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Vocational Update (No. 1) -- July 2012

ACER **Vocational** UPDATE

INSIDE…

Evidence for improvement

To meet the current and future training needs of the Australian workforce, the national vocational education and training (VET) system must deliver well-targeted, high-quality programs that match the needs of students, workers, business and industry. To achieve this, VET providers and systems must be informed by quality sources of data and must work from this evidence base to establish goals, monitor progress and drive local and systemic improvement.

Substantial investments have been made in data collection and analysis, especially in regard to enrolments, costs, completions and employment outcomes. There has been less emphasis, however, on the types of information needed to improve the quality of teaching and learning in VET.

In this edition of ACER's *VAWE Update*, we profile a range of ACER projects and activities which are focused on providing that much-needed evidence base to improve the quality of teaching and learning in VET.

Justin Brown and Ron Wilson report on their work with VET providers to identify the key measures they should consider as part of their continuous improvement practices.

Juliette Mendelovits explains why the Programme for the International Assessment of Adult Competencies promises to help governments monitor the impact of current vocational, adult and workplace education programs addressing language, literacy and numeracy (LLN).

Phillip McKenzie reports on a new research study that aims to produce a comprehensive empirical analysis of the existing systems for financing technical and vocational education and training in Vanuatu, Samoa, Papua New Guinea, Solomon Islands, Kiribati, Tonga, and Fiji.

Dave Tout reports on revisions to two key adult language, literacy and numeracy standards frameworks this year – the Australian Core Skills Framework and Victoria's Certificates in General Education for Adults.

We also report on ACER's inaugural National Adult Language, Literacy and Numeracy Assessment Conference in Melbourne in May, which addressed research, policy and practice regarding the LLN skills of the Australian adult population from an industry, training and policy perspective with a focus on identifying and assessing LLN skills and supporting learners and trainees in improving their LLN skills. The conference also included a 'user group' meeting for major clients of ACER's adult LLN assessment services and workshops on the Australian Core Skills Framework and writing formative assessment.

Ralph Saubern
Director, Assessment Services
Australian Council *for* Educational Research

To learn more about ACER's Vocational, Adult and Workplace Education Services, visit **www.acer.edu.au/vawe**

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Building capacity: The inaugural ACER National Adult LLN Assessment Conference

ACER's inaugural sell-out National Adult Language, Literacy and Numeracy Assessment Conference in Melbourne in May addressed research, policy and practice regarding the language, literacy and numeracy (LLN) skills of the Australian adult population from an industry and training perspective with a focus on identifying and assessing LLN skills and supporting learners and trainees in improving their LLN skills.

The conference for managers and coordinators of training and learning in both industry and the vocational education and training (VET) sector included a 'user group' meeting for major clients of ACER's adult LLN assessment services and workshops on the Australian Core Skills Framework and writing formative assessments.

The conference's attendees represented a wide range of VET and industry organisations, public and private, from across all states and territories, alongside representatives from government and peak bodies.

The conference was opened with a welcome and presentation on 'Challenges and Opportunities for Adult LLN Assessment' by Professor Geoff Masters, Chief Executive of ACER, followed by two keynote presentations on 'The Employer and Industry Perspective: the value of investing in LLN in the workplace' by Megan Lilly, Director of Education and Training at the Australian Industry Group (AIG), and Robert Bluer, Industry Manager of Education at Innovation and Business Skills Australia (IBSA), and a joint keynote by ACER's Dave Tout and Juliette Mendelovits on 'Assessment in Adult LLN: Its crucial role in improving skills.'

Key messages

Investment in increasing adult literacy and numeracy levels has been recognised as one of the keys to boosting Australia's productivity, and this was a key message delivered by a number of the speakers at the conference.

Mr Tout said international studies have demonstrated that investment in increasing the LLN skills of adults has a direct and positive impact on productivity and GDP per capita. 'But more than that, low levels of adult LLN cost Australia at individual, family, economic and social levels,' he said. 'Investment in adult literacy and numeracy education can therefore benefit individuals and families as well as Australia's economy and society.'

In his conference opening presentation, Professor Masters said that everybody, whether child or adult, is at a different point in their learning and is capable of making progress if motivated and provided with appropriate learning opportunities. Professor Masters said that the purpose of assessment is to establish what individuals know and where they are in their learning, and to use that knowledge to inform the next step in their development.

AIG Director of Education and Training Megan Lilly delivered the first keynote presentation of the conference, on the findings of the AIG National Workforce Literacy Project report, *When Words Fail*. In the study, employers overwhelmingly indicated that they are experiencing problems with LLN skills in their workforce, resulting in reduced productivity.

'Addressing workforce literacy and numeracy issues is a shared responsibility between government, individuals, education authorities and employers,' said Ms Lilly. 'Yet while there is willingness on the part of employers to play a role in building workforce literacy and numeracy skills, only eight per cent of our survey respondents told us they have adequate capacity to do so.'

The most recent adult LLN survey, conducted in 2007, revealed that about half of Australia's adult population – more than seven million Australians – has insufficient LLN skills to cope in modern society. During her keynote Ms Lilly noted that four million of these adults are in jobs today and will continue to be

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for many more years. Ms Lilly said that workers with insufficient LLN skills may have been in jobs that haven't necessarily demanded LLN of them in the past, but those jobs are transforming, due in large part to technology, and the demands are increasing. For the remaining three million adults who are not in work, Ms Lilly acknowledged that low LLN skills are a contributing factor to their unemployment.

