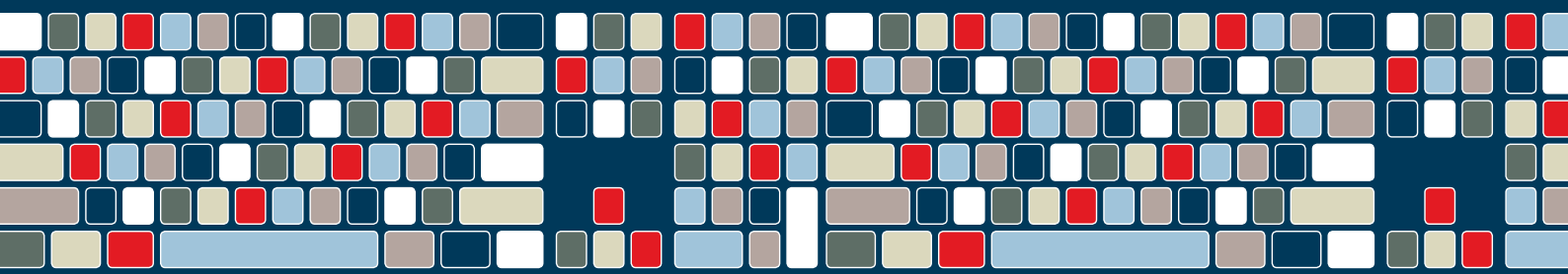Australian vocational education and training

Research messages 2008

National Centre for Vocational Education Research *Informing policy and practice in Australia's training system*

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Australian vocational education and training

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National Centre for Vocational Education Research

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Highlights for 2008

Francesca Beddie

Introduction

A survey of NCVER's 2008 commissioned and in-house research identifies some strong themes emerging around topics of current policy relevance: social inclusion, Australia's changing demography, provider capacity to respond to workforce challenges and to industry demand, the competency-based system and the role of industry in encouraging learning. This research has also served to increase our knowledge about subjects identified in the national vocational education and training (VET) research priorities.

National VET research priorities 2007–10

1. Growing the labour supply: by examining how VET can support greater participation in the workforce, especially for equity groups whose participation is relatively low.
2. Motivating individuals to participate in VET: by understanding why people choose to, or not to, participate in VET, what drives demand for VET and what outcomes it offers participants in the medium-to-long-term.
3. Sustaining a skills base through apprenticeships and traineeships: by identifying ways of maximising the number of people who complete their apprenticeship or traineeship.
4. Enhancing the productive capacity of enterprises: by ensuring that employers are well placed to maintain the skills of their workers and to adapt to new work practices and technologies.
5. Enabling VET providers to compete effectively: by identifying the barriers VET providers face to operating effectively in a competitive environment.

Research highlights are presented below, collated under the five themes by which NCVER organises its work. Key messages for 59 pieces of work published in 2008, including some conference papers, can be found in the body of this volume. Statistical publications and other value-added research dissemination produced by NCVER, such as *At a glances*, are not covered in this publication.

Industry and employers

The main body of work under this theme concentrated on the challenge the changing nature of the labour market and the workplace presents to a VET system that is expected to be responsive to rapidly evolving skills requirements.

Learning is an important workforce development and retention strategy. Smith et al. (*Approaches to measuring and understanding training expenditure*) demonstrate that those employers who recognise this can benefit from creating a learning culture, while the body of work completed in 2008 on regional partnerships shows that industry does see the value in building partnerships with VET providers. Cooney and Long (*Inter-firm cooperation in training*) argue the case for encouraging inter-firm cooperation and Townsend and Waterhouse (*Whose responsibility? Employers' views on developing their workers' literacy, numeracy and employability skills*) document benefits employers can gain by paying attention to workers' literacy and numeracy skills.

