastle

*“The use of DEEWR HEIMS has the potential to reduce duplication of data/survey questions by reducing the number of student demographic/attribute questions.” and “The use of sampling and DEEWR HEIMS has the potential to reduce survey fatigue by minimising the number of contacts with a student.” - Deakin University*

*“Using centralised sampling improves the degree of administrative control, the ability to track students and the survey follow up procedures. However, if the central agency makes administrative errors the consequences are greater than if a single devolved unit committed the same error.” – Universities Australia*

It is clear, however, that student privacy is a major practical consideration. This is due not only to institutions' own policies, but to legislative requirements, both state and federal.

*“There is an increasingly complex legal and regulatory environment relating to privacy” – University of Notre Dame*

Nonetheless, institutions indicated that they would be prepared to change their privacy policies if required to meet the needs of the centralised sampling.

*“Universities would be willing to explore necessary changes in their privacy agreements if satisfied that third party arrangements satisfied institutional concerns and were reviewed on a periodic basis.” – Queensland University of Technology.*

Some institutions suggested that a legislative approach would also be appropriate.

### Reference Group advice

The centralised, independent administration of a coherent suite of Government endorsed performance measurement instruments will deliver greater transparency, higher quality data and administrative efficiency. This could be achieved through the contracting of a third-party provider to co-ordinate the entire suite of instruments. The Reference Group recommends that the Department select a provider through a competitive tender process. Instruments to be initially included in the indicator suite would be the University Experience Survey (UES), a redesigned Graduate Outcomes Survey and a survey of employer satisfaction with graduates. These instruments would be phased in progressively, with the central co-ordination role being contracted in the first instance for a period of three years, from 2012-13 to 2014-15.

Although precise details as to survey administration will need to be decided on by the contracted co-ordinating body, initial approaches to participate in surveys would most likely be made by email, then be supplemented by telephone follow-up where required. In principle, the performance instruments should be administered on a stratified sample basis, however, specific administrative practices for each instrument would need to be considered on an individual basis. The Graduate Outcomes Survey is particularly problematic in this regard, because of the need to report on cross-cutting education and labour market data items.

Samples for the instruments would be constructed by the co-ordinating body using a single sample frame. The HEIMS database and the CHESSN student identifier will probably not be suitable for use in constructing sample frames due to timing issues, but could be used for data quality assurance. Privacy issues should not be an insurmountable obstacle to universities participating in such a centralised

sampling methodology, provided they are afforded adequate time to adjust internal policies and practices.

The Government has announced that it intends to publish results from the suite of performance measurement instruments on the *MyUniversity* website and this raises the issue of whether the scope of the instruments should extend beyond domestic students to include international students. On this basis, the Reference Group believes that onshore international students should be included within scope for the new performance indicator suite. Offshore international students should not be included at present. Measuring learning and teaching quality for these students raises a range of practical and conceptual issues which would require further consideration and consultation with the sector. The evolving role of TEQSA in assuring the quality of education provided to offshore international students would also need to be considered in this regard.

The Reference Group believes that consideration will need to be given to ongoing governance arrangements for the centralised performance measurement suite. This could be accomplished relatively simply through extending the role of the Reference Group itself. The current Terms of Reference for the AQHE Reference Group need to be revised, as its current broad scope needs to be made more specific and relevant to the implementation of the Government endorsed suite of performance measurement instruments. Specifically it recommends, the responsibilities of the AQHE Reference Group between 2012-2015 will be to:

- Provide consolidated advice on behalf of Universities to the Department and to Ministers on the development of performance measurement instruments up to and including the implementation of those instruments during 2015
- Provide advice to the Department and to Ministers on other matters relevant to performance measurement that may arise during that time.

Future development of performance measures will need to be co-ordinated with the work of TEQSA, the Higher Education Standards Panel and the Office for Teaching and Learning, as the roles of all relevant bodies are clarified over time. For example, TEQSA's Regulatory Risk Framework includes indicators of graduate satisfaction, employment and further study. The inclusion of students at private providers within the scope of the performance measurement suite is an issue requiring further investigation, given TEQSA has an important role in this regard. The Reference Group recommends that a representative of private higher education providers be included in the Reference Group.

The Reference Group believes that access and use of data generated by the performance measurement suite should be governed by a Code of Conduct. The development of a Code of Conduct would be a priority for the Reference Group.

## Recommendations

The AQHE Reference Group recommends:

- 2.1 The Department contract an independent and centralised administrative body to co-ordinate the Government endorsed suite of performance measurement instruments.
- 2.2 The Department use a competitive tender process to select a third-party provider to fulfil this centralised administration role for the period 2012-13 to 2014-15.
- 2.3 The work program of the centralised administrative body in the first contract period should consist of:
  - The University Experience Survey

- A survey of employer satisfaction with graduates
- A Graduate Outcomes Survey

2.4 In principle, that stratified sampling techniques should be used across all the performance measurement instruments, subject to further investigation as to the statistical validity of such an approach for each individual instrument, particularly in regards to the labour market information required in the Graduate Outcomes Survey.

2.5 The following timetable for the development and implementation of the performance measurement suite be adopted;

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| AGS                   | October round               | April round   |              |              |              |              |
| <b>Administrators</b> |                             |               |              |              |              |              |
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| GCA                   | AGS                         | AGS           |              |              |              |              |
| ACER                  | UES                         |               |              |              |              |              |

Timelines for the development and implementation of the survey of employer satisfaction with graduates requires further consideration.

- 2.6 A centralised sample frame be constructed by the central administrative body, based on student data provided by institutions and that the HEIMS database and CHESSN student indicator be used for post facto quality control of sampling.
- 2.7 Institutions be afforded adequate lead time to modify internal privacy policies and practices to meet the requirements of the sampling system.
- 2.8 Onshore international students be considered in scope for the performance measurement instruments. The possible inclusion of offshore international students requires further consideration as to both conceptual and practical issues, noting that co-ordination with TEQSA will be required.
- 2.9 The responsibilities of the AQHE Reference Group between 2012-2015 will be to:
- Provide consolidated advice on behalf of Universities to the Department and to Ministers on the development of performance measurement instruments up to and including the implementation of those instruments during 2015
  - Provide advice to the Department and to Ministers on other matters relevant to performance measurement that may arise during that time.
- 2.10 That a representative of private higher education providers be included in the AQHE Reference Group.
- 2.11 That a Code of Conduct governing access and use of data resulting from the performance measurement suite be developed with a view to allowing universities full access to the new datasets.