Industry Skills Councils (ISCs) also agree that now is the time for action. IBSA Industry Manager of Education Robert Bluer in his keynote presentation addressed the need to increase the overall capacity of the VET workforce in relation to adult English LLN knowledge and expertise. He also addressed the critical importance of good assessment, observing that, 'We have a fairly brutal way of doing it in VET: "Yes, you're competent; no, you're not." We need to do more than make that harsh judgement.'

The afternoon had a series of practical and research-based breakout sessions given by Robert Bluer from IBSA, Michael Taylor from AIG, Philippa McLean from Philippa McLean Consulting, Dave Tout and Juliette Mendelovits from ACER, Justin Brown from ACER, Charles Darr from NZCER, Jack Wenn from Rio Tinto, Anne Taib from Victoria University and Pauline Farrell from Box Hill Institute.

Our aim is that the National Adult LLN Assessment Conference becomes an annual part of the VET calendar with the goal of making an ongoing contribution to building our professional knowledge and capacity to respond to the challenges ahead. We thank all the conference presenters and participants for their active contribution and look forward to continuing the conversations throughout the year and on to next year's conference.

Further information including a full list of speakers and topics, and some presentations is available at
http://www.acer.edu.au/nallnac

Ten things learned from the conference

In the final session of a busy two days of active exchange between conference participants and presenters, Ralph Saubern and Dave Tout led an open plenary session to uncover key ideas that could be taken away from the conference.

Below, in no particular order, is the list of ideas produced together.

1. International and local research shows that low levels of LLN skills are a significant issue for education, work places and life skills in Australia.

2. Much of this research shows that numeracy is a critical predictor of educational, workforce and lifelong success. We need to remember to talk about literacy *and* numeracy.

3. We need to continue to increase our knowledge of the issues and implications of low LLN skills both within VET and outside VET, particularly in business and industry.

4. No single sector – public education, private education, industry or government – can address the issues in isolation. It requires a shared response and a collective responsibility.

5. To engage business and industry in the response we need to show that LLN is not just an educational issue but a workforce safety, efficiency and productivity issue. We need to explain and demonstrate the return on investment from a focus on improved LLN for business and industry.

6. Government has a crucial part to play through funding at a strategic level to provide effective policy settings and to initiate and support long-term programs, research and evidence gathering, and best-practice approaches.

7. Assessment is a vital tool for gathering evidence to improve teaching and learning, and inform educational and business administration. Learning, training and assessment are not separate activities but essential partners.

8. We need properly funded research to provide us with an evidence base for policy and planning, rather than relying solely on local and anecdotal information.

9. There is a great diversity of skills, expertise and experience in the VET sector. To be effective we need to find ways of expanding the workforce capacity in terms of LLN and getting 'specialists' in different fields working cooperatively.

10. Assessment and a focus on evidence is an effective way of bringing together a variety of perspectives, interests and expertise to address cooperatively the ongoing challenges of improving LLN skills across the community.

Language, literacy
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It's time: Language, literacy and numeracy and the new Core Skills Profile for Adults

For the first time since the early 1990s, both government and industry acknowledge that adult language, literacy and numeracy skills are important and worthy of government support at a national program level. Tools that provide an evidence base for student learning are critical to the success of LLN skills programs, says Blanca Camacho.

The Commonwealth government increased funding for adult language, literacy and numeracy (LLN) programs in the 2011 budget and is currently developing a new national foundation skills policy, with further initiatives and programs this year. The growing policy interest goes back to the release of the international Adult Literacy and Lifeskills survey results in 2007, which showed that between 46 per cent and 70 per cent of adults

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in Australia had poor or very poor skills across one or more of the five skill domains of prose literacy, document literacy, numeracy, problem-solving and health literacy.

There's been a plethora of reports, programs and strategies to improve the LLN skills of the Australian workforce since then, including:

- the Industry Skills Councils April 2011 report, *No More Excuses: An industry response to the language, literacy and numeracy challenge*

- the Skills Australia May 2011 report, *Skills for Prosperity: A roadmap for vocational education and training*

- the Commonwealth Government May 2011 report, *Building Australia's Future Workforce: Skills to promote increased participation*

- the research and report by the Australian Industry Group released in 2011 as the *National Workforce Literacy Project: Report on employers views on workplace literacy and numeracy skills*

- the announcement of the National Foundation Skills Strategy for Adults with the Commonwealth Government working with state and territory governments this year, and

- Skilling Australia's Future Workforce program, worth $3 billion over six years.

ACER's work to support these programs and strategies has focused on the development of assessment tools to measure the core skills of adults participating in VET and workplace training.

ACER's Vocational Indicator began development in 2009 and was launched in 2010. Key stakeholders insisted that they needed data that allowed early identification of potential learning problems in their existing or potential learners, independent of the subject matter to be studied. The Vocational Indicator was created to assess four areas considered important to VET success, and broadly aligned to the Australian Core Skills Framework:

- literacy

- numeracy

- mechanical reasoning, and

- abstract reasoning.

Since its release, the Vocational Indicator has been delivered to clients across Australia, including TAFEs, private RTOs, industry skills councils, group training organisations, industry and a range of other associations that sponsor training.

Most have been using the Vocational Indicator to identify gaps in the literacy and numeracy but also the reasoning skills of students, so they can look at their own courses and training programs to identify the level of literacy, numeracy and reasoning required and then match students to courses, but equally identify the intervention required to upskill students to courses.

The main purpose is to enable educational institutions to identify levels of skill and gaps in skills for those beginning vocational education and training. Some employers also use it for the purpose of recruitment, but typically to identify skill levels to match employees to suitable positions.