The work led by the National Institute of Labour Studies, *A well-skilled future*, which was completed in 2008, highlights the importance of learning on the job. This has implications for those workers who do not have access to such learning either because of the casual nature of their employment or their capacity to benefit from informal learning. These issues are being explored by the University of South Australia's Centre for Work+Life and were the subject of the Dawe, Saunders and Nguyen examination of casual workers in the home and community care sector, which can be found under the VET in context theme (*Vocational education and training and casual workers in the home and community care sector*). They also pose questions about how VET providers incorporate and assess informal learning in their training programs. Misko's review of the literature on formal, informal and non-formal learning (*Combining formal, non-formal and informal learning for workforce skill development*) makes clear that employers are more interested in the results of learning than its form and are looking for both technical skills as well as problem-solving, team work and communication skills.

The study Callan conducted into accelerated apprenticeships (*Accelerated apprenticeships: Apprentice, employer and teaching staff perceptions*) touches on these issues and underlines the point that, in the case of apprentices, accelerated learning progress needs to incorporate innovative up-front training, intensive pre-apprenticeship training, the full application of recognition of prior learning, intensive forms of off-the-job delivery and industry investment in workplace mentors.

While Callan, along with Choy et al. (*Effective models of employment-based training*), was concerned about new approaches to employment-based training, Karmel and Mlotkowski undertook an empirical analysis of the drivers of apprenticeship numbers. Their study pointed to the dominant role of economic and market forces rather than government incentives in the rise and fall of trade apprenticeships (*Modelling the trades: An empirical analysis of trade apprenticeships in Australia, 1967–2006*).

Students and individuals

Much of the work undertaken in 2008 underlines the fact that training has an important place in the social inclusion agenda, with VET providers catering to many disadvantaged learners (e.g. second-chance learners, unemployed people, Indigenous people). The caveat raised by many researchers is that for the training to be effective these groups need additional support services to help them perform well. This was the strong message emerging from two reports on the Welfare to Work Initiative, by Barnett and Spoehr (*Complex not simple: The vocational education and training pathway from welfare to work*), and Guenther, Falk and Arnott (*The role of vocational education and training in welfare to work*).

VET providers also face challenges in catering to some groups; for example, sub-sets of people with a disability, particularly when the disability (e.g. mental illness) remains undisclosed or, as Karmel and Nguyen found, when those students are also educationally disadvantaged (*Disability and learning outcomes: How much does the disability really matter?*). The survey by Griffin and Nechvoglod of the literature on research into disability (*Vocational education and training and people with a disability: A review of the research*) discusses some of the problems in the available data and suggests that future research in this area should focus on specific questions designed to improve VET delivery.

Wallace, a 2007 New Researcher awardee, discusses the importance of taking into account community attachment and identity when considering how to cater to students in regional and remote areas, including those from Indigenous backgrounds (*Reluctant learners: Their identities and educational experiences*).

Poor literacy and numeracy is a hindrance to good outcomes for students. Miralles-Lombardo, Miralles and Golding show there is scope for collaboration with community-based organisations to create pathways for refugees, so that they overcome problems of adapting to the Australian environment before they start formal training for employment (*Creating learning spaces for refugees: The role of multicultural organisations in Australia*,

which can be found in the Teaching and learning section). As the workforce expands to include more migrants, and to operate in the global economy, Bean's study of cross-cultural training points to cultural competence becoming another skill workers need to acquire (*Cross-cultural training and workplace performance*).

This year saw work into the training needs of older workers, as well as attention to youth transitions. The latter will grow as a significant element in NCVER's work as the various strands of work using the Longitudinal Survey of Australian Youth come to fruition.

By 2020 people aged between 50 and 65 will comprise 45% of the working age population (Tan and Richardson), making it important to consider older people's training needs and learning styles, as well as to address issues of discrimination and the trend towards more flexible working arrangements. (The Tan and Richardson publication, *Demographic impacts on the future supply of vocational skills*, can be found in the Industry and employers section.) These messages are also conveyed in the Ferrier, Burke and Selby Smith study (*Skills development for a diverse older workforce*) as well as in Karmel's consideration of research on older learners (*A peripatetic research perspective on older persons and vocational education and training*).