## 4 University Experience Survey

### Issues

The University Experience Survey (UES) was developed for use as an indicator of student experience in the Performance Funding arrangements. The UES was designed as an instrument to measure the experiences of first year (and potentially later year) students and to provide more timely results than the existing Course Experience Questionnaire.

The Government announced in the 2011-12 Mid-Year Economic and Fiscal Outlook (MYEFO) that Reward Funding would be discontinued for the student experience and quality of learning outcomes indicators. As a result, the UES will no longer be used for Reward Funding. Instead, the Government has proposed that the focus of the UES will now be for continuous improvement and to inform student choice.

In February 2012 the Government published the *Report on the Development of the University Experience Survey* – see <http://www.deewr.gov.au/HigherEducation/Policy/Pages/AdvancingQuality.aspx>

The UES was designed and developed throughout 2011 and was piloted in August 2011 among first year, and some later year, undergraduate students at 24 universities. Approximately 20,000 students responded to the survey, giving a response rate of 14 per cent.

The UES was designed to measure satisfaction across three key dimensions of student experience, learning engagement, teaching and support and educational development. The report's key findings include:

- 79.1 per cent of students stated they were satisfied with the quality of their overall educational experience; and
- 82.4 per cent of students expressed satisfaction with the quality of teaching.

Across the three key dimensions of student experience:

- 64.8 per cent of students were satisfied with their learning engagement;
- 84.2 per cent of students were satisfied with a broad measure of teaching and support; and
- 93.3 per cent of students were satisfied with their educational development.

The report made 10 recommendations on the future of the UES:

**Recommendation 1:** It is recommended that the UES measures three core areas of student experience: Learner Engagement, Teaching and Support, and Educational Development.

**Recommendation 2:** It is recommended that the version of the UEQ reproduced in Appendix A of the UES Report be used as a baseline instrument to be further developed to enhance its relevance to informing student choice and continuous improvement. It also recommended that institutions be able to add approved optional items to the standard form to assist with continuous quality improvement.

**Recommendation 3:** It is recommended that the UES focus both on first-year and final-year undergraduate, bachelor pass students' experiences.

**Recommendation 4:** It is recommended that scientific sampling methods—and, where necessary a census—be used to select students for the UES, and that sampling be designed to yield discipline-level reports for each university.

- Recommendation 5:** It is recommended that the UES be administered using a range of modes, primarily online, but also with the use of Computer Assisted Telephone Interviewing (CATI) and paper surveying.
- Recommendation 6:** To ensure consistency and efficiency it is recommended that the UES be administered independent of universities.
- Recommendation 7:** It is recommended, in terms of fieldwork timing, that students are surveyed at the beginning of their second semester of bachelor degree study and in their penultimate semester of bachelor degree study.
- Recommendation 8:** It is recommended that a 'UES Response Rate Strategy' be developed and implemented in conjunction with the sector as a whole. A target response rate of 35 per cent is proposed for use with the UES to assist in securing a sufficient number and range of responses, and this target response rate should be reviewed as the UES develops.
- Recommendation 9:** It is recommended that certain standards and agreements be developed to guide how governmental agencies and universities use UES data.
- Recommendation 10:** It is recommended that the UES be reviewed and refined during 2012 with a focus on informing student choice and continuous improvement relevant to key stakeholders in light of recent policy changes.

### Sector feedback

Of the 48 submissions received in response to the AQHE discussion papers, approximately 25 provided advice on the UES. These submissions largely supported the development of the UES and its use in the suite of performance measurement instruments.

As expected, the key issue raised with regard to the UES is the potential overlap with the Course Experience Questionnaire (CEQ) and how the two instruments will work together. The majority of responses which raised this issue supported a single measure of student satisfaction and learning outcomes, and approximately 14 responses supported using the UES over the CEQ.

*"It is clear that with the development of the University Experience Survey (UES), there is significant overlap between the UES and the Course Experience Questionnaire (CEQ) in the assessment of measuring a student's university experience. The UES is a more modern instrument, and is useful in measuring student experience within the student life cycle. JCU supports the IRU proposal that the UES be tested on enrolled students for its operational validity and reliability, and if these are demonstrated, then the UES replace the CEQ." – James Cook University*

*"The UES is capable of measuring aspects of the student experience that are covered by the CEQ. The UES could provide a richer source of data on the student life-cycle. This would result in more timely and relevant data to be used to improve the quality of teaching and learning." – Monash University*

*"The UES is much more substantially based on the research literature on student success, particularly student engagement, and on effective teaching and support, than the CEQ." – The University of Adelaide*

A few responses were more cautious of using the UES to replace the CEQ particularly due to the longevity of the CEQ, while others put a case for using the UES for first year students and maintaining

the CEQ or moving it to survey students in their final year to align with the timing of the UK National Student Survey (NSS):

*"The availability of trend data is part of what gives the CEQ its utility and fitness for purpose and it should be maintained." - The University of Sydney*

*"Deakin supports the continued use of the CEQ..... Evidence of the reliability and validity of the CEQ has been reported in peer-reviewed journals and GCA reports...Further work is required [UES] to ensure the fitness of the instrument to inform quality improvement and student choice." - Deakin University*

*"The UES and CEQ can play important complementary roles as one is the current students' experience and another is an overall experience of the graduates, after the completion of their course. With appropriate analysis, they may better provide for future information needs at a number of levels." - Macquarie University*

*"Given that the UES combines aspects of the AUSSE and the first year experience survey, UWA is confident that this new survey will provide the Government, the sector and the University with useful data...If a final year survey is considered warranted, then UWA would support consideration of the CEQ being administered in the final year of study, in the same manner as the National Survey of Students in the UK. This approach would provide data that could be benchmarked more legitimately, since the survey would be administered nationally at the same point of the students' study." - The University of Western Australia*

While replacing the CEQ with the UES would cause a break in the CEQ's time series, submissions have suggested transitional arrangements to minimise this effect. Note that the change in labelling of the CEQ scales caused a break in the time series between 2009 and 2010.

*"New survey instruments, if replacing existing survey instruments, may break the time-series unless new and old surveys are run in parallel or unless the new survey has items similar to those in the previously used surveys (for example, if the UES replaces the FYEQ). This would make it difficult to compare year-on-year performance and track progress across time." - Southern Cross University*

The following section presents a more detailed discussion on the future of the CEQ and its relationship with the UES.

