University of Melbourne

From the SelectedWorks of Professor Hamish Coates

September, 2010

Building research and learning capacity

Hamish Bennett Coates, ACER

Available at: https://works.bepress.com/hamish_coates/112/
The need for sound research on higher education grows in step with the sector’s increasing significance to economic and social life. Higher education is, perhaps surprisingly, a relatively under-researched field. The need for informed research that helps improve policy and practice is now greater than ever.

This edition of the Higher Education Update reports on ACER’s work to assist institutions and systems measure learner and graduate capability, plan the research workforce, set and monitor educational standards, and design system-wide policies.

Finding innovative and valid ways to measure the capabilities people develop through higher education is becoming increasingly important. ACER is preparing to make a major contribution in this area, having recently been engaged by the OECD to test the feasibility of an international Assessment of Higher Education Learning Outcomes (AHELO). This work, which involves assessing reasoning in the fields of engineering and economics, links with other ACER work underway in Colombia and Saudi Arabia.

Measuring learners’ capacity to succeed in higher education is also important, particularly for systems seeking to expand participation. A story in this update reports on national research on the Special Tertiary Admissions Test (STAT) that demonstrated the test’s capacity to identify whether people have the ability to succeed in higher education.

Higher education institutions depend on a highly skilled and experienced workforce. Understanding, managing and replenishing this workforce is now a national agenda for many countries, not least due to shrinking budgets, growing competition for highly talented professionals and looming retirements. A recent national survey of students in research qualifications has investigated how education for research candidates can be reshaped to prepare them for future careers. Related work has explored the characteristics of supply and demand among this workforce.

Finding effective ways to define, set and monitor academic standards lies at the centre of higher education. Measuring the extent to which students engage in effective learning practices is a core concern, and reviews are provided on recent findings from the 2009 Australasian Survey of Student Engagement (AUSSE). With 54 institutions, the 2010 AUSSE is the most rigorous and comprehensive survey of its kind, and will provide institutions with enormous insights for improving planning and practice.

This edition of the Higher Education Update concludes with reviews of work undertaken to help systems build the capacity they need to bolster future economic and social growth.

We hope you enjoy this review, and welcome your feedback and ideas to highereducation@acer.edu.au

Associate Professor Hamish Coates
Principal Research Fellow
Internationally some 135 million students are enrolled in 17,000 higher education institutions – twice as many as just a decade ago. Almost three million of these students have enrolled in universities outside their home countries. From one country to the next, each institution offers a very different experience, with its own unique program, style and approach.

With such diversity on offer, students need guidance in choosing a university that best suits their needs and aspirations. Higher education institutions need points of reference to help track and improve their performance. But global information on what students have learned and are capable of doing does not currently exist.

To fill this need, the Organisation for Economic Cooperation and Development (OECD) has announced it will run the Assessment of Higher Education Learning Outcomes (AHELO).

AHELO has the potential to be the most comprehensive international assessment of university learning outcomes. Unlike current research- and reputation-focused rankings, AHELO aims to measure how well students are learning the kinds of ‘above content’ capabilities that underpin much contemporary knowledge work.

The OECD has launched a feasibility study in anticipation of a full-scale AHELO. About 200 higher education students at 10 institutions in six countries are expected to take part in the study. The Australian Council for Educational Research (ACER) is leading a consortium of international organisations that will design and implement the feasibility study.

Higher education is multidimensional by nature, and AHELO has been designed to mirror this complexity. One strand of work, led by the Council for Aid to Education (CAE) based in New York, concentrates on measuring generic skills. Other strands measure students’ capacity to reason and think in the fields of engineering and economics. Development of the economics assessment is being led by the Educational Testing Service based in Princeton, with engineering along with overall project management by ACER. If it is feasible to develop such assessments, then a full-scale AHELO might significantly increase the number of disciplines assessed.

The feasibility study will be completed in 2011. In light of the findings, OECD member countries will at that time decide whether to proceed with a full-scale AHELO.

For more information, visit www.oecd.org/edu/ahelo
Assessing generic skills in Colombia

The need for tertiary graduates to enter the workforce with highly-developed generic skills has been a key concern of employers around the world in recent years. Generic skills – such as effective communication, critical reasoning, problem solving, and adaptability to change – are essential to graduates’ employability and success in the workplace.

Many universities have invested considerable effort into nurturing these skills in their students, and education systems are increasingly recognising the need to measure the extent to which graduates develop them.