Research this year underlines that career advisors in schools still do not have vocational education and training sufficiently on their horizons. At the same time, there is much activity underway to fashion vocational learning for school children (e.g. polytechnics; trade centres in schools; work experience; school-based apprenticeships). These issues are investigated in several reports by Karmel (including *The Tasmanian Polytechnic: Some thoughts from a research perspective*, found in the VET system section); also by Rainey et al. (*What choice? An evaluation of career development services for young people*), and Kennedy and Haines (*Course expectations and career management skills*).

While the issue of skills shortages may attract less attention given current economic circumstances, the underlying issues of how Australia achieves and sustains a well-skilled workforce will remain pertinent, as will the imperative towards achieving higher-level qualifications in order to gain sustainable employment. Long and Shah found, in a study on the costs and benefits of getting a VET qualification, that the best returns are for students who study higher-level qualifications (certificate III upwards), and do so part-time (*Private returns to vocational education and training qualifications*). Karmel, Mlotkowski and Awodeyi point out that except in the trades, there is usually not a neat match between what people study and the jobs they get (*Is VET vocational? The relevance of training to the occupations of vocational education and training graduates*).

Teaching and learning

A market which is clearly demanding higher VET qualifications poses challenges to the current structure of competency-based training. Some of this year's research suggests that training packages may not be the vehicle for imparting the type of cognitive skills being called for. This is the implication in the Cartledge and Watson work on design education (*Creating place: Design education as vocational education and training*).

The final year of activity under the Adult Literacy Research Program emphasises that literacy is a necessary skill for workers at all levels and that a systematic approach to policy-making is necessary to achieve better integration of literacy and numeracy into VET offerings. It also argues for greater support of literacy tutors. This body of work has been packaged into a wiki <http://www.adultliteracyresource.edu.au> to encourage its use by adult literacy practitioners.

Papers by two New Researcher awardees, who were supported to give papers at NCVER's 'No Frills' conference in 2007, reveal an interest in the use of technology to improve practice among VET practitioners.

Sutcliffe, whose publication (*Getting on [line] with it … surveying student experiences*) can be found in the Students and individual theme, looked at web-based survey techniques, and Todhunter and Pettigrew (*VET goes virtual: Can web conferencing be an effective component of teaching and learning in the vocational education and training sector?*) looked at web conferences as a component of teaching and learning.

The VET system

The main messages of the research consortium on building VET provider capability have resonance in the current reform atmosphere. One strong theme is the need for a more strategic approach to VET workforce planning. See, for example, Smith and Hawke (*Human resource management in Australian registered training organisations*) as well as work by Chappell and Hawke (*Investigating learning through work: The development of the* Provider Learning Environment Scale). Clayton et al. also have suggestions for how registered training organisations can manage change and build organisational capability (*A study in difference: Structures and cultures in Australian registered training organisations*). This includes recruiting staff with relevant skills and attributes, maintaining and building the skills of staff and finding better ways to make registered training organisations employers of choice.

Other recurrent themes are that the system is becoming more client-focused, although many providers and staff feel constrained by the operational environment. Similar points were made in Ferrier, Dumbrell and Burke's report on how VET providers are faring in the competitive market (*Vocational education and training providers in competitive training markets*). They observe that competition has encouraged adaptability and creativity, and often collaboration. It has also led to less reliance by public providers on government funds.

VET in context

Several reports published in 2008 take a look at how the VET sector intersects with other elements of society and with the policy environment. The recurring theme in this work is the benefits partnerships can bring. Gelade and Fox (*Reality check: Matching training to the needs of regional Australia*) suggest that a mix of vocational education and training, drawing on public and private provision, as well as in-house training, can meet the needs of regional enterprises, who also benefit from cooperation across industries. Rushbrook and Pickersgill (*In training we trust: Communicating regional training need and demand to vocational education and training providers*, which can be found in the VET system section) have a similar message, gleaned from their work in the Riverina, which showed that consumers of VET make judgements about programs based in part on their trusted, informal networks. They also argue that VET providers could make better use of the statistics available on local training demand. Kearns, Bowman and Garlick (*The double helix of vocational education and training and regional development*) argue that VET providers do not always need to take the lead in such relationships but, given their position in local communities, they can foster linkages that bring benefits to the economy and encourage social cohesion.