Another issue raised in the submissions is that of whether the UES should be run as a census or as a sample. Those universities who provided feedback on this issue generally supported a sample administration of the UES, however, there were other responses supporting a census for the Australian Graduate Survey (AGS), therefore, this issue should be considered in parallel to the above issue relating to the overlap of the UES and the CEQ.

*"Whilst UON supports sampling for the UES, it suggests a census approach to the AGS survey to address concerns regarding sample size. A census methodology would enable deeper analysis at a discipline level." - The University of Newcastle*

*"We would support a census approach to collecting data for a final year CEQ and for the AGS. A survey would be the most appropriate approach to collecting data for the UES. In this particular case we support central sampling of students as this will ensure a consistent process across institutions." - The University of New South Wales*

Another issue raised regarding the UES is its focus on first year students. A few submissions stated that a large number of students do not enter university through traditional methods but do so through

alternate pathways, including direct entry into the second year of a program. They therefore expressed concern that the experience of these students will not be measured.

*"We can confirm our support for its[the UES] introduction as a survey of experience for first year students, while noting the concern expressed by institutions which have a significant number of students who enter directly into the second year of university and so will not be included in a survey of first year students. It may be better considered as a survey of entering students."* – Council of Australian Directors of Academic Development

### Reference Group advice

The Reference Group believes that the recommendations of the *Report on the Development of the University Experience Survey* should serve as the basis for guiding the future of the UES. The current version of the UES should be used as a baseline instrument (Recommendation 2) and that it be reviewed and refined during 2012 with a focus on informing student choice and continuous improvement (Recommendation 10). There should be an investigation and development of a set of tailored items for potential incorporation into the core instrument to reflect different student circumstances e.g. external, mature age and part time students. In addition, there should be an investigation and development of a set of non-core items and scales for purposes of assisting universities with their continuous improvement activities (Recommendation 2). To ensure continuity in the development of the instrument, the Reference Group believes it would be appropriate for the Department to approach the UES Consortium led by ACER to administer and further develop the UES in 2012.

The scope of the UES instrument will extend to all Table A universities in 2012. Universities have received Facilitation Funding in 2011 and 2012 in return for agreeing performance targets, to participate in the development of performance measurement instruments and establish baseline performance. On this basis, it is expected that all universities will participate in the UES and its further development in 2012. The scope of the UES instrument will include administration among first and final year bachelor pass students (Recommendation 3). In view of the intention to publish UES results on the *MyUniversity* website, subject to results proving valid and robust, the Reference Group recommends that the 2012 UES be administered among domestic and international on-shore bachelor pass students.

The Reference Group supports the use of scientific sampling methods (and where necessary a census) to select students for the UES (Recommendation 4). The Reference Group proposes that a UES Response Rate Strategy be developed to secure a sufficient number and range of responses (Recommendation 8). The Reference Group believes that achieving a target response rate of 35% would most likely require that the UES be administered using a range of modes of delivery, including on-line, Computer Assisted Telephone Interviewing (CATI) and/or paper surveying (Recommendation 5). The Reference Group proposes that in 2012, where possible, that the UES instrument be administered independently of universities (Recommendation 6), noting that it is proposed to move to comprehensive independent administration of the full suite of performance measurement instruments from 2013 onwards, as outlined in the previous section. Responses to the AQHE discussion papers were largely in favour of an independent central administration of the UES and the other performance measurement instruments. The main reasons put forward for doing so were data quality and integrity, and sector confidence in instrument outputs.

The Reference Group is in agreement that certain standards and agreements should be developed to guide how governmental agencies and universities use UES data (Recommendation 9). It believes it would be more appropriate to develop data protocols concerning access and use of performance data in the broader context of the development of performance measurement instruments – see Recommendation 10 in the previous section, Centralised Administration of Performance Measurement Instruments.

A key issue raised in submissions was the interrelationship between the UES and CEQ. To address this issue, the Reference Group proposes that the UES Consortium investigate the conceptual and empirical relationship between UES scales and CEQ scales and advise on options for deployment of these scales across the student life cycle. This would enable a comparison between UES and CEQ results and facilitate an informed decision on the future of CEQ beyond the end of the transitional phase in 2014-15 (for more details on transition arrangements see the following section concerning proposals for a redesigned Graduate Outcomes Survey).

### Recommendations

The AQHE Reference Group recommends:

- 3.1 The Department approach the UES Consortium led by ACER to administer and further develop the UES in 2012 in accordance with recommendations in the 2011 UES report.
- 3.2 The scope of the 2012 UES include all Table A providers, first and final year undergraduate bachelor pass students and domestic and onshore international undergraduate bachelor pass students.
- 3.3 A response rate strategy be developed for the 2012 UES to provide an appropriate number and range of responses given the proposed uses of the instrument.
- 3.4 The UES Consortium investigate the conceptual and empirical relationship between UES scales and CEQ scales and advise on options for deployment of these scales across the student life cycle.

## 5 A Redesigned Graduate Outcomes Survey

### Issues

A suite of performance measurement instruments that will improve transparency in university performance is a key aspect of the Advancing Quality in Higher Education initiative. The Australian Graduate Survey (AGS) is a national survey of newly qualified higher education graduates, conducted annually by Graduate Careers Australia (GCA). A strengthened AGS is part of the suite of performance measurement instruments that were announced as part of the AQHE initiative.

Graduate outcomes data will form a core component of the resulting range of performance indicators, providing information on a key point of the student life cycle, that is the transition from study to the labour market. Graduate destinations data is valuable for government in labour market monitoring and workforce planning, especially in relation to the Minister's role in ensuring the higher education system meets Australia's labour force and skills needs.

The Government has also proposed that graduate outcomes information will be published on the *MyUniversity* website, providing students with enhanced information about the interaction between higher education and the labour market, thereby allowing students to make more informed choices about their education. Importantly in this respect, institutional level and institution by field of education level data will be made public. While this does not accord with current AGS practice, it is consistent with approaches to publishing performance information previously undertaken by the Department.<sup>1</sup>

In revising the AGS, there is a need to ensure the transparency and quality of graduate outcomes data, as well as the efficiency of administrative arrangements (including minimising survey burden on institutions and students). In addition, the development of a wider suite of performance measurement instruments is a timely opportunity to review the ability of the existing AGS instrument to meet the changing needs of the sector. The AGS was first administered around three decades ago, and despite numerous revisions its current administrative model retains significant elements which are anachronistic in today's higher education environment. The *Review of the Australian Graduate Survey* discussion paper noted that

*"...the ongoing role and value of the AGS needs to be clearly articulated... [it] may need to be modified to enable the survey to establish a coherent place among the range of new indicators, and to ensure it continues to meet the evolving needs of higher education sector stakeholders."*

From being the prime source of nationally benchmarked data on university performance, the AGS will become one of several available data sources. The AGS may need to be modified to enable the survey to establish a coherent place among the range of new indicators, and to ensure it continues to meet the evolving needs of higher education sector stakeholders.