In Colombia, the Colombian Institute for the Promotion of Higher Education (ICFES) is addressing the issue by evaluating the growth in students’ generic skills over the course of their degrees.

ICFES is the Colombian agency responsible for the assessment of skill achievement, knowledge and competencies of students across kindergarten, primary, secondary and tertiary levels.

In the last two years, ICFES has contracted ACER to provide a version of the Graduate Skills Assessment. Originally developed for the Australian higher education sector, the Graduate Skills Assessment consists of a two-hour multiple-choice test, and a one-hour written communication test; it is designed to measure critical thinking, problem solving and interpersonal skills.

The Colombian Graduate Skills Assessment was prepared by ACER and translated into Spanish by the ICFES. In 2009, more than 3700 students from 10 fields of study sat for the test at 16 universities in Colombia.

The ICFES is also working with ACER to build staff capacity in item writing. Drs Bryce and McCurry travelled to Colombia in May and June to conduct a workshop for ICFES item-writing specialists.

The workshop aimed to develop staff skills in writing standardised psychometric test items to assess critical thinking, problem solving and interpersonal skills, like those in the Graduate Skills Assessment.

The first week was spent discussing theory, examining the rationale for each of the constructs of critical thinking, problem solving and interpersonal skills, examining similar constructs, looking in detail at the Colombian Graduate Skills Assessment constructs and then discussing the characteristics of good stimulus material and questions to test each construct.

The second week of the workshop was devoted to participants’ item writing. The aim was for each participant to produce a folio of panelled and edited items.

In the course of the workshop ACER consulted with ICFES staff on how the Generic Skills Assessment writing test scripts had been marked in the past and how they might be marked in the future; as well as on the possibility of linking Year 11 student assessment with the Generic Skills Assessment.

Drs Bryce and McCurry also made three presentations to different audiences while in Colombia.

The first was aimed at students and covered generic skills and what students need to know about the Colombian Graduate Skills Assessment.

The second presentation was aimed at ICFES staff and covered the art of generic skills item writing.

The third presentation, aimed at stakeholders and the general public, covered generic skills and generic skills assessment, with a focus on the interests of ministry and university staff rather than the potential candidates.

Visit www.acer.edu.au/gsa-uni for more information about the GSA.
Around 3000 students will sit the Cognitive Skills Test at Saudi Arabia’s Imam Muhammad bin Saud Islamic University (Imam University) in October.

The Cognitive Skills Test, developed by ACER, aims to measure students’ critical reasoning and problem solving. The test will be used to gain a better understanding of the growth in generic skills attained by Imam University students over the course of their undergraduate studies.

ACER Research Director of Systemwide Testing Chris Freeman and Principal Research Fellow Dr Hamish Coates travelled to Riyadh this year to work closely with key staff at Imam University to develop timelines, strategy and sampling procedures for the test administration.

The test sample will include first-, third- and final-year students from three fields of study: Arabic studies, including languages and studies of Islamic religion such as Shari’ah, Usool ad-Deen and Dawah; humanities, including social science, economics, administration and Arabic; and sciences, including medicine, engineering and computer science.

ACER will also continue to assist Imam University to build staff capacity through the newly established Imam University Centre for Evaluation and Assessment (ICEA). ACER entered into an agreement in January with Imam University to establish the centre.

ACER will host a delegation of staff from Imam University in November. The Imam University staff, including administration, management and teaching staff, will attend ACER workshops on test development, psychometric analysis, information and communication technology structures for registration, test paper scanning procedures and test centre operational management.

ACER Higher Education General Manager Marita MacMahon Ball said the project further expanded ACER’s growing commitment to improving learning in the Middle East.

Imam University was established in 1974 and has more than 1300 academic staff and 25 000 students based at 10 campuses.
Boosting Australia’s knowledge economy hinges in no small way on increasing the number of people who participate in higher education. But resting admission on senior secondary achievement scores alone means that not all talented people who would like to attend university are able to gain admission. Aptitude tests such as the Special Tertiary Admissions Test (STAT) are playing an increasingly important role in helping ensure that all able students can access university study.

Introduced in 1992, STAT is an aptitude test that many Australian tertiary institutions use as part of their admissions procedure for special categories of applicants such as those without recent Year 12 results. It is also required for some specialist courses as a further entry selection criterion and to help manage competition for small numbers of highly prized university places. By combining candidates’ STAT scores together with other information available to them at the time of selection, institutions are able to make decisions about offers of places in tertiary courses.