Skilled migration and the workforce: An overview

John Saunders

This publication provides a brief overview of migration in Australia, with an emphasis on the contribution that migration has made to the skills of the workforce. It starts with a look at migration in an historical perspective and describes the main types of migration and government programs to attract migrants. It then looks more closely at migrants in the workforce and in particular, the occupational outcomes for migrants as well as the utilisation of qualifications. It concludes with a detailed explanation of the skilled migration program and migration program outcomes.

Key messages

- Australia clearly benefits from the movement of skilled workers in and out of the country. In 2004–05 there was a net gain of around 46 000 skilled migrants, two in three of whom were professionals.

- The number of skilled migrants has tripled in the past decade. They now account for close to half of all migrants. Skilled migrants represent a major source of supply for occupations experiencing employment growth, particularly in the professions and the trades.

- Temporary migration has grown substantially and is most evident in the rapid rise in employer-sponsored long-stay (or class 457) visas. This is in response to recent skill shortages, with most 457 visa holders employed in the professions and the trades.

- Migrants constitute 11% of employed people. They are relatively over-represented in the professions (14%) but under-represented in technical and associate professional occupations (10%) and the trades (9%).

- Many skilled migrants experience difficulties in finding employment in their occupational field, representing a loss of the potential benefits they bring to a job.

Changing forms of employment and their implications for the development of skills

Sue Richardson, Peng Liu

This report concentrates on changing employment patterns by examining the shift away from the standard of full-time permanent employment which occurred between 1992 and 2005. It describes the effects of changing employment modes on the amount and type of training received by employees and considers the implications for the vocational education and training (VET) sector. This research is part of a larger suite of research undertaken by the National Institute of Labour Studies, Flinders University, and the Centre for Post-compulsory Education and Lifelong Learning, University of Melbourne.

The focus of the study was on the ways in which people learn, particularly on the job, to be productive workers. It asked whether part-time, casual and labour hire forms of work have affected the development of vocational skills.

Key messages

- Since 1992, there have been substantial changes in men's employment patterns, with a decrease in the number of permanent full-time jobs (new and existing) and a large increase in casual jobs, both full- and part-time.

- Women have seen strong growth in permanent jobs, both full- and part-time.

- Growth in permanent jobs has been concentrated among both men and women aged 45–59 years, while the absolute number of permanent jobs for men aged 20–30 years has fallen.

- Growth in permanent jobs has been concentrated in occupations that mostly require higher education, rather than vocational education.

- From 2001 to 2005, the total hours of employer-sponsored training fell by 15% for permanent workers and by 27% for casual workers. In total, casual workers get about half the employer-provided internal training and a mere fraction of the employer support for external courses that permanent workers get.

- The shift away from full-time continuing employment is likely to put skill development on the job at risk, placing the onus on VET providers to offer courses that are accessible to full-time, part-time and casual workers.

- The reduced employer support for training means that skills development will increasingly need to be funded by the workers themselves and the taxpayer.

For a synthesis of the consortium's entire program of work, see *A well-skilled future* by Sue Richardson and Richard Teese.

Note: This publication was produced through the National Vocational Education and Training Research and Evaluation Program; see page 80 for details.

Changing forms of employment and their implications for the development of skills can be found on NCVER's website <http://www.ncver.edu.au/publications/1994.html>

Combining formal, non-formal and informal learning for workforce skill development

Josie Misko

This review of literature was prepared for the national Skilling the Existing Workforce project undertaken by the Australian Industry Group (AiGroup) as part of the Commonwealth–State Skills Shortage Initiative. The aim of the national AiGroup project was to investigate strategies and programs which increase the skills, knowledge and capabilities of individuals and groups in the workforce and those wishing to enter the workforce. This review was commissioned to augment the findings of the national AiGroup investigation by providing a greater focus on how formal, non-formal[1] and informal[2] learning and practical organisational strategies and initiatives are used and recognised in workforce development.