With a growing demand for assessment tools to gather evidence on student learning and program effectiveness across the sector, ACER has made a major investment to expand the Vocational Indicator to offer greater coverage across the Australian Core Skills Framework levels 1 to 5, improve the ability to discriminate at the lower and higher levels, and cover a wider spectrum of mathematics that would be relevant and useful as an indication of potential vocational ability or for an assessment of an adult's numeracy ability.

The updated tool, called the Core Skills Profile for Adults, will be available soon.

Blanca Camacho is a Project Director in ACER's Assessment Services Division.

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PIAAC: Monitoring adult literacy, numeracy and problem-solving skills

A new international study of adult literacy, numeracy and problem-solving skills promises to help governments monitor the impact of current vocational, adult and workplace education programs addressing language, literacy and numeracy.
Juliette Mendelovits explains.

The Organisation for Economic Cooperation and Development's Programme for the International Assessment of Adult Competencies (OECD PIAAC) is a new international study of adult literacy, numeracy and problem-solving skills (OECD). The first administration is taking place in 2011 and 2012 in 26 countries, including Australia.

The assessment, a household survey of adults between the ages of 16 and 65, follows and is linked with previous international surveys: the International Adult Literacy Survey (IALS), administered in 22 countries and regions between 1994 and 1996; and the Adult Literacy and Lifeskills (ALL) Survey conducted in 2003 and 2006 in 12 countries and regions. Australia has put its hand up to participate in all three of these surveys: IALS in 1996, the ALL Survey in 2006, and PIAAC which was administered across Australia between October 2011 and February 2012.

PIAAC seeks to measure the skills and competencies needed by adults in the 21st century, including online literacy, numeracy and problem-solving in a technology-rich environment. PIAAC is computer-delivered in all three domains.

The international consortium that is managing the assessment on behalf of the OECD commissioned ACER to develop all of the new literacy tasks for PIAAC, drawing on both development originated at ACER and on contributions from participating countries. In addition, ACER Senior Research Fellow Dave Tout serves on the PIAAC international numeracy expert group, and previously served on the numeracy expert group for the ALL Survey.

While Australia participated in both IALS and the ALL Survey, our focus on adult literacy development otherwise has been intermittent at best: there was a surge of activity in the late 1980s and early '90s, and then a hiatus until about

2010 when, following the report on Australia's performance in ALL, both industry and government began taking a renewed interest in, and concerted steps to improve, adult skills in language, literacy and numeracy.

Current industry awareness and government policy in the vocational, adult and workplace education sector is now leading to a focus on engaging disadvantaged groups, and improving the literacy and numeracy levels of the existing workforce and those looking to enter the workforce. For example, there is broad industry support for the implementation of literacy and numeracy achievement standards for trade qualifications for those seeking entry into the energy sector. The key is ensuring that adults who do not meet the entry standard are supported to address identified shortfalls.

In another development, the national Industry Skills Councils are evaluating the feasibility of assessing technical, pedagogical and administrative aspects of trainers and teachers of adults. For example, within two years it is planned that all vocational education teachers will themselves require certification that indicates they have satisfactory levels of literacy and numeracy proficiency.

The value of international adult literacy studies is now recognised at a policy level in Australia. The Council of Australian Governments, comprising state, territory and federal government representatives, will be using the PIAAC results, scheduled for release in 2013, to monitor language, literacy and numeracy, and the impact of current vocational, adult and workplace education programs addressing language, literacy and numeracy.

Juliette Mendelovits is the Research Director of the Assessment and Reporting: Humanities and Social Sciences program in ACER's Educational Monitoring and Research Division.

Language, literacy and numeracy

Countdown: Adult numeracy developments in two key standards frameworks

Revisions to key adult language, literacy and numeracy standards frameworks have been released this year, and ACER's Dave Tout played a key role in both of them. Here, he explains numeracy developments in the Australian Core Skills Framework and Victoria's Certificates in General Education for Adults.

The latest edition of the Australian Core Skills Framework (ACSF) was released by the Commonwealth Department of Education, Employment and Workplace Relations (DEEWR) this year. The 2012 ACSF revision, funded by DEEWR, was undertaken by a team of consultants led by Philippa McLean. The plan was to field test the 2008 ACSF, which has been in use in draft form for about three years, and revise it in light of user feedback.

One key change to the 2012 ACSF is the addition of a new level. The team received significant feedback from ACSF users and potential users about the need for descriptors of a lower level ACSF performance, since there are a number of adults in Australia who are unable to demonstrate performance at the current exit level 1 of the ACSF. This informed our development of a new lower Pre Level 1 Supplement. Although performance at Pre Level 1 is extremely limited, it is nonetheless possible to identify skills and progress at this level and to assess performance. As a result the new ACSF includes the Pre Level 1 Supplement encompassing a set of Performance Features and Sample Activities for each of the five ACSF core skills.

The 2012 ACSF therefore describes six levels of performance in the five core skills of:

- learning
- reading
- writing
- oral communication and
- numeracy.

The numeracy core skill was more extensively revised than the other core skills, with new Focus Areas developed for all three numeracy Indicators, and with Performance Features clearly aligned to each Focus Area.

Victoria's Certificates in General Education for Adults (CGEA), which are also extensively used elsewhere in Australia, include numeracy and mathematics units across five levels ranging from an Initial Level Course, through to Certificates at Levels I, II and III of the Australian Qualifications Framework (AQF). The 2011 revision, funded through a contract with the General Studies and Further Education Curriculum Maintenance Manager (CMM) at Victoria University, addressed feedback from key CGEA numeracy personnel and from public consultations with providers on necessary changes to the numeracy and mathematics units, including making more explicit the role that number plays in the numeracy and mathematics units, and using the revised ACSF numeracy core skills documentation to review the existing CGEA descriptions.