A report on the findings from the first national Australian study on the validity of STAT was published recently in the Journal of Higher Education Policy and Management. The study, conducted by Dr Hamish Coates and Tim Friedman at ACER, was one of the largest studies of its kind internationally and provided
important evidence on the use of aptitude tests in university admissions. The report suggests that the use of Year 12 results as the sole basis for tertiary admissions is problematic. History provides many examples of capable students possessing the ability to succeed at university who, during their final years of schooling, have had their dreams of higher education shattered due to illness, family circumstances, personal misfortune or even natural disaster. These students need an alternate method of entry to higher education.

ACER’s study reveals that changes to the demand and competition for places in tertiary studies have led institutions themselves to question the continuing emphasis on achievement scores as almost the sole criterion for tertiary admission. The study indicates that reliance on Year 12 results is problematic for a number of reasons, not least because mature-aged students often do not hold recent results; because students come from schools, states and countries that emphasise or teach different curricula; and because students can be disadvantaged if they have backgrounds that do not provide support mechanisms for success.

In the December 2008 Review of Australian Higher Education, the Australian Government affirmed the importance of ensuring that those from disadvantaged backgrounds aspire to and are able to participate in higher education. Consequently, the government has set a target that, by the year 2020, 20 per cent of undergraduate enrolments should be students from low socio-economic backgrounds. To reach this target it will be necessary to identify people with the ability to succeed at university who have so far been overlooked by the traditional selection methods.

STAT is playing an important role in facilitating this goal. The ACER report states that aptitude tests have been recognised for providing consistent and unbiased performance across demographic subgroups, because such tests are designed to measure each student’s ability to analyse information and think critically, rather than testing knowledge of a specific subject area.

STAT assesses three kinds of competencies considered important for success in tertiary study: verbal reasoning, quantitative reasoning and written English. The written English component is not required by all universities and, consequently, only 25 per cent of candidates take this part. The results of the test are reported as scaled scores rather than percentages because there is no pass or fail mark on STAT. This means that the STAT score scale reflects the differing abilities of the candidates who sit the test.

Of course, there is a distinction between ‘ability’ and ‘achievement’. Aptitude tests such as STAT are designed to identify individuals who have the capacity to undertake university study, rather than predict levels of achievement at university. A wide range of factors, not just ability, influences student achievement or demonstrated performance at university. In other words, the student with top marks in Year 12 is not necessarily the best university graduate.

The ACER study suggests that STAT’s estimates of first-semester performance are comparable to those linked with Year 12 marks; in other words, STAT is able to predict students’ university success at least as well as Year 12 marks are able to predict students’ success. This affirms that the STAT aptitude test is a reliable and efficient alternative to Year 12 marks that ensures students who are capable of success at university are able to gain admission.

Currently, only 29 per cent of 25-34-year-old Australians have attained at least a bachelor-level qualification. In order to reach the federal government’s target of 40 per cent by the year 2025, it will be necessary for an additional 345 000 students to graduate as a result of policy-driven change. Achieving this figure entails the enrolment of an even greater number of students, so that non-completion can be accounted for. The ACER report notes that expanding the system brings with it a need to not just enhance the social inclusiveness of higher education, but also to ensure that entering learners have the capacity to succeed. Reliable and efficient university admissions processes, such as STAT, will enhance current practice and optimise the fairness of higher education in Australia.

For more information on STAT, visit www.acer.edu.au/stat
A new survey will gauge the career intentions of students undertaking higher degrees at 38 Australian universities.

The National Research Student Survey is being conducted by ACER with the Centre for the Study of Higher Education at the University of Melbourne, for the Commonwealth government’s Department of Education, Employment and Workplace Relations.

The research will examine the career intentions of higher degrees by research students in Australia and focus on their attitudes towards academic teaching career pathways.

ACER Senior Research Fellow and lead researcher on the survey Dr Daniel Edwards said there is an urgent need to know more about whether these students plan to join the academic workforce after graduation.

‘There are looming challenges facing academics in Australia resulting from an aging workforce, so it is vitally important that we understand the career intentions of research students, and identify factors that might help to encourage them into the academic profession,’ he said.

The National Research Student Survey will look at the provision of training for university teaching to higher degree by research students.

While HDR students make up a large proportion of the sessional teaching workforce, and most institutions provide professional support for these workers, training for university teaching is not mandatory within the HDR at any Australian institution.

Teacher training is also often overshadowed by the overwhelming focus on research in the higher degree by research qualification.