Combining formal, non-formal and informal learning for workforce development by Josie Misko shows how multiple variations and combinations of formal, informal and non-formal learning, accompanied by various government incentives, and organisational initiatives (including job redesign, cross-skilling, multi-skilling, diversified career pathways, action learning projects, quality assurance arrangements, job rotations, and mentoring programs) can be used to prepare workers to gain, maintain or progress through jobs.

Key messages

- Formal learning continues to be the main route to recognised qualifications, required for entry into jobs, especially regulated occupations. However, informal learning acquired through experience in work and life is the most frequently used of all the learning forms.

- Employers are mostly interested in the results of learning rather than the form of learning. What they want are essential technical skills and knowledge required for jobs and for compliance with legislative requirements. They are also keen to have problem-solving, team work and communication skills.

- Workers with higher levels of education and training continue to access greater amounts of learning (formal and non-formal) than others. If we are serious about extending the source of skills, we must invest in the learning of those with lower levels of education and training.

- Accelerated apprenticeship training which often relies on recognition of prior learning and self-paced gap training may be problematic for individuals who do not have the required literacy and numeracy skills for independent study.

This review provides examples of how different learning forms supported by government incentives and organisational practice operate in the skill development of new and existing workers. However, the concept of workforce development is even broader and includes other human resource aspects such as performance management, and recruitment and retention strategies. Such aspects should not be forgotten by governments and employers when developing policies to increase the skill levels of the workforce.

1 Non-formal learning refers to learning that occurs in structured programs but does not lead to accredited final qualifications.
2 Informal learning refers to learning acquired through everyday work and life.

Note: This publication was produced through NCVER's consultancy work; see page 80 for details.

Accelerated apprenticeships: Apprentice, employer and teaching staff perceptions

Victor Callan

Australia's continued buoyant economy means that demand for skilled workers in many occupations is outstripping supply. To remedy this imbalance federal and state governments are implementing various strategies. These include raising levels of skilled migration, programs to improve the basic skills of people without formal qualifications and accelerated apprenticeships. The last of these is the subject of this report.

While apprenticeships are a readily identifiable way to meet skills needs, there are concerns that current models are not delivering, with high non-completion rates in some industries and a general difficulty in attracting apprentices. Accelerated apprenticeships, which reduce the typical four-year duration of a trade apprenticeship, may address some of these issues.

Accelerated apprenticeships: Apprentice, employer and teaching staff perceptions by Victor Callan focuses on pilots of accelerated apprenticeships in the automotive trades in Queensland. Callan examined the perceptions of apprentices, employers and teachers of the strengths and shortcomings of both traditional and accelerated approaches.

Key messages

- The traditional model of apprenticeship training is still well regarded. It is not failing but it does need to evolve to remain useful and relevant.

- In the automotive industry, at least, the establishment of certificate II training within certificate III is a key aspect of the design of accelerated apprenticeships.
  - This allows students willing to do repetitive service tasks, and who may prefer to exit their training early, to do so with an industry qualification that matches an essential element of the trade.

- Accelerated models offer obvious benefits but they will usually be more expensive, imposing additional costs as well as pressures upon apprentices, employers and trainers.

- To achieve results in shorter time frames, accelerated apprenticeships must incorporate innovative up-front training; intensive pre-apprenticeship training; the full application of recognition of prior learning; intensive forms of off-the-job-delivery; and industry investment in workplace mentors.

Readers interested in employment-based learning models should also see *Effective models of employer-based training* by Sarojni Choy et al. (NCVER 2008).

Accelerated apprenticeships: Apprentice, employer and teaching staff perceptions can be found on NCVER's website <http://www.ncver.edu.au/publications/1991.html>

Effective models of employment-based training

Sarojni Choy, Kaye Bowman, Stephen Billett, Louise Wignall, Sandra Haukka

Apprenticeships and, more recently, traineeships, are a time-honoured way of training people for certain occupations. What makes them distinctive is the combination of work experience and off-the-job training. The success of this training model—employment-based training—raises the obvious question of whether the model can be adapted to new occupations and higher-level qualifications. Looking at alternative models of employment-based training, particularly for higher-level qualifications, was the focus of this research by a team led by Sarojni Choy from the Queensland University of Technology.