Given the increasing number of surveys in which university students are being asked to participate, and for which universities are being asked to provide administrative support, the additional value offered by the AGS needs to be clearly articulated. One option to reduce cost and respondent burden would be to move from the current census basis of the AGS, where all eligible students are invited to participate, to a survey sample. Consideration should also be given as to whether the Course Experience Questionnaire (CEQ, the student satisfaction component of the AGS) should move to surveying students, rather than graduates, in line with the other performance indicators being developed.

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<sup>1</sup> Department of Education, Training and Youth Affairs (1998); Department of Education, Science and Training (2001).

The most notable challenge to the ongoing relevance of the CEQ comes from the new University Experience Survey (UES). The UES will gauge student attitudes towards a number of aspects of their university course, initially at the end of their first year and potentially in their final year of study. While not identical to the information garnered by the CEQ, the UES will provide an alternative measure of student satisfaction and course experience perceptions across the student life cycle. Consideration therefore needs to be given to the value of continuing the CEQ as an additional survey instrument.

Information provided by the GDS (Graduate Destinations Survey, the graduate outcomes component of the AGS) will not be replicated by any of the new performance indicators. By its nature, the GDS is a measure of a university's contribution to skill formation in relation to labour market outcomes and can only be administered at the end of the student life cycle. Information on graduate outcomes will continue to be of value to the sector. Nonetheless, consideration should be given as to whether the GDS as currently configured is appropriate for the needs of the sector in the future.

### Sector feedback

In December 2011 the Department released the discussion paper *Review of the Australian Graduate Survey*. Of the 48 submissions received, 37 provided feedback to the Review of the AGS discussion paper. 31 submissions provided feedback on the overlap between the CEQ and UES, 26 submissions commented on the use of census as against sample surveys, response rates and data quality issues and 23 submissions commented on the centralised administration of surveys.

### Centralisation of administration

A clear majority of respondents supported centralised administration. The primary reasons given for this support were credibility of the survey results, the possibility of implementing a sample methodology, and potential increases in data quality and timeliness.

*"Survey administration should be centralised and undertaken by a third party under a robust sampling methodology."* – University of South Australia

*"Centralised administration will reduce administrative duplication."* – Universities Australia

A few respondents were opposed to centralisation outright, especially smaller institutions concerned about falls in response rates under a centralised model.

*"A centralised model of delivering the AGS would, given current requirements such as targeting a 50% response rates from each major group, be entirely unworkable for some institutions."* – University of Wollongong

A greater number of submissions raised concerns over certain aspects of centralisation, even when they were supportive overall. Concerns centred around the ability of a centralised model to achieve required response rates, and to deliver results to universities at a sufficiently granulated level and in a timely manner.

*"Uniformity in data collection is essential for creditability of the results. However, if a centralised collection is adopted, the data collected should contain fields that are useful for institutions' internal performance monitoring, including identification of respondents and the courses in which they are enrolled."* – The University of Western Australia

*"The overall benefit of a centralised model for the AGS will not be realised unless the implementation is accompanied by a guarantee that: central procedures and policy will safeguard data security; prompt return of raw data sets to institutions (as the data owners) for internal*

*purposes is ensured; expedience in survey administration and reporting is ensured; and a cost benefit for institutions will result.*" – Queensland University of Technology

*"A good case for a centralised model can be made, however, on efficiency grounds and the University would be supportive of such a move as long as the data collected continues to be useful to the University."* – The University of Melbourne

### *Continuation of the CEQ*

Respondent views on the continuation of the CEQ were split fairly evenly into three groups. One group of submissions clearly supported the continuation of the CEQ, given its proven track record, availability of time series data and ability to provide international benchmarking.

*"The CEQ is one of the few current or proposed survey instruments that provides internationally comparable data."* – University of Technology, Sydney

*"The availability of trend data is part of what gives the CEQ its utility and fitness for purpose and it should be maintained."* –The University of Sydney

*"Deakin supports the continued use of the CEQ. .... Evidence of the reliability and validity of the CEQ has been reported in peer-reviewed journals and GCA reports."* – Deakin University

A slightly greater number of submissions favoured the discontinuation of the CEQ. This was generally because the UES was seen as a better instrument and maintaining the CEQ would result in unnecessary duplication. It should be noted that some respondents were in favour of allowing a transition period to ensure that the UES would be an adequate substitute for the CEQ.

*"The UES is capable of measuring aspects of the student experience that are covered by the CEQ. The UES could provide a richer source of data on the student life-cycle. This would result in more timely and relevant data to be used to improve the quality of teaching and learning."* – Monash University

*"If year 3 students undertake the UES survey as proposed, then we consider that the CEQ should be discontinued because of the commonalities between them"* – The University of Newcastle

*"In CSU's view the UES is much more substantially based on the research literature on student success, particularly student engagement, and on effective teaching and support, than the CEQ... CSU strongly recommends discontinuation of use of the CEQ."* – Charles Sturt University

In addition, around one third of respondents argued in favour of using one of either the UES or CEQ in order to avoid duplication, without expressing a preference between the two, or suggested some form of combined UES/CEQ, perhaps after a time delay for development.

*"The best approach may be for the two instruments [CEQ and UES] to merge."* – Universities Australia.

*"UB supports the development of a new UES that builds on existing student experience instruments and that can lead to a streamlined instrument that gathers information on students' learning experience as they enter and progress through the higher education system."* – University of Ballarat

### *Joint administration of the CEQ and GDS*

Assuming the CEQ was to continue, there was a roughly even split in respondent views on joint administration of the CEQ and GDS. Arguments in favour of joint administration included efficiency and a perceived benefit in asking graduates about satisfaction in conjunction with labour market outcomes.

*“Administration of the GDS and CEQ simultaneously still seems appropriate. If it were split into two separate surveys, the response rate for the survey which was second in line could be adversely affected.”* – University of Western Australia

*“A further advantage to joint administration of the surveys is that the four month period between graduation and completing the CEQ allows students more time to reflect on their course and also with the added benefit doing so from the perspective of how the course had prepared them for their employment or further study.”* – The University of Melbourne

Those arguing for splitting the administration generally wanted to change the timing of one or both instruments, as discussed below, or believed that de-coupling would improve the instruments by allowing them to focus on their specific subject matter.