In some other countries, however, higher degrees are not as narrowly focused on research as they are in the Australian system. In the United States of America, the higher degrees by research generally include a coursework element, and teaching experience is often mandatory.

The National Research Student Survey will include a comparison of Australian practices with those internationally, and will examine the extent of training for university teaching in Australian universities, as well as students’ perceptions of it.

‘If universities can understand not only students’ career intentions but also the factors influencing these choices, universities can address the issues and spark students’ interest in academic careers,’ Dr Edwards said.

‘With better information about how to encourage and support students to become expert teachers, we may be able to minimise the impact of the challenges facing the ageing academic workforce,’ he said.
Workforce demand for postgraduate-qualified employees is projected to rise by almost 50 per cent over the next two decades, according to a new research paper published in the Journal of Higher Education Policy and Management.

The paper by Dr Daniel Edwards of the Australian Council for Educational Research (ACER) investigates the demand for the doctorate by research (PhD) qualification in Australia. It draws on the findings of a research project sponsored by the Federal Department of Innovation, Industry, Science and Research commissioned in 2009 as part of the Department’s wider Research Workforce Strategy.

Using one of the most sophisticated workforce forecasting models in the world, Dr Edwards suggests that demand for PhDs will grow and the Australian workforce will be a more highly qualified group in 2020 than it is at present.

The total Australian workforce is expected to grow by 16.6 per cent between 2007 and 2020. Despite making up a relatively small component of the overall workforce, the number of doctorate degree-qualified workers is expected to grow by 47.9 per cent over the same period of time.

The largest growth in the doctorate component of the workforce is projected to occur in the 25-34 age bracket.
‘Given that the doctorate workforce currently possesses a notably older age profile when compared with all employed professionals, it is hoped that this growth in the young cohort will help to regenerate the academic workforce,’ Dr Edwards said.

Women’s participation in the doctorate population is also projected to rise between now and 2020, with particularly large growth in the number of women in the younger age groups. In the 25-34 age group the growth for women will be proportionately larger than for men.

However Dr Edwards notes that, given the current climate of policy change in order to facilitate the sustainable growth of Australia’s knowledge economy, it is possible that actual growth of the doctorate degree-qualified workforce will exceed these projections.

Dr Edwards cites policy derived from the Department of Innovation, Industry, Science and Research’s 2009 report Powering ideas: An innovation agenda for the 21st century, aimed at providing greater support for postgraduate research students and early-career researchers.

Similarly, the Department of Education, Employment and Workplace Relations’ 2009 report Transforming Australia’s higher education system outlines the proposed national 10-year reform agenda for higher education and research.

These policies are so new that their effects are not yet recorded in these forecasts, which were based on the first quarter of 2009.

Take, for example, the projections of the number of doctorate-degree qualified people employed in the post-school education industry. In 2007 there were just over 22,000 people employed in the industry. The research projected modest growth of 7.7 per cent to the year 2020, raising this figure to just over 24,000.

Compared to the projected growth of more than 50 per cent in the government administration, technical services, computer services, legal and accounting services and the marketing and business management industries, 7.7 per cent is a relatively small amount of growth. Dr Edwards attributes this to the employment trends that have occurred in the past few years within this industry, as well as the overall age profile of those working in post-school education.

However, he says that when taking into account recent policy decisions made by the Australian government, there is the potential for a sharper growth trajectory than is forecast in this paper.

According to Dr Edwards, the policy with the most immediate consequence for examining demand for PhDs is the government response to the 2008 Bradley Review of Australian Higher Education which set a target for a rate of 40 per cent university completion among the 25-to-34-year-olds in Australia by the year 2025.

‘Reaching this target will involve balancing the growth in the number of higher education students with increases in the number of academics within the system, thus suggesting a much larger growth in the post-school education industry than the 7.7 per cent projected in this research,’ Dr Edwards said.

Dr Edwards notes that these issues of demand feed directly into predictions of supply and the extent to which the demand can be satisfied.

Though further research into the supply-side is required, current research by Dr Edwards and his colleagues at ACER suggest that there will be a need to increase participation at the PhD level if the predicted levels of workforce size for these qualifications are to be achieved.


The online article is available from http://works.bepress.com/daniel_edwards
Australian students get less staff interaction than USA counterparts

The largest ever survey of current higher education students in Australia and New Zealand reveals that students in Australasia report receiving less attention from university staff than do students in the United States of America.