The researchers discovered that the uptake of higher-level vocational education and training (VET) qualifications is constrained by employers' preferences for either university degrees or for demonstrable skills rather than VET credentials. They did, however, conclude in this report, *Effective models of employment-based training*, that enhancements to current models could encourage more effective training for higher-level qualifications.

Key messages

- Any new employment-based training arrangements need to take account of the age, literacy and numeracy levels of new entrants, and workplace conditions. For most new entrants, it is important to have a contract of training of sufficient duration to allow them to accumulate and learn from experiences. Fast-tracking can assist more capable learners, as can recognition of prior learning processes.

- Those seeking higher-level qualifications within employment-based training want greater autonomy to manage their study.

- The five enhanced models proposed will require a review of the complexities of the regulatory environment and of education and training delivery and employment conditions. In addition, employment-based training models for higher-level VET qualifications need to be able to compete with university qualifications.

The report's recommendations are based on case studies in the manufacturing and child care industries, and their relevance and applicability to other industries are yet to be determined. The authors emphasise that one size does not fit all and that employers must consider different training strategies in order to develop higher-quality skills.

Two other recent National Centre for Vocational Education Research (NCVER) reports of relevance to the issues raised in this research are:

- *Accelerated apprenticeships: Employer, apprentice and teaching staff perceptions* by Victor Callan (NCVER 2008)

- *Higher-level vocational education and training qualifications: Their importance in today's training market* by Sue Foster, Bernadette Delaney, Andrea Bateman and Chloe Dyson (NCVER 2007).

Note: This publication was produced through the National Vocational Education and Training Research and Evaluation Program; see page 80 for details.

Effective models of employment-based training can be found on NCVER's website <http://www.ncver.edu.au/publications/1990.html>

Has employer satisfaction with vocational education and training changed between 2005 and 2007?

Louise Brooks, Tomi Awodeyi

This paper investigates large differences in employer satisfaction with vocational education and training (VET) between 2005 and 2007. Employer satisfaction was measured using the Survey of Employer Use and Views of the VET System, which was first conducted in 2005 and repeated in 2007. It measures employer satisfaction with vocational qualifications as a job requirement, apprentices and trainees, and nationally recognised training.

Differences in weighted estimates of employer satisfaction were examined in light of sample sizes and the distribution of employers' responses to the survey. A model-based approach to estimation was used, which accounted for the relationship between satisfaction and the size and industry of the employer.

Key messages

- In three out of five cases, the large differences in employer satisfaction between years were found to be real and not as a result of the structure of the sample.

- In the remaining two cases, the differences in employer satisfaction were found not to be significant. This suggested that the structure of the sample had the potential to reveal differences that did not hold up under closer scrutiny.

- Survey estimates of large differences between years need to be treated with some caution and a model-based approach to estimation provides a tool to give assurance that large differences are real and not a result of peculiarities in the sample.

Whose responsibility? Employers' views on developing their workers' literacy, numeracy and employability skills

Ray Townsend, Peter Waterhouse

In any discussion of labour supply and labour productivity, the importance of literacy, numeracy and employability skills (such as communication and problem-solving) should not be overlooked. Very few jobs can be performed properly without these skills.

Whose responsibility? Employers' views on developing their workers' literacy, numeracy and employability skills by Ray Townsend and Peter Waterhouse explores the views of those employers already engaged in the provision of literacy, numeracy and employability skills and their continuing development in the workplace. The research focused on the question of who should be responsible for providing employees with the requisite skills. As discussed in the report, Townsend and Waterhouse argue that the solution to this issue relies on a collaborative effort: education and training providers and employers working together for the benefit of individuals and their organisations.

Key messages

- It is not realistic to expect the education and training system to provide employers with job-ready applicants, complete with all of the literacy, numeracy and employability skills required by employers.

- The employers surveyed all recognise the need to develop and continue to enhance the literacy, numeracy and employability skills in their employees.

- Many individuals with relatively high qualifications, even professionals, need to develop or build on their literacy, numeracy and employability skills. What they need to learn will depend on the evolving nature of their jobs.