### *Census or sample methodology?*

As with the issue of centralisation, the key concern for universities in relation to the use of a census or sample methodology is the useability of the data they receive, in terms of level of detail, quality and timeliness. A small majority of respondents favoured maintaining a census approach, mainly because it was considered that a sample would not provide sufficiently robust data at the required level of detail. In addition, some respondents saw a census as providing a ‘voice’ to graduates in providing feedback.

*“If the AGS were to move from a census to a sample then the ‘graduate’ voice of the CEQ and the continuity of the dataset would be lost. The ability to report by discipline or by equity group is also likely to be compromised, especially for relatively small institutions.”* – Murdoch University

*“The GDS needs to be census based, due to the variability of the responses and the detailed data collected for some data items such as occupation and duties it is very difficult to produce a representative sample that will allow for the collection of data at this detailed level.”* – University of Western Sydney

*“Although a targeted approach has been suggested as an effective way of boosting responses, the reality is that a survey sample would create some problems of Notre Dame because of the ongoing challenge to reach the response rate requirement from a relatively small student population.”* – University of Notre Dame Australia

There was, however, substantial minority support for moving to a sampling approach, mainly on the grounds of efficiency and reduced survey burden, and the possibility of using sophisticated survey techniques.

*“A stratified sampling methodology should be designed that is cognisant of the intended uses of the data. The aim should be to collect enough data to support the analysis required. Subsequent weighting of the data to the underlying population characteristics should also be undertaken.”* – The University of Queensland

*“A stratified sampling approach provides scope for longitudinal surveying of the same cohort of graduates over time e.g. a four-year out survey and/or surveys of their employers. This tracking of individuals over time would provide a significant body of evidence for the Government and stakeholders to demonstrate the impact that higher education has on individual lives... A stratified*

*sampling approach would reduce the survey burden on the graduate population and would be cost effective.*” – University of South Australia

*“La Trobe strongly favours the adoption of a sample approach for the AGS and analogous surveys. An appropriately constructed sample is more reliable than a census and would bring additional benefits in increased efficiency and reduced cost.”* – La Trobe University

### *Timeliness*

The key area of sector dissatisfaction with the current AGS was the timeliness of data being returned to universities. There was a general sense that there was substantial room for improvement in this regard through changes in administrative practice, including centralisation, sampling and an online instrument. Other suggestions to improve timeliness included having a fixed date for publication of data, improving student engagement, reducing the time allowed to universities to collect responses, and a system of reward and punishment for institutions based on their meeting deadlines.

*“The combination of a centralised model, the primary use of an online instrument, the dropping of the 50% response rate minimum and an earlier fieldwork closing date for the survey will allow more timely delivery of final data files and survey results to the sector.”* – Graduate Careers Australia

*“The timeliness of AGS reporting could be improved by further utilising available technology, providing additional government funding to resource survey administration, or by providing incentives for higher education providers who submit data on time and/or penalties for those who do not. Seeking to centralise administration of the AGS and utilise existing reporting processes to pre-populate information would also assist in improving the timeliness of AGS reporting.”* – Edith Cowan University

### *Timing of survey administration*

A number of respondents raised the possibility of the GDS being administered with a longer time lag after graduation. This was based on a view that the current timing of four months post-graduation did not allow graduates sufficient time to establish career paths, or may even overlap with ‘gap’ years or vacations from work and study. Suggested time frames ranged from six months to 18 months post-graduation.

*“The collection of the GDS only four months after graduation does not accurately reflect the career paths of the majority of university graduates.”* – The University of Adelaide

In addition, respondents in favour of de-coupling administration of the GDS and CEQ were sometimes in favour of administering the CEQ to students rather than graduates, for example in the ‘middle years’ of enrolment. A few submissions were in favour of administering the CEQ immediately on completion.

It should be noted, however, that only a minority of respondents suggested a change in timing, and some respondents actively supported the current timing;

*“The timing seems reasonable in that it obtains useful data on employment outcomes and provides sufficient time for graduates to reflect on their course experience.”* – University of Western Australia

### *Aspects of student experience*

Submissions indicated a perceived inability of the AGS as currently constituted to adequately reflect the diversity of the modern student population. The AGS was seen as deficient in regard to overseas students, mature-aged students, students from a low-SES background, non-school leavers and external

students. This relates to data items, collection (for example lower response rates for overseas students) and reporting/analysis (for example analysis of employment results which are based on the 'school-leaver' model).

A number of submissions commented that moving to a wholly electronic instrument would make it possible to customise the survey for different target groups. In addition, centralised administration and pre-population of demographic information would aid in improving analysis for equity groups. Graduate Careers Australia suggested that a separate version of the AGS might be administered for overseas students, a proposal discussed further below.

### Reference Group advice

Obtaining high quality graduate outcomes data is important and the development of a suite of performance measurement indicators for the higher education sector provides an opportunity to re-evaluate the current AGS. The Reference Group proposes that a redesigned Graduate Outcomes Survey (GOS) be developed and introduced from the second half of 2013, as part of the suite of Government endorsed performance measurement indicators co-ordinated by a third-party provider - see the discussion in the Centralised Administration of Performance Measurement Indicators section above.

The GOS would make substantial departures from current AGS administrative practice. The GOS would be administered on a fully centralised, independent basis, using a standard survey instrument. Administration of the GOS on the basis of a random, stratified sample (as recommended for the performance measurement suite as a whole) presents particular difficulties. This is because of the requirement to report on cross-cutting education and labour market data items. To provide reliable data at this level of granularity, sample rates for some groups of students are likely to be as high as the response rate currently achieved by the AGS using its 'census' model. As such, the Reference Group proposes that a 'hybrid' model be adopted for administration of the GOS, where all graduates are invited to participate via email, but with targeted telephone follow-up based on stratified sample techniques.

The Reference Group believes there is no compelling reason why the GOS should not continue to be administered roughly four months post-graduation. While acknowledging that this timing provides only a limited snapshot of graduate employment outcomes, this is true of any point-in-time labour market survey. By the same token, there is substantial divergence in the precise timing of the current AGS, and as such administration of the GOS at six or even twelve months post-graduation would be acceptable if this was seen as desirable for practical reasons. The Reference Group proposes that a longitudinal survey of graduate labour market outcomes be developed to provide comprehensive data in this area, while noting that financial and time constraints would impact on the ability of Government to implement this proposal.