The results of the 2009 Australasian Survey of Student Engagement (AUSSE) were released in May by the Australian Council for Educational Research (ACER).

The results show that the level of student-staff interaction is considerably lower in Australasia than it is in the USA.

AUSSE 2009 results reveal that a small but significant proportion of students (11 per cent) say they never receive timely feedback on their academic performance from their teachers.

Many Australasian students do not ever discuss their grades (32 per cent), ideas from classes (47 per cent) or career plans (53 per cent) with their teachers.

The frequency with which first-year students in Australia and New Zealand discuss their grades, their career plans or ideas from classes with teaching staff is less than half that of their counterparts in the USA.

A very large proportion of students (more than 70 per cent) have never worked with teaching staff outside of coursework requirements.

According to ACER Principal Research Fellow and AUSSE director Associate Professor Hamish Coates, being supported by teaching staff plays a dramatic role in keeping students involved, particularly in first year, and in the quality of education.

‘To some extent, students are themselves responsible for their learning, but the effort they put into their work is not the only factor affecting their learning outcomes,’ he said.

Research shows us that the contact students have with staff are among the strongest influences on positive learning outcomes.

‘When students have the opportunity to speak with their teachers about their performance, their grades, or ideas from their classes, particularly outside of the classroom, and engage with their teachers on an individual level, students tend to be more engaged with learning,’ he said.

AUSSE also provides a measure of student satisfaction with the educational experience. While AUSSE is not a student satisfaction survey, it does acknowledge that student satisfaction plays a role in engagement and has grown to be treated as a core education outcome.

According to Associate Professor Coates, assessing satisfaction reinforces a market-oriented perspective on university education; however, it is important that learners see their experience as providing an appropriate return on what is often a considerable personal investment.

Students’ average score for the overall satisfaction scale was 68. Average satisfaction scores decreased between first- and later-year students from 71 to 66.

Eighty per cent of students surveyed rated their educational experience as good or excellent.

Additionally, more than 80 per cent said that if they had to start over, they would likely attend the same institution.

The intense emphasis placed on satisfaction may explain why almost all teaching staff (93 per cent) surveyed reported that students’ satisfaction with their overall university experience was ‘important’ or ‘very important’.
Interestingly, staff also tended to underestimate student satisfaction, rating it on average as 53 on the student overall satisfaction scale.

Such information about student satisfaction and engagement is essential to ensuring universities offer high quality education, according to Associate Professor Coates.

‘Universities need to measure engagement to inform improvement,’ he said.

‘AUSSE provides data that universities can use to attract, engage, retain and graduate students.

‘We need to look at how students are learning and the outcomes they are achieving to help universities identify what really counts in terms of quality.’

The 2009 AUSSE involved more than 30,000 students from 35 higher education institutions. A public report on the results was released by ACER in May.

AUSSE reports on the time and effort students devote to educationally purposeful activities and on students’ perceptions of other aspects of their university experience including interactions with university staff.

AUSSE is a collaboration between ACER and participating universities. Around 45 institutions are participating in 2010.

The full report, Doing More for Learning: Enhancing engagement and outcomes, and further information on AUSSE is available from http://ausse.acer.edu.au
The role played by private providers in the Australian higher education sector is growing and the overall satisfaction of their graduates is evidence of their success.

Enrolment numbers have risen dramatically since the introduction of the federal government higher education loan scheme in 2005, according to a recent report by the Australian Council for Educational Research (ACER) for the Australian Council for Private Education and Training (ACPET). The report is on the standards, processes and practices among private higher education providers.

In 2008 there were approximately 125 private providers in Australia with almost 50,000 higher education students enrolled. This represents growth of 22 per cent on the previous year’s enrolment figures.

Continued growth by private providers may help alleviate some of the pressure placed on the public universities by the federal government’s target for 40 per cent of Australian 25-34 year olds to have a bachelor level qualification or higher by 2025.

Some private providers are able to offer niche courses in specialised fields that are not available in public universities. Other providers characterise their role as facilitating the higher education aspirations of people who are not offered enrolment by a public university. This is made possible with entry requirements that include interviews and letters of recommendation, with less emphasis on prior academic record.

This more inclusive approach to student selection then raises issues relating to the need for increased student support and for quality control to ensure those accepted can complete their degree and that the degree is of a standard that would be acceptable in the workforce.

In response to this, many private providers highlight the need to have standards of teaching that not only equal, but surpass those of public universities. The ACER research suggests private providers may be achieving this goal.