It's been effective to undertake the two revisions at roughly the same time. The ACSF was a useful tool to assist in reviewing the balance across the five levels of the CGEA and to help guarantee a more even spread of mathematical knowledge and skills. Equally, writing the detailed and structured curriculum descriptions of the CGEA led to some refinements to the ACSF numeracy descriptions.

ACER's work on national and state numeracy standards frameworks supports the teaching and learning of numeracy and mathematics. Both the ACSF and the CGEA are structured around a view of numeracy as a vehicle for giving meaning to mathematics, and that values mathematics as a critical tool to be learned and productively used.

The ACSF is available at www.deewr.gov.au/acsf

The CGEA is available through the Training Support Network at http://trainingsupport.skills.vic.gov.au

Dave Tout is a Senior Research Fellow in the Assessment and Reporting: Mathematics and Science program in ACER's Educational Monitoring and Research Division.

Continuous improvement

AQIS: The new VET benchmark

AQIS – ACER's AQTF Quality Indicator Service – provides a complete reporting solution to enable all Australian registered training organisations to collect quality standards information about the delivery of their training programs, as Rebecca Simpson explains.

The national set of standards prescribed in the Australian Quality Training Framework (AQTF) regulates Australia's vocational education and training system to ensure the delivery of high-quality training and assessment services for clients. One way it does that is by requiring RTOs to fulfil reporting requirements under the AQTF Learner Engagement and Employer Satisfaction Quality Indicators, as well as Competency Completion. The focus is on an evidence-based and outcomes-focused approach to quality assurance in Australian vocational education and training.

The National Skills Standards Council advised in December 2011 that while RTOs are required to continue to use Learner Engagement and Employer Satisfaction questionnaires to collect data, they are *not* required to use the Survey Management, Analysis and Reporting Tool or SMART system to report to their regulators against the Learner Engagement and Employer Satisfaction quality indicators. It's in response to this decision that ACER developed its AQTF Quality Indicator Service (AQIS).

AQIS enables RTOs not only to fulfil their mandatory reporting requirements under the AQTF, but also to collect additional quality data tailored in terms of a range of benchmarking options that include trainer quality, the effectiveness of assessment, the relevance of training, the quality of training resources and the like, as well as overall satisfaction.

An RTO may, for example, want to compare its performance on both the Learner Engagement and Employer Satisfaction questionnaires with 'like' RTOs in the same kind of location, of the same size or of the same type – TAFE, private college or enterprise.

AQIS enables all survey data collected online, manually or by paper-based scanning to be managed securely. As an RTO, you **register for an AQIS account**, then choose your collection option and send through your data. You're notified when your online reports are ready to be downloaded.

So what's in a report?

The standard AQTF report contains collated survey data from the Learner Engagement and Employer Satisfaction questionnaires to fulfil your mandatory annual AQTF Quality Indicator reporting requirements.

The customised benchmark report adds another level to the standard AQTF report based on the type of additional comparative information you might wish to collect. You select an initial set of benchmark criteria upon registering for AQIS. The customised benchmark report is sent to you along with your standard AQTF report. You can also request additional benchmark

data after your initial report is generated at no extra cost.

All data collected by ACER to produce baseline benchmark reports is treated as strictly confidential and no identifying RTO information is included in any of the benchmark reports sent to other RTOs.

But why benchmark?

Benchmark data provides a valuable, evidence-based source of information about the quality of education and training, student support services and staff engagement within your institution. Collecting and distributing benchmark data also sends a clear message to current and new students, employees and regulators that your RTO takes quality assurance and continuous improvement seriously.

Benchmarking lets you:

- compare yourself with 'like' RTOs using a set of standard criteria
- see first hand how your students and staff rate their training and assessment experiences
- actively engage and retain apprentices, trainees and other VET students
- see those methods that can improve support services for students, apprentices and trainees
- evaluate and manage learning resources, and
- market your RTO and training services based on high-quality independent review by students and teachers.

Rebecca Simpson is the Project Officer in the Corporate and Vocational Education program of the Assessment Services Division of ACER.

Register for an AQIS account at **http://www.acer.edu.au/tests/aqis/register-for-aqis**

Continuous improvement

Working with RTOs to understand the 'business' of the VET provider

Justin Brown and Ron Wilson have been working with VET providers to identify the key measures they should consider as part of their continuous improvement practices.

VET professionals are working in an increasingly turbulent and unfamiliar operating environment. These changes are requiring innovative approaches to 'collecting, analysing and acting on relevant data' to monitor and enhance organisational performance.

These new approaches recognise that the business of the VET provider is just that – a business. To understand the drivers and levers within their Institutes, it is critical for VET professionals to utilise a comprehensive suite of measures that accurately reflect the operational health of the organisation.

VET managers are increasingly asking questions that challenge the traditional ways of working in the sector, such as:

- What information and performance measures should we be monitoring to enhance the quality of service delivery?

- Is our decision-making based on 'lead' or 'lag' indicators?

- How can we shift the focus towards a 'lead' indicator approach to data collection?

- What are the measures, processes and mechanisms needed and where should they be deployed?

- How do we reshape our internal systems and processes to collect, analyse and act on this information?

Our project to address such questions responds to an identified need among VET professionals, particularly managers responsible for reporting, quality and service improvement, for a more coherent and integrated approach to how their organisation makes use of the information they already collect and to identify new data collections that fill knowledge gaps. It aims to enhance the feedback culture within each VET provider by drawing on a suite of reliable, coordinated and complimentary information sources to better demonstrate compliance under the AQTF and to enhance how providers utilise information to support service delivery and continuous improvement processes.