The Reference Group proposes that the core of the GOS would be the current Graduate Destinations Survey (GDS). The current GDS instrument, however, requires revision and the central co-ordinating body should be tasked with evaluating the GDS data items in detail. In addition to the GDS, the GOS would include the current Postgraduate Research Experience Questionnaire (PREQ) for postgraduate research students. The postgraduate research environment has changed since the current PREQ was first developed in 1999. The Reference Group believes it would be desirable to review the PREQ data items and scales in the near future.

The relationship between the new University Experience Survey (UES) and the current Course Experience Questionnaire requires further consideration. To address this issue, the Reference Group proposes that an investigation of the conceptual and empirical relationship between UES scales and CEO scales be undertaken by the UES Consortium, providing advice on options for deployment of these scales across the student life cycle – see the discussion in the previous section. This process would be

informed by a period of overlap between the two instruments, which would enable a comparison between UES and CEQ results and facilitate an informed decision on the future of CEQ. Accordingly, the current CEQ should continue to be included in the GOS on a transitional basis until at least 2014-15.

The Government's intention to publish results from the suite of performance measurement instruments on the *MyUniversity* website raises the issue of whether the scope of the instruments extends beyond domestic students to include international students. The Reference Group proposes that the GOS seek to obtain high quality data from onshore international students, which is an important cohort for the sector. Obtaining data from this group presents particular difficulties. Accordingly, the Reference Group believes the third-party provider contracted to co-ordinate the performance measurement suite should submit a detailed proposal for the surveying of onshore international students. This might include using a separate survey instrument, but other options might also be considered.

### Recommendations

The AQHE Reference Group recommends:

- 4.1 A redesigned Graduate Outcomes Survey (GOS) be developed and included in the centrally co-ordinated suite of Government endorsed performance management instruments.
- 4.2 The GOS be administered on a 'hybrid' sample basis, with an initial email approach to all graduates supplemented by targeted telephone follow-up based on stratified sampling techniques. The Reference Group advises that achievement of the required granularity of data will in many cases require very high response rates.
- 4.3 The GOS should take as its core the current Graduate Destinations Survey (GDS), (subject to review of data items), and also include the current Postgraduate Research Experience Questionnaire (PREQ) for postgraduate research students (subject to review of data items and scales) and the current Course Experience Questionnaire (CEQ) for undergraduate students (on a transitional basis until at least 2014-15).
- 4.4 The timelines be adopted for the GOS development and deployment, and transitional arrangements for the Australian Graduate Survey, as outlined in the Centralised Administration of Performance Measurement Instruments section.
- 4.5 The GOS should continue to be administered approximately four months after graduation, but noting there is substantial divergence in the precise timing of the current instrument, and as such administration at six or even twelve months post-graduation would be acceptable if this was seen as desirable for practical reasons.
- 4.6 A longitudinal graduate outcomes survey be established, subject to budget and time constraints.
- 4.7 The detail of the GDS instrument be reviewed as part of the contractual requirements for the centralised administration project.
- 4.8 The transitional arrangements regarding overlap between data items and scales in the University Experience Survey and the CEQ be adopted, as outlined in the University Experience Survey section.
- 4.9 Detailed proposals for the delivery of the GOS to international students should be submitted by parties tendering for the role of centralised administrative body, including evaluating the possible administration of a separate survey vehicle for international students.

## 6 Assessment of Generic Skills

### Issues

The Bradley Review of Higher Education argued that in an internationally competitive environment it is necessary to demonstrate that the Australian higher education sector is achieving quality outcomes and standards. To fulfil this objective, the Review proposed that a set of indicators and instruments be developed to directly assess and compare learning outcomes. In addition, it proposed the development of a set of formal statements of academic standards by discipline along with processes for applying those standards.

Knowledge of what students have learned and achieved and that they have attained the expected outcomes of their degrees can provide assurance about the quality of higher education. The Group of Eight have argued that with the move to a 'universal' demand driven funding system, "entry standards become less important and the focus shifts to learning outcomes and exit standards. A 'universal' system will be a more diverse system, so in addition to strong minimum standards, there will always be a need for universities to demonstrate outcomes above the minimum." (Group of Eight, Policy Note No.3, University Admissions, February 2012, p.1)

It is worth noting that there are a number of concurrent processes underway that will contribute to assuring the quality of learning outcomes from the higher education sector. First, there is the development of teaching and learning standards to be undertaken by the newly formed Higher Education Standards Panel. It is likely that this process will be informed, in part, by TEQSA's threshold provider and qualification standards given the interdependencies across different standards (domains). In addition, there are a number of sector wide learning standards projects including: the Assessing and Assuring Graduate Learning Outcomes (AAGLO) project examining assessment tasks and assurance processes that contribute to student achievement; the UWS led Learning and Teaching Standards study of inter university peer review and moderation of coursework and; the Go8's Quality Verification System focusing on external review and moderation of grades. The ALTC's Learning and Teaching Academic standards project has supported the development of learning standards at discipline level. This is by no means an exhaustive list, see Krause, Barrie and Scott's 'Mapping Learning and Teaching Standards in Australian Higher Education: An Issues and Options' (2012) for a more comprehensive discussion of relevant initiatives.

The Business Council of Australia (BCA) has argued that, "the shift to a demand driven funding model should enable a system that is responsive to demand by industry and business with respect to the decisions made by institutions and students. In addition, it will be important that the new arrangements support a system that is responsive to demand from industry and business, as well as responsive to the demands of students." (Business Council of Australia, 2011, *Lifting the Quality of Teaching and Learning in Higher Education*, p.9). In responding to the needs of industry, the BCA states that the higher education sector continues to face a challenge in ensuring that learning outcomes are relevant to the requirements of the workplace. "The ability of graduates to contribute effectively in the workplace will be increased if the knowledge they have gained is up-to-date and is complemented by good technical and generic skills." (BCA, 2011, p.13) The BCA argues that the challenges involved in adapting to new and changing workplaces requires that graduates possess effective generic skills.

In this context, the Australian Government has previously announced that it intends to implement a version of the Collegiate Learning Assessment (CLA) suitable for the Australian higher education environment as a measure of the quality of learning outcomes. The Australian Government originally proposed that the CLA be included in the performance indicator framework for the purposes of performance funding.

In the 2011-12 Budget, the Government released details of its Advancing Quality in Higher Education (AQHE) initiative. This provided information on the new performance measurement instruments being developed for use in performance funding, and this included implementation of the CLA.