According to the report, 83 per cent of graduates from private providers indicate high levels of overall satisfaction with their education, compared to an average of 70 per cent among graduates from public universities in Australia. Seventy per cent of graduates from private providers agree that their institution provides good-quality teaching, compared to 53 per cent of graduates from public universities.

On average graduates from private providers are more positive about their skills development than are graduates from public universities, perhaps due to the small size and school-like approach to teaching and student relations that is a characteristic of most private providers.

ACER’s report also identified areas for improvement: some private providers are not strong in the benchmarking of student satisfaction and outcomes, and in the moderation of assessments. The monitoring of graduate outcomes is particularly important for private providers to ensure their courses produce graduates who are suitable to employers and to ensure their courses are appropriately recognised by other higher education institutions.

The representatives from the providers consulted in the ACER report say that the rigour involved in their course accreditation ensures that their courses are more ‘up to date’, more ‘industry-relevant’ and more academically rigorous than those taught in public universities.

The report findings are based on consultation with private providers, analysis of the 2008 Graduate Destinations Survey conducted by Graduate Careers Australia, which included participation by 10 private providers, and statistics from state and federal governments. The sample comprises about 15 per cent of all Australian private providers.
Australian governments and institutions are working to get more people involved in higher education, but large proportions of students do not remain at university long enough to progress beyond the first year. In Australia, around 20 per cent of domestic students and 10 per cent of international students who begin university do not continue to their second year. This early departure of students represents a waste of potential, resources and skills.

Finding a way to improve retention rates is a pressing challenge for institutions and the system overall. A recent briefing published by the Australian Council for Educational research (ACER) uses findings from the 2009 Australasian Survey of Student Engagement (AUSSE) to highlight areas in which Australian universities are effective in engaging first-year students and areas which are in need of attention.

The 2009 AUSSE involved more than 12 000 first-year students from 30 higher education institutions.

The most common reasons cited by first-year students who discontinue their studies are difficulties balancing university studies with personal commitments and the need to work more hours to support themselves.

These factors are particularly important for females, and just under 60 per cent of first-year students are female.

The AUSSE briefing suggests that students’ participation in paid work does not significantly interfere with academic engagement unless students are working over 30 hours per week.

Around 66 per cent of first-year students work for pay either on or off campus. On average, first-year students undertake paid work for less than 10 hours per week, and provide care for dependents for less than five hours per week. However, these are averages; approximately 14 per cent of female first-year students say they spend more than 20 hours a week caring for dependents.

Students studying part time and externally or by distance are more likely to be working for pay and report the highest number of hours working for pay off campus.

When first-year students who do paid work are asked to describe the extent to which it relates to their studies, 12 per cent report that it is closely related while 68 per cent report that it is very little or not at all related.

The AUSSE briefing report suggests that moderate hours of paid work have very little negative impact on the extent to which first-year students engage in studies, or on their educational outcomes; however, working in jobs related to study is most likely to boost students’ work- and career-related skills, but most students who undertake paid work report that their work has little relevance to their intended future career.

The findings of the AUSSE may help universities to understand the factors that lead students to drop out of university. Ultimately, the prospects of retention are boosted when students feel supported, challenged and connected to their universities.

The AUSSE briefing, Getting first-year students engaged, and further information on AUSSE is available from http://ausse.acer.edu.au
Variation between students is as important as average student achievement, according to an international higher education assessment expert.

Australian universities must not look solely at average results from student engagement surveys but also focus on the difference of experiences amongst their students, Indiana University Associate Professor Alexander McCormick told the Student Engagement Forum in July.

Professor McCormick, the Director of the United States National Survey of Student Engagement, delivered the keynote presentation at the forum.

The Student Engagement forum was hosted by La Trobe University and the Australian Council for Educational Research (ACER).

The forum focused on the use of information from the Australasian Survey of Student Engagement (AUSSE) to improve the quality of higher education.

AUSSE, the largest survey of current higher education students in Australia and New Zealand, is a collaboration between ACER and participating universities.

The 2009 AUSSE involved more than 30 000 students from 35 higher education institutions. A public report on the results was released by ACER in May.

McCormick said the information gathered by student engagement surveys such as AUSSE can be used by institutions to set standards and improve quality; however the results are also commonly used to compare institutions to their peers.

McCormick expressed concern that survey results will be over-simplified if the focus is just on comparing the average result of one institution to another.

‘Most of what we know from our research is that there is far more variation within institutions that there is between institutions,’ he said.