Following a detailed profiling of existing and proposed data collection, we have provided some guidance as to how providers could more effectively collect, analyse and act upon information and data, and collaborate in doing this into the future. This has involved working with clients to:

- map existing processes and isolate particular tension points in relation to data capture and information reporting

- identify and evaluate the value of existing measures at each phase of the student engagement process

- address weaknesses in existing data collections and reporting processes, and

- better understand your market, business processes and overall organisational health.

For the first project report that guidance focused on areas such as:

- advice on the design and deployment of 'dashboard indicator' or 'traffic light indicator' reports on the staff intranet at the point of log-in to present a high-level snapshot to present a 'shared view of the world' and enable program managers to drill down into specific areas of program delivery

- advice on ensuring that responsibility, accountability and monitoring processes be embedded within delivery departments on matters such as accurate course set up and result entry

- advice on designing a consistent process with underpinning performance measures to track students through discrete phases of engagement with the organisation, including those at risk of disengagement or withdrawal

- advice on mandatory pre-selection testing of students to assess language, literacy and numeracy skills as well as study skills to ensure that prospective learners are placed into appropriate levels and courses, and

- advice on production of a standardised market intelligence report, developed in consultation with delivery areas, which draws on the best available information by industry area.

Our work with these VET providers is a good example of the sort of **research and consultancy** ACER undertakes in youth and adult education, and vocational and workforce education contexts in Australia and globally for institutions, industry, governments and other stakeholders. Visit **http://www.acer.edu.au/vawe/research-and-consultancy/**

Justin Brown is a Senior Research Fellow in the Teaching, Learning and Transitions research program at ACER.

Ron Wilson is the Principal of Diosma Consultancy. He has been involved in education and vocational education and training for more 35 years as a teacher, school principal and TAFE Institute general manager.

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Supporting the advancement of disadvantaged learners

Monitoring and reporting is a vital feature of good practice to support the advancement of access and equity in the Australian national training system, explains Justin Brown.

Both at a national and jurisdiction level, the systematic reporting of information on disadvantaged learners can assist users to identify issues, trends and patterns across a range of indicators and measures of progress.

Evidence of patterns and change over time are not only important for systematising the monitoring and reporting process, and providing some nuance to this process, but also to give strength to the often anecdotal and micro-scale examples of success which are championed by practitioners in the vocational education and training (VET), adult and community education, community services and related sectors.

There is a range of data sources available at the national and jurisdiction level to enrich understanding of the participation, progress and achievement of disadvantaged learners. However there has not been, until now, significant effort to bring these sources of information together to produce a national report on disadvantaged learners in the Australian VET sector.

The National VET Equity Advisory Council (NVEAC) has recently developed a *VET Equity Outcomes Framework* to monitor the performance of the VET system in achieving positive outcomes for the wide range of disadvantaged learners identified in their national *Equity Blueprint*. To progress the development of the framework, NVEAC has engaged ACER, in collaboration with the Centre for the Economics of Education and Training at Monash University, to develop the first *Annual*

Report on Disadvantaged Learners in VET to provide a comprehensive baseline dataset to monitor progress in the *Equity Outcomes Framework*.

The *Annual Report* will include a synthesis of data analysis and research literature on the following groups:

- Indigenous Australians
- people with a disability
- people from culturally and linguistically diverse backgrounds
- people from rural, regional and remote locations
- people from low-SES backgrounds, and

- 'second chance' learners, that is
  - people with less than Year 12 or equivalent level of educational attainment
  - people returning to learning after a long period of absence from study and/or work
  - people re-skilling following redundancy
  - people involved in the criminal justice system, and
  - people of working age who are neither working nor studying.

The first *Annual Report* is due for publication in early 2013.

Continuous improvement

In Victoria, ACER in collaboration with the Faculty of Education at Monash University, is currently undertaking an evaluation of the *2011 Access and Equity Grants Scheme* for the Victorian Department of Education and Early Childhood Development (DEECD). The project is using an action-based learning approach to investigate the features of good practice in service delivery across six Victorian-based programs.

The project is in the process of:

- identifying and examining common features and models that underpin delivery to disadvantaged learners and assistance to support outcomes with reference to relevant other research and literature reviews

- providing an assessment of the elements that constitute an effective service delivery model for disadvantaged learners, including partnerships, resourcing, coverage of the equity cohort, participation and outcomes, and stakeholder engagement, and

- identifying good practice for service delivery models for disadvantaged learners, including pedagogy and service delivery models that are applicable and scalable for future delivery.

The outputs of the project will include:

- a *Good Practice Resource Kit* to support development of effective programs and service models

- case studies with documented project outcomes, including examples of good practice access and equity service models for publication and presentation, and

- a final report, with an evaluation framework, to provide an evidence base for the development of service models and strategies to engage the disadvantaged cohort.

The *Good Practice Resource Kit* and case studies are due for publication in early 2013.

ACER has an extensive record, both in Australia and internationally, on research issues of access and equity in VET in relation to SES and disadvantage. Recent ACER publications and reports have included:

- a national review of support models for disadvantaged learners in the Australian VET system for the National VET Equity Advisory Council in 2010

- the national evaluation of the Sporting Chance Program for the Commonwealth Department of Education, Employment and Workplace Relations in 2011

- state-wide reports for the *On Track* student destination survey of Year 12 completers and Early Leavers for the Victorian DEECD from 2008 onwards

- a state-wide review of programs to support Indigenous youth transitions for the Aboriginal Affairs Taskforce in Victoria in 2009, and

- a review of entry-level Indigenous employment strategies in the Victorian DEECD in 2012.