In the 2011-12 Mid Year Economic and Fiscal Outlook (MYEFO) the Government announced that it would discontinue performance funding for student experience and quality of learning outcomes indicators. This was in support of achievement of the Government's fiscal objectives and on the basis of feedback from the sector that there was no consensus on whether it is appropriate to use such indicators for performance funding (noting that performance funding was retained for participation and social inclusion indicators). Universities have acknowledged the need to develop a suite of enhanced performance measures for providing assurance that universities are delivering high quality higher education services at a time of rapid expansion. The Government had previously announced that it would focus on the development of student experience and quality of learning outcomes indicators, including the CLA, for use in the *MyUniversity* website and to inform continuous improvement by universities.

### AHELO

The CLA was chosen by the OECD for use in their Assessment of Higher Education Learning Outcomes (AHELO) project as the basis for assessment of generic skills. The OECD is undertaking an AHELO Feasibility Study, comprising generic skills, engineering and economics strands, which will advise on the potential for a comprehensive and robust cross-national assessment of higher education learning outcomes. The study is to be concluded by the end of 2012.

The first phase of the AHELO Feasibility Study, undertaken between January 2010 and June 2011, focused on the application of the CLA instrument in a small number of cross-linguistic and cross-cultural settings and has provided encouraging signs of the potential for international assessment of generic skills. Qualitative small scale validation, for example through cognitive labs, has demonstrated support from students, faculties and institutions for assessment of generic skills.

Translation and external validation of the CLA instrument has been undertaken in several countries, though to date, there is insufficient information that constructed response tasks in the CLA have been translated, adapted and verified to international standards. On the basis of feedback, it has been agreed to strengthen the CLA by developing an assessment framework for generic skills and by adding pre-validated multiple choice questions. It is expected that it will be possible to find commonality among international conceptualisations of generic skills. This would underpin development of an assessment framework for generic skills. The translation of multiple choice questions for the generic skills assessment has been completed and adaptation and verification are underway.

With regard to the economics and engineering strands, the first phase of AHELO Feasibility Study involved developing provisional assessment frameworks, testing the instruments for an international context and small-scale validity testing. Development of the assessment frameworks for economics and engineering has shown that it is possible to define discipline specific learning outcomes internationally. The first phase has demonstrated that it is possible to develop economics and engineering assessments to international standards, though in the case of the former, the OECD has concluded that more evaluation is required to ensure the assessment is pitched 'above content'.

The OECD approved commencing the second phase of the AHELO feasibility study in July 2011. The second phase will examine the scientific and practical feasibility of an AHELO by focusing on the practical aspects of assessing students' learning outcomes. The second phase will focus on the practical implementation of generic skills, economics and engineering assessments among a larger group of students, faculties and institutions and further investigate validity issues and assess data reliability.

Major work undertaken in the second phase to date has focused on uploading and delivery of test instruments via the AHELO Test System. The second phase is expected to be completed later in 2012.

### Sector feedback

Sector feedback was sought concerning a proposal to develop and trial a version of the CLA, as an assessment of generic skills suitable for use in the Australian higher education environment. Of the 48 submissions received in response to the AQHE discussion papers, approximately 39 provided feedback on the CLA. Key issues on which stakeholders provided feedback included the uses and validity of the CLA instrument, the AHELO project, the relationship of the CLA to development of teaching and learning standards, assessment of discipline specific skills, participation and measurement issues.

### Uses and validity

A number of submissions expressed reservations about the validity of the CLA instrument, given its proposed purposes. Many submissions expressed reservations about the potential use of the CLA for comparing institutional performance, arguing it was not designed or suitable for this purpose. There was some support for the CLA instrument as a continuous improvement tool, with submissions offering cautious support for its introduction on this basis.

*“Support is not extended at this time to using the results [of the CLA] for assurance and accountability given the relative immaturity of the science (at least in Australia), the contradiction with the original design of such tests, and for a variety of validity, reliability, and methodological issues.” – Macquarie University*

*“The CLA is intended to support academic communities in designing complex assessment tasks which foster the development of graduate attributes.” – Assessment and Assurance of Graduate Learning Outcomes*

*“To allow a productive discussion of the CLA as a tool to assess student learning outcomes DIISRTE should clarify that its purpose is to support analysis across time for particular institutions, not to compare institutions.” – Innovative Research Universities*

*“Notwithstanding the many reservations regarding the use of the CLA for institutional comparison and performance measurement purposes, there may be value in piloting its use to support local institutional improvement as part of the mission-based Compacts agreements” – University of Western Sydney*

### AHELO

Business representatives have expressed their support for international benchmarking of assessment of generic skills through the AHELO project. A number of submissions commented on the future potential of the AHELO project in this regard. However, a more common view expressed is that it would be better to delay implementation of the CLA in the Australian higher education environment until after the results of AHELO Feasibility Study become available.

*“AIG supports the use of an internationally (OECD) based tool for reporting on the acquisition of generic skills, such as the Collegiate Learning Assessment. The international comparisons that will be drawn from this type of reporting will be useful to industry, the higher education sector and governments alike.” – Australian Industry Group*

*“It would be prudent to wait for the results of the AHELO trial before making any decisions to mandate the CLA in the Australian higher education sector.” – Group of Eight*

### Teaching and learning standards

A common theme in several submissions concerned the relationship of the assessment of generic skills, as measured through the CLA instrument, to broader initiatives to assure the quality of higher education learning outcomes, such as the development of teaching and learning standards. In summary, submissions stressed the need for coherence and consistency across approaches.

*“Due to the significant reputational risk associated with the CLA results for the sector, if the government pursues implementation, the CLA should be carefully piloted and the synergies with the revised AQF, TEQSA’s Teaching and Learning Standards and professional accreditation requirements thoroughly tested.”* – University of South Australia

*“Having some common data which all institutions use should be helpful to demonstrating standing against the T&L standards once developed.”* – Innovative Research Universities

A number of submissions commented that they favoured external review and moderation processes, rather than standardised assessment of generic skills, suggesting that this was a more appropriate means for assuring the quality of graduate learning outcomes.

*“Accreditation, and external monitoring, examination and moderation, are well established processes of measuring and guaranteeing program quality. These processes can ensure program outcomes are linked and relevant to industry and the professions. UON would therefore prefer these trusted, proved and reliable ‘assessment’ mechanisms to an unproven ‘test’ of graduate skill sets.”* – The University of Newcastle

### Discipline specific skills

On balance, submissions favoured the assessment of discipline specific skills. This is largely consistent with the view expressed in the Bradley Review of Higher Education that the focus should be on discipline since learning outcomes are generally discipline specific.