- Training providers need to be able to equip employers with the skills for identifying literacy and numeracy gaps and to provide education 'infrastructure' services, such as contextualised educational design. This will encourage the continuation of literacy and numeracy learning in the workplace.

Readers interested in the provision and development of literacy, numeracy and employability skills in the workplace should also see *Thinking beyond numbers: Learning numeracy for the future workplace* by Beth Marr and Jan Hagston (NCVER 2007). This research reinforces the message that employees respond well to learning within their work context and to the opportunity to apply their learning at work.

Approaches to measuring and understanding employer training expenditure

Andrew Smith, Gerald Burke, Michael Long, Tom Dumbrell

While it is recognised that employers invest a substantial amount of money and time in training, the exact nature and amount of this investment is poorly measured and understood. This project set out to supplement the available data, which have many limitations, with more detailed data for selected industries. However, it became quickly apparent that this was not possible.

It found that good data on employer-funded training are extremely difficult to capture, not only because of the diversity by which employers meet their skill needs, but also because many employers do not keep accurate records. As a consequence, the report focuses on measurement issues rather than hard, quantitative data.

Nevertheless, *Approaches to measuring and understanding employer training expenditure* offers some insights into aspects related to training expenditure across firms in the four selected industries: construction, retail trade, manufacturing and health and community services (with support provided by the Community Services and Health Industry Skills Council).

Key messages

- Some of the drivers for investment in training—such as government employer incentives—are common across industries; others—such as compliance with regulations, shortages, labour turnover and exposure to competition—will vary, depending on specific industry circumstances.

- The common perception is that small firms tend not to invest in training to any great extent. This research suggests that the traditional split between high-spending large firms and their small low-spending counterparts does not always reflect actual practice.

- One of the difficulties in getting an accurate picture of the training landscape is that a significant amount of informal training is not recorded.

The research also suggests how a national survey of employer training expenditure and practices might best be implemented in the future. The authors argue that collecting data based on employers' impressions is better than having no data, especially where baseline data can be supplemented with in-depth qualitative research. In considering any future survey, however, it would be important to understand the key policy initiatives that the outputs are likely to inform so that a manageable and robust survey can be designed. It also needs to be borne in mind that collecting training practices data is problematic, because training is often decentralised and suitable records are not retained.

Note: This publication was produced through the National Vocational Education and Training Research and Evaluation Program; see page 80 for details.

Approaches to measuring and understanding employer training expenditure can be found on NCVER's website <http://www.ncver.edu.au/publications/2016.html>

Inter-firm cooperation in training

Richard Cooney, Michael Long

Competition between firms has been identified as being the basis of efficient markets. Competition leads to benefits for consumers and drives firms to greater efficiencies in the production of goods and services. However, research and experience suggest that cooperation among firms provides benefits in a range of business service activities such as marketing or training services. For many firms, particularly small-to-medium-sized firms, cooperation with other firms becomes a key strategic focus in the effort to realise business efficiencies.

Based on a survey of 600 firms in five manufacturing industries, Richard Cooney and Michael Long investigate cooperation among firms in the provision of training. They explore various aspects of cooperation in these industries and identify the policy implications of such training arrangements for the vocational education and training (VET) sector.

Key messages

■ A modest proportion (less than 20%) of Australian manufacturing firms participates in cooperative training arrangements. For those firms that do, such arrangements are only part of their overall training effort.

■ Cooperation in training occurs largely through pre-existing business-to-business relationships. Cooperative training arrangements help firms to reinforce these relationships, provide better-quality training and save money.

■ The VET sector currently has only a marginal involvement in cooperative training arrangements. To expand this role, training providers need to develop networks within the business community and arrangements capable of meeting the needs of a cluster of firms.

While acknowledging the low response rate of the survey (21%) and the potential sample bias towards firms that provide training, this report provides an important contribution to understanding the nature and extent of inter-firm cooperation in training and the potentially significant role that the VET sector has in these relationships.

Readers interested in employers' use of vocational education and training should also see:

■ *Australian vocational education and training statistics: Employers' use and views of the VET system 2007 – Summary* (NCVER 2008)

■ *Reasons for training: Why Australian employers train their workers* by Andy Smith, Eddie Oczkowski and Mark Hill (NCVER, forthcoming).

To have and to hold: Retaining and utilising skilled people

Andrew Smith, Eddie Oczkowski, Chris Selby Smith

Not being able to hire people with the required skills is an obvious impediment to the productivity and prosperity of any organisation and, ultimately, to a country's economy. An equally important concern for employers is how to keep skilled employees and how to use their skills fully.

This report, *To have and to hold: Retaining and utilising skilled people* by Andy Smith, Eddie Oczkowski and Chris Selby Smith, examines the ways in which Australian employers retain skilled staff at a time of low unemployment and skills shortages. It also considers the ways in which employers enhance their ability to use the skills of their people. The study analysed retention and utilisation at the organisation level. Its focus is on the role of human resource management practices, including training and high-performance work practices, in enabling employers to retain and utilise the skills of their staff.

Key messages

- The key driver for both skills retention and utilisation is the presence of a learning orientation in the organisation. People stay in organisations if they feel they are learning and progressing in their careers.

- Retention or utilisation of skilled people is not necessarily improved through strategies such as increasing wages, adopting family-friendly working policies, and the use of non-monetary rewards. These things help make people feel satisfied, but they are not sufficient to retain skilled people in a tight labour market.

- What does facilitate retention is the application of high-performance work practices, such as a commitment to learning, open-mindedness and shared vision. More widespread adoption of these practices would benefit employers and workers alike.

- Training as part of an overall learning culture, particularly nationally recognised training, is also important in retaining skilled people and making better use of their skills. This also offers opportunities for registered training organisations to work with employers to improve retention and utilisation strategies for employees.

Note: This publication was produced through the National Vocational Education and Training Research and Evaluation Program; see page 80 for details.

To have and to hold: Retaining and utilising skilled people can be found on NCVER's website <http://www.ncver.edu.au/publications/2045.html>

Changing work organisation and skill requirements

Bill Martin, Josh Healy

How work is organised is an important factor in determining what skills workers need to do their jobs. It is common to think therefore that, with today's emphasis on teamwork, employees must be multi-skilled and able to work collaboratively and flexibly, unfettered by traditional hierarchical structures and rigid task separation.

This research, part of a larger body of work addressing issues on changing work and skill needs in Australia, investigated the extent to which the contemporary workplace has changed. It compared practices in several industries (call centres, hospitals, manufacturing plants and mining operations) with a model of high performance, to see how they were faring and their degree of success in meeting the complex demands of industry. It also considered whether employees needed new sets of skills and the role the vocational education and training (VET) sector should adopt in providing these skills.

Key messages

- Australian organisations have experimented with elements of the high-performance model, including teamwork, decentralisation of authority, increased knowledge-sharing, flexibility in job content, pay for performance, strict recruitment practices, and additional training provision. However:
  - there are few examples of organisations that have sustained teamwork systems. Instead, teamwork has either declined or been used primarily to ensure the social integration of workers or induct them into organisational cultures
  - none of these practices has been used consistently to produce permanent changes in how work is organised, nor to produce a demand for significant new skills (for example, communication skills) among employees.

- Cost-cutting and cost containment have often been the motivation for reorganising work practices. While these have resulted in multi-skilling, such changes are unintended and normally not resourced. They run the risk of high degrees of work intensification and people quitting.

- Nevertheless, employees do need to be able to negotiate workplace changes by developing skills in areas such as cooperation and negotiation, as well as greater abilities in administrative, supervisory and even management skills.

- While it would be unwise of the VET system to design future training on the assumption that high-performance practices will become widespread, VET providers do need to remain sensitive to these changes in work organisation among their clients, and to the skills development they can offer employees needing to cope with them.

For a synthesis of the entire program of work conducted by the National Institute of Labour Studies, Flinders University, and the Centre for Post-compulsory Education and Lifelong Learning, University of Melbourne see *A well-skilled future* by Sue Richardson and Richard Teese.

Note: This publication was produced through the National
Vocational Education and Training Research and
Evaluation Program; see page 80 for details.

Changing work organisation and