Often the principles guiding these types of research project stem from a need to better understand the types of strategies at the system, regional and local level that most effectively support learners in achieving their aspirations for education, training and employment. In turn, it is vitally important that systems regularly monitor, evaluate and report the impact of these strategies in terms of the participation, progress and achievement of disadvantaged learners.

Justin Brown is a Senior Research Fellow in the Teaching, Learning and Transitions research program at ACER.

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Measuring workforce capability with CATs

John Mitchell of JMA Analytics talks about how a collaboration with ACER's Dr Siek Toon Khoo is supporting his successful program of capability analysis tools.

To further satisfy workforce development directors' love of data, my company, JMA Analytics, which specialises in capability analysis and measurement, has formed a unique partnership with the Australian Council for Educational Research, which now provides all psychometric services for JMA Analytics.

CAT data

JMA Analytics' range of capability analysis tools (CATs) includes VETCAT®, the tool for measuring the facilitation, assessment, commercial and generic skills of VET teachers, and CURCAT®, the tool for measuring their industry currency. These psychometrically evaluated self-assessment online survey tools provide the individual with a 10-page report, downloadable within about 10 seconds of completing the survey, and provide the organisation with 30-page reports on every faculty, department or program area.

At one of the latest TAFE Institutes to use three CATs simultaneously, the Institute is receiving 86 30-page reports, to cover all their educational faculties and administrative sections.

The CATs were launched in June 2010 and are now used by 25 TAFE Institutes, a government department and a community college, across Queensland, New South Wales, Victoria, South Australia and Western Australia. The seven CATs include ADMINCAT® for people in administration and LEADCAT® for organisational leaders. The set also includes MANAGECAT® for all managers, MANAGECAT® for vocational education managers and MANAGECAT® for public service managers.

Factors influencing practice

By July 2011, the popularity of the tools led me to approach Dr Siek Toon Khoo, Research Director of the Psychometrics and Methodology Program at the Australian Council for Educational Research (ACER).

I realised we needed deep, specialist quantitative expertise to satisfy clients' interest in extracting as much information as possible from the extensive data produced by the CAT surveys. And I knew from my previous contacts with ACER that Siek Toon and her team of psychometricians and statistical analysts specialise in educational assessment and quantitative research methodology. They are a powerhouse.

My clients respect the fact that Siek Toon has international experience and credentials as a psychometrician and quantitative methodologist, and has published in the international literature.

Siek Toon gave the keynote presentation to the National CAT Forum in Sydney in October 2011 on the teasing topic, 'What else can we learn from the CAT data?' In the presentation she showed how her quantitative analysis identified those factors that do and do not influence VET practitioners' level of demand for professional development, and those factors that do and do not influence practitioners' level of industry currency.

These powerful insights help workforce development directors know where to direct their efforts and funds, to effectively and efficiently build workforce capability. Informed by these insights, they can be more targeted in their approach and more confident about a return on their investment in workforce development.

The ACER team commenced work in mid-2011 by analysing the ADMINCAT® data after its first public usage, with the current large training provider of the year, TAFESA Regional. The team now analyses data generated by all CATs, and recently completed an analysis of all the CURCAT® and VETCAT® data generated at 18 TAFE Institutes in 2011. Handling such large databases is pretty straightforward for Siek Toon and her team.

National benchmarking

Siek Toon is now working with me on developing benchmarking tools that will be used by CAT users interested in comparing their results and sharing ideas about ways to respond to the insights provided by the data. To date, 12 TAFE Institutes have joined the national benchmarking activity, hosted by TAFE NSW-Hunter Institute and chaired by its Director of Workforce Development, Mark Primmer.

Proving that workforce development directors love data about their workforces, Mark believes the benchmarking will not only lead to improvements to workforce development but also will create a competitive advantage for these TAFE Institutes when they bid for national or international contracts. 'We will be able to say that as a group of Institutes we have nationally benchmarked and psychometrically evaluated data about the capability of our staff,' says Mark.

Dr John Mitchell is the Managing Director of JMA Analytics and John Mitchell & Associates.
Visit JMA Analytics **http://www.jma.com. au/jmaanalytics.aspx**

Funding

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Financing TVET in the Pacific

Phillip McKenzie reports on a new research study that aims to produce a comprehensive empirical analysis of the existing systems for financing technical and vocational education and training in Samoa, Papua New Guinea, Solomon Islands, Kiribati, Tonga and Fiji.

The research has been commissioned by the Australian Agency for International Development (AusAID), and is being conducted by ACER in association with Austraining International and leading consultants Andrea Bateman, Robert Horne, Leo Maglen, Ken Ngangan and Ray Powell. ACER staff involved include Justin Brown and Julie Kos. As well as case studies of the seven countries, the project will identify technical and vocational education and training (TVET) financing issues across the region, and identify options to make future financing more efficient and effective at both national and regional levels.

Effective TVET systems are essential for developing the skill base that countries need to advance their economies, and building and maintaining them requires an investment by governments, employers, individuals and external agencies. In order to maximise the returns it is important that this investment in skills is effective and efficient. Collecting and analysing financial information is an important component of management and accountability arrangements. It also bears directly on policy development relating to funding models, who should pay for training and in what proportions, institutional arrangements, governance structures, and tailoring training programs to meet the needs of specific groups, such as new entrants to the workforce and the disadvantaged.

At present, Pacific Island countries generally have only limited capacity to collect and analyse financial and other data on TVET provision, so the development locally of the skills that are needed to do this, and to research and report on the policy implications, are an important aspect of the study.