A US study of student engagement recently found that less than 10 per cent of the variation of results is attributable to the institution.

‘To focus solely on the differences between institutions is like just looking at the tip of the iceberg,’ McCormick said. ‘The tendency to look at averages and mean scores implies that all students feel the same… however the student experience is highly variable within our institutions.’

Results from the US student engagement survey demonstrate that an institution with a high average rating could have a range of individual students results extending below the average rating of the lowest ranked institution.

McCormick said that institutions should focus on the least-engaged students.

He said that student engagement pays bigger dividends for under-represented groups such as racial and ethnic minorities and for under-prepared groups such as students from low socioeconomic backgrounds.

US research suggests that, for these students, improved engagement levels result in better outcomes, such as higher grade point averages.

This is all part of the challenge that McCormick identifies as the difference between ‘participation’ in a student engagement survey such as AUSSE and ‘use’ of the results.

‘Gathering information is the first and easiest step in using a student engagement survey to improve the quality of higher education,’ he said.

‘Student engagement isn’t just like a light switch. It’s not something that an institution can simply turn on then adjust the dimmer,’ he said.

McCormick recommended that institutions extend survey results with focused inquiry, using focus groups and staff surveys. Strategies to unite interest and focus attention are also important in the quest to improve the quality of higher education.

New US research into student engagement suggests that strong top-tier leadership, committed staff leadership and involvement, and institution-wide commitment to quality were linked to improved student engagement.

McCormick’s research into student engagement trends is supported by the Spencer Foundation.

For more information on the Australasian Survey of Student Engagement (AUSSE), visit http://ausse.acere.edu.au
The Victorian university sector will need to enrol an additional 12,000 students per year if Australia is to meet the federal government’s national target of 40 per cent attainment of bachelor degree qualifications among 25- to 34-year-olds by 2025, according to research by the Australian Council for Educational Research (ACER) for Skills Victoria.

The Australian federal government’s policy statement, Transforming Australia’s Higher Education Sector – a response to the Bradley Review of Australian Higher Education – outlined a range of long-term reforms for higher education. To explore state-based strategies in line with the new national objectives, the Victorian government commissioned an Expert Panel on Tertiary Education in Victoria, led by Professor Kwong Lee Dow, to advise on the development of the Victorian Tertiary Education Plan.

The Expert Panel on Tertiary Education in Victoria was informed by a Skills Victoria report advising on the development of the Victorian tertiary education plan.

ACER provided advice to the panel and conducted modelling of future growth scenarios for higher education in Victoria. Two ACER research papers, Forecasting university level attainment numbers for Victoria and Forecasting university enrolment and completion numbers for Victoria, informed the Skills Victoria report.

The ACER research found that Victoria has a large share of the nation’s 25- to 34-year-olds, that the attainment rates of these people are higher than in many other parts of the country, and that the majority of people in this age group with university qualifications reside in Melbourne.

According to ACER Senior Research Fellow and author of the report Dr Daniel Edwards, Victoria may need to lift its attainment rates substantially.

‘Due to the relative size of Victoria and the high concentration of people with bachelor degree level qualifications, the Victorian contribution to the attainment of national targets is necessarily more substantial than is the case for many other states,’ he said.

In 2006, just under 30 per cent of Australian 24- to 35-year-olds held bachelor degree qualifications or above. For Victoria, the figure was 34 per cent; and for Melbourne, close to 38 per cent.

‘If Victoria is to continue to contribute at the same rate to national attainment levels, it will need to lift its bachelor level attainment rate above 40 per cent to assist Australia to meet the national attainment target by 2025,’ Dr Edwards said.

The ACER research forecast Victorian university commencement and completion numbers deemed necessary to assist Australia to meet the national attainment target.

It estimated that the Victorian bachelor-level attainment rate for 25- to 34-year-olds would need to rise from the 2006 figure of 34 per cent to 47 per cent.

For Melbourne to continue contributing to the national attainment levels at the current rate, more than half of 25- to 34-year-olds will need to attain bachelor-level qualifications.

The report suggests Victorian universities need to increase commencement capacity on 2007 levels by about 12,000 to 17,000 additional enrolments per year between now and 2015.

Analysis of Papua New Guinea’s university sector by Australian researchers will inform the development of higher education policy and planning.

The research, comprising a needs analysis and an analysis of courses and curricula, has been conducted by the Australian Council for Educational Research (ACER) and Massaro Consulting. This research has been conducted for AusAID through the AusAID Education Resource Facility, of which ACER is a consortium partner.