*“It is more appropriate to measure generic skills in the context of disciplines.”* – Deakin University

However, there were a number of submissions that expressed an opposing view suggesting that assessment of high level generic skills take precedence over assessment of discipline specific skills. This was largely on the grounds of costs, feasibility and practicality.

*“Indeed, while we have an open mind about various potential approaches, we are also sceptical about the long-term prospect of creating and maintaining valid, effective and contemporary assessments of generic skills at a fine-grained discipline level. We see this as potentially very expensive and time-consuming, and we doubt that there will be value for effort.”* – The University of Melbourne

*“The suggestion that we need to dig down further in order to identify ever more fine-grained criteria for every discipline seems to run counter to the very concept of ‘generic’ skills.”* - Swinburne University of Technology

### Participation

In order to secure participation by students, many submissions commented on the need to minimise the survey burden on students and that participation must be valued by students. With regard to the latter, submissions suggested this could be achieved by providing students with reports of their achievement,

providing incentives to participate as occurs with other surveys and informing students that results would be used to improve teaching.

*“The preferred approach would be to ensure that assessments are valued by students because of their utility in achieving desirable outcomes, such as employment or access to further study. For example, an assessment providing valid, certified, well-calibrated assessments of generic skills would be superior to the broad assessments currently undertaken by many private and public employers as part of graduate selection processes. Likewise, a suitable assessment of generic skills could become an effective component of a suite of selection instruments for entry to various post-Bachelor higher education programs.”* – The University of Melbourne

*“Incentive or participation rewards should be administered centrally.”* – The University of Newcastle

### *Measurement*

Many submissions reiterated concerns identified in the discussion paper about the capacity of the CLA to adequately measure generic skills. For example, submissions noted that the measurement of value-add is difficult and complex where there are differences and changes in the mix of students across institutions and time.

*“The capacity of standardised instruments to measure gain or value-add is limited.”* – Deakin University

*“Swinburne has the highest rate in Australia of pathway entry into years two and three from TAFE and other providers. Put simply, it is hard to measure value-add unless the measures are student-specific i.e. the same student is tested on entry and exit.”* – Swinburne University of Technology

*“It is clear that statistically adjusting the CLA scores is a critical part of the measurement process to obtain valid comparisons, however without the ATAR, it is unclear what a reliable adjustment process might involve.”* – University of South Australia

Some submissions expressed concern about potential bias in the measurement of generic skills using the CLA instrument, suggesting this was inequitable as it would lead to some groups of students being disadvantaged over others.

*“It is well demonstrated that performance in uncontextualised “generic skills” instruments is very heavily influenced by a student’s social, cultural and educational background prior to university. The proposed generic skills instruments will merely serve to reproduce social inequality and privilege.”* - Charles Sturt University

### Reference Group advice

There are a range of broader initiatives underway to assure quality in the higher education system, as outlined earlier in the paper. A key factor in this regard will be the development of teaching and learning standards with a focus on learning outcomes. The Reference Group believes there is merit in the submissions arguing the need to ensure coherence and consistency across approaches. This will be achieved, in part, as a result of the Higher Education Standards Panel and the Office for Learning and Teaching being represented on the AQHE Reference Group.

The Reference Group strongly supports reservations expressed through the submissions that the CLA instrument is not valid and reliable nor fit for the purposes of cross-institutional comparison and performance reporting given the original design of the instrument was for use in continuous

improvement among US colleges. The findings of the OECD's AHELO Feasibility Study are due to be reported later in 2012 and the findings of this study will be of interest to informing proposals to administer the CLA instrument in Australia.

With the introduction of the demand driven funding system, there is a need to assure the quality of learning outcomes and that graduates are meeting labour market and employer needs. In this context, it is worth noting that the CEQ Generic Skills Scale currently provides a measure of generic skills, although this is a measure of graduates' self-reporting of their attainment of generic skills. There are a limited number of reliable empirical studies of employer needs and their satisfaction with graduates. Therefore the Reference Group sees merit in gathering additional, more timely evidence with respect to employer needs and satisfaction with graduates. One issue to be examined, for example, would be the practical difficulties in identifying individuals within businesses who can provide an informed response on graduate performance. The Reference Group proposes that a literature review and scoping study be conducted to examine the practical feasibility and value of a survey of employer needs and satisfaction with graduates.

### Recommendations

The AQHE Reference Group recommends:

- 5.1 In view of widespread concerns expressed in the sector about the validity and reliability of the Collegiate Learning Assessment (CLA) instrument and that it is not fit for purposes currently proposed for its use in Australia, that the development of a CLA pilot study in Australia not be continued.
- 5.2 That consultations with TEQSA, the Higher Education Standards Panel and the Office for Teaching and Learning commence to achieve coherence and consistency to assure the quality of higher education outcomes, in particular with regard to the development of teaching and learning standards focusing on learning outcomes.
- 5.3 That to obtain assurance that the generic skills of graduates are meeting the needs of the economy, a literature review and scoping study be undertaken to examine the practical feasibility and value of a survey of employer needs and satisfaction with graduates as part of the suite of Government endorsed performance measures.

*Appendix – List of submissions*

University of Notre Dame  
Australian Council of Engineering Deans  
Edith Cowan University  
The University of New South Wales  
La Trobe University  
Deakin University  
Southern Cross University  
University of Southern Queensland  
Regional Universities Network  
Bond University  
Council of Australian Directors of Academic Development  
University of Tasmania  
Macquarie University  
Associate Professor Susan Page & Dr Christine Asmar  
Griffith University  
Graduate Careers Australia  
The University of Western Australia  
Group of Eight  
Charles Sturt University  
The University of Adelaide  
University of South Australia  
The University of Melbourne  
National Association of Graduate Careers Advisory Services  
The University of Sydney  
AiGroup  
University of Wollongong  
Curtin University of Technology  
Queensland University of Technology  
The University of Queensland  
University of Western Sydney  
University of Canberra  
University of Ballarat  
The University of Newcastle  
University of Technology, Sydney  
National Tertiary Education Union  
Victoria University  
James Cook University  
Swinburne University of Technology  
Monash University  
The Australian National University  
Innovative Research Universities  
Assessing & Assuring Graduate Learning Outcomes Project Group  
Murdoch University  
Universities Australia  
RMIT University  
Australian Technology Network of Universities  
Council of Private Higher Education