The scale and maturity of the TVET systems, and the structures, finances and resources that support them, reflect the diversity in the economic and social circumstances of the seven Pacific Island countries. It is critical to understand the funding mechanisms and resource allocation models, which are currently being used in the seven national TVET systems. For example, the manner in which TVET budget preparations are approached from an intra-governmental perspective will enable a more comprehensive understanding of the robustness of the financial and procurement management systems for providing TVET.

At the national level, the logistical issues faced among the seven Pacific Island countries in terms of transport, communications and information technology often combine with factors such as scale, remoteness and resource inadequacies to become significant barriers to TVET delivery and graduate employability. Each of these factors can influence the role and positioning of TVET in training individuals and interacting with the labour market and, in turn, how the TVET system is financed and resourced. By working closely with the seven countries, the study is intended to help inform their decision making about key policy issues such as what forms of TVET can be provided efficiently domestically, and what forms are better sourced by distance education mode or by sending students overseas.

To address funding mechanisms and resource allocation, and logistical issues, the research will work with local TVET stakeholders and researchers to:

- identify the current public and private sources of capital and recurrent funding for TVET and the relevant expenditure from each source

- identify where expenditure is directed, taking account of the participation of females and males, and through what distribution mechanisms

- identify the TVET outcomes provided for the funds allocated, including a comparison of the costs of TVET training between different types of providers, fields and levels of training, duration, mode of delivery, and geographic location, and

- assess the strengths and weaknesses in different contexts of different financing mechanisms being used and financing mechanisms that are more likely to ensure financially sustainable national TVET systems.

The study is scheduled to run from April 2012 to March 2014, and the seven countries will be involved over two stages:

Stage One fieldwork in 2012: Samoa; Tonga; Vanuatu; and Papua New Guinea (Phase 1).

Stage Two fieldwork in 2013: Fiji; Kiribati; Solomon Islands; and Papua New Guinea (Phase 2).

The research is built on ongoing TVET stakeholder engagement, and on contributing to local capacity.

Dr Phillip McKenzie is the Research Director of the Teaching, Learning and Transitions research program of the Educational Monitoring and Research Division at ACER.

Upcoming
Events

More than match stats: Language, literacy and numeracy workshops for VET practitioners

There was plenty going on in the AFL in April, including a two-day ACER workshop for Player Development Regional Managers from the AFL Players Association to better understand the impact of language, literacy and numeracy skills on players' capacity to learn. With the workshop so well received and the May National Adult Language, Literacy and Numeracy Assessment Conference sold out, ACER is running a series of programs in Melbourne from July for vocational education and training practitioners. Blanca Camacho has more.

The April two-day AFL Players Association workshop addressed:

- language, literacy and numeracy (LLN) skills and their impact on adult learning

- LLN skills and the Australian Core Skills Framework (ACSF)

- using ACER's Vocational Indicator to identify the level of AFL players' LLN skills, and

- ways to support AFL players with low LLN skills.

Following the success of this, and recognising the need for further support for vocational education and training (VET) practitioners, ACER's Vocational Unit in Assessment Services in conjunction with the ACER Institute is now running a series of programs from July to December for all VET practitioners.

On 30 July (repeated 26 October), Lynn Sendy-Smithers and Dave Tout will offer a practical workshop that looks at the importance and role of LLN skills in VET. Based on knowledge of research about

adults' skills in literacy and numeracy, about the teaching and learning of LLN and of the Australian Core Skills Framework (ACSF), Sendy-Smithers and Tout will provide practical advice and strategies for VET and workplace teachers and trainers about what actions and activities they can undertake to address any LLN issues identified.

The workshop will address the following key questions:

- What are LLN skills and how do they impact on adult Australians?

- What is the ACSF and what does it tell us?

- What can teachers and trainers do to support adults in VET and workplaces who might have low LLN skills?

On 21 August (repeated 16 November), Tom Lumley and Sendy-Smithers will offer a beginners' guide to writing literacy items in assessments for adults. This workshop will provide an overview of the process of literacy item writing, and some of the processes that typically go into developing strong and valid assessment items, including panelling and revision, items in relation to the ACSF, field testing and comparing the initial drafts of a unit of items with the final set as used in an operational assessment tool. The last part of the workshop will give participants time to put the principles to work and to write

and panel some items. This may include putting some of their own assessment items up for critique.

On 13 September (repeated 10 December), Dave Tout and Jim Spithill will offer a beginners' guide to writing numeracy items in assessments for adults. This workshop will provide an overview of the process of numeracy and mathematics item writing, and some of the processes that typically go into developing strong and valid assessment items, including panelling and revision, items in relation to the ACSF, field testing and comparing the initial drafts of a unit of items with the final set as used in an operational assessment tool. The workshop will also address specific numeracy issues related to the complexity of the language in numeracy and mathematics items and the choice of distractors for multiple choice numeracy items. The last part of the workshop will give participants time to put the principles to work and to write and panel some items. This may include putting some of their own assessment items up for critique.

Blanca Camacho is a Project Director and Education Consultant in ACER's Assessment Services Division.

Find more information on the ACER Institute programs from July to December at **www.acerinstitute.edu.au**.

Upcoming Events

Profiling adults' core skills

The new Core Skills Profile for Adults from ACER is enabling educational managers and workplace supervisors to collect, analyse and use data to implement evidence-based practices to improve learning and completion rates, as Blanca Camacho explains.

The new Core Skills Profile for Adults enables educational institutions and registered training organisations (RTOs) to identify the literacy, numeracy and reasoning skills of candidates beginning vocational education and training, or any working age Australians who need to develop high-level skills or complete qualifications to participate effectively in today's competitive labour market.