This research has been commissioned to inform the Review of the Papua New Guinea University System being undertaken by Professor Ross Garnaut and Sir Rabbie Namaliu as part of the PNG-Australia Partnership for Development.

In the context of PNG’s population of approximately 6.5 million people, the current size of the university sector is relatively small. Development strategies will aim to promote growth in the university sector so as to increase the education levels of the nation and to facilitate the growth of the economy.

The ACER research explores a number of scenarios of growth in the university sector and increased rates of university attainment. The research considers factors that will affect university sector growth, such as retention within university, university intakes, school retention and graduation numbers, workforce issues for schools and universities, and infrastructure.

The needs analysis examines the PNG higher education system and its role in providing graduates that satisfy the needs of the PNG economy. It aims to identify industry needs within PNG and how these relate to graduate output, including the demand for and quality of graduates, the demand for and quality of research from universities, and the relationships between education, research and industry.

The analysis of university courses and curricula focuses on the provision of education from PNG’s university sector. It projects the future needs of PNG and the extent to which course and curricula currently mirror these needs. It also explores the potential for courses that could nurture future leaders, with specific reference to public administration and governance.

The review by Garnaut and Namaliu will report to the PNG and Australian governments with recommendations on options for PNG to strengthen the university system and opportunities for PNG and Australia to work together to support improvements in the PNG university sector.
The Australian Council for Educational Research (ACER) is one of the world’s leading educational research centres. Its mission is to create and promote research-based knowledge, products and services to improve learning across the lifespan.

ACER was established in 1930 and for 80 years has built a strong reputation as a provider of reliable support and expertise to education policy makers and professional practitioners. As a not-for-profit organisation, independent of government, ACER receives no direct financial support and generates its entire income through contracted research and development projects and through products and services that it develops and distributes. ACER has experienced significant growth in recent years and now has more than 300 staff located in Melbourne, Sydney, Brisbane, Perth, Adelaide, Dubai and New Delhi.

ACER is a leader in the provision of quality educational research, both within Australia and internationally. As a national, independent research body, ACER brings a high level of expertise and objectivity to its work.

In recent times ACER has expanded on its program of research and development in support of learning in vocational education and training and in higher education institutions while maintaining and expanding work undertaken in support of schools.

ACER has seven research programs:

Research into Transitions and Post-school Education and Training explores influences on the educational and occupational pathways of young people as they progress from school to further education, training and work. Studies investigate the labour market and social outcomes of different pathways as well as evaluations of particular policies and programs.

The Assessment and Reporting program conducts research into a wide range of educational outcomes (academic and social). This work, undertaken for clients nationally and internationally and in support of ACER’s own tests and assessment programs, includes the refinement of test constructs; studies of test validity and reliability; assessment methods and formats; psychometric analyses of test data; and methods for item banking, online test delivery and reporting.

Research in the National and International Surveys area draws on staff expertise in sampling, survey management, the analysis of survey data and the interpretation and reporting of results in conducting large scale survey research. Current work includes the leadership of three major programs of international surveys including the OECD Programme for International Student Assessment (PISA).

The Systemwide Testing program identifies more effective ways of monitoring achievement across entire education systems.

Research into Teaching, Learning and Leadership focuses on the relationship between teacher professional development and improved student learning.

The Policy Analysis and Program Evaluation unit explores education policy issues and conducts program evaluation.

The newly established Psychometrics and Methodology research program provides high quality psychometric and data analytic support to projects, manages externally commissioned data analysis/methodology projects and undertakes, publishes and presents research on psychometric and other quantitative research issues.

In addition to being a national centre for educational policy research and advice, ACER develops and provides a range of research-based products and services to support the work of professional practitioners.

ACER provides secure, fee-for-service testing programs to schools, universities, employers and professional organisations. These programs include selection tests for entry to schools and universities, scholarship tests and tests for diagnostic and monitoring purposes, and recruitment tests.

The organisation also encompasses ACER Press, the Cunningham Library, the ACER Institute, and the ACER Leadership Centre.

The ACER Higher Education Update is published biannually by the Australian Council for Educational Research. Editorial support by Rebecca Leech, Megan Robinson and Louise Reynolds.

t 03 9277 5555
f 03 9277 5500
e highereducation@acer.edu.au
w www.acer.edu.au

ISSN 1835-4912

Copyright © 2010 ACER