Results for the Core Skills Profile for Adults will support providers to identify the resources they need to allocate in terms of time and materials, where and when to concentrate literacy and numeracy specialists for support, which interventions need to be implemented, and what professional learning specialist staff might need in order to implement those interventions. It's about collecting, analysing and using data to implement evidence-based practices to improve learning and completion rates.

For a demonstration in your organisation email **blanca.camacho@ acer.edu.au**

Public demonstrations are coming soon to Perth, Brisbane and Melbourne.

Perth: 24 July 9:30–11am at the ACER Perth office, 7/1329 Hay Street, West Perth.

Brisbane: 13 August 9:30–11am at the ACER Brisbane office, 1/165 Kelvin Grove Road, Kelvin Grove, Brisbane.

Melbourne: 17 August 2–4pm at the ACER Melbourne office, 19 Prospect Hill Road, Camberwell, Melbourne.

The Core Skills Profile for Adults provides:

- online diagnostic assessment in reading, numeracy and writing, and abstract and mechanical reasoning using general everyday and work contexts
- instant secure online delivery
- diagnostic reporting on the abilities demonstrated by students
- common scale scores to track student progress
- items that address the current Australian Core Skills Framework (ACSF)
- ease of administration, so teachers can devote time to teaching that might otherwise be spent marking
- an initial integrated core online screener test in each domain to take respondents automatically to the most appropriate basic, intermediate or advanced ACSF level

- automatically generated scores online, with individual, group, gap analysis and progress reports generated on the fly
- view and print options of group results displaying candidate and test statistics by test session, comparing individual candidate's performance to that of their peers and group descriptor reports with ACSF levels and explanations
- access to test results as a csv file which can be run by clients themselves
- capacity for diagnostic information and descriptions to be built in to the tool, to enable reports for teachers and trainers
- low cost and easy test administration
- single sign-on functionality for large institutions and employers integrating learning management systems, and
- a dashboard view of all assessment usage and performance to drill down into statistics at the level of the individual learner or institution or employer.

Blanca Camacho is a Project Director and Education Consultant in ACER's Assessment Services Division.
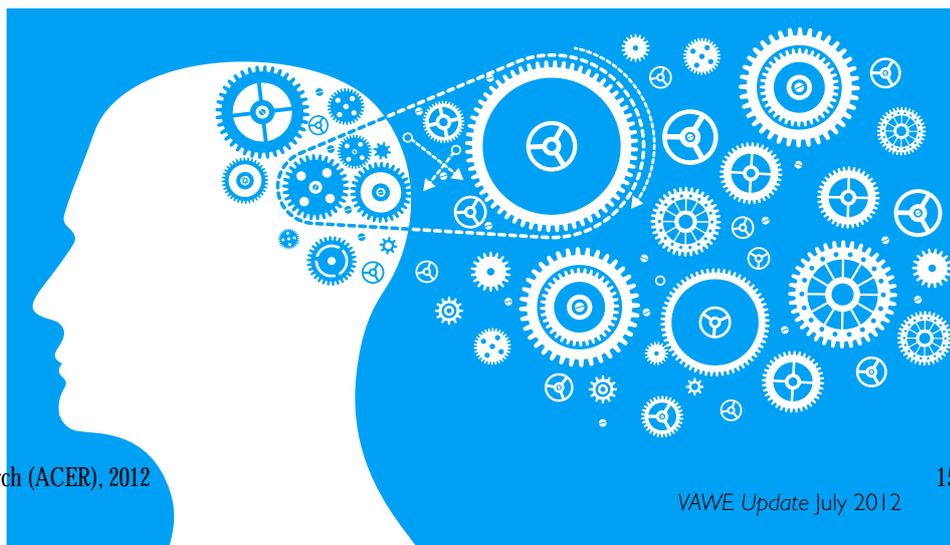
Australian Council for Educational Research

The Australian Council for Educational Research (ACER) is an independent, not-for-profit organisation with a proven track record and a global reputation for excellence. Drawing on extensive expertise and experience, ACER works with providers, governments, industry, educational leaders, trainers and learners on a wide range of vocational, adult and workforce education programs.

ACER Research and Consultancy

ACER undertakes a broad range of research and program consultancies in youth and adult education, vocational and workforce education contexts in Australia and globally for providers, industry, governments and a wide range of stakeholders. This includes:

- curriculum and standards development

- policy and program evaluation

- surveys on pathways and transitions

- research on participation in VET by different social groups

- the impact of training on employability and incomes, and

- psychometric and statistical analysis.

ACER's research draws on advanced quantitative and qualitative techniques and includes a strong focus on program impact and effectiveness.

To contact an ACER expert in your field, go to **www.acer.edu.au/vawe/our-expertise**

ACER Assessment Services

ACER provides assessment services for providers, training bodies, employers and governments, including the design, development and implementation of testing programs and the provision of external quality monitoring and benchmarking services. This includes:

- assessing skills in language, literacy and numeracy (LLN)

- quality and benchmarking services

- selection and recruitment testing services

- assessing graduate and professional aptitudes and skills, and

- test scoring, reporting and data interpretation services.

To find out more about our assessment services, go to **www.acer.edu.au/vawe/assessment-services**

Seminars, Conferences and Professional Learning

ACER organises forums for VET professionals, industry representatives and business clients including:

- conferences, seminars and round tables on key areas of vocational, adult and workplace education research and practice, and

- professional learning programs on the teaching and learning of LLN in vocational, adult and workplace education contexts, assessment development, data interpretation and monitoring.

To find out more, go to **www.acer.edu.au/vawe/courses-and-conferences**

The ACER Vocational Update is published by the Australian Council for Educational Research. Editorial support by Steve Holden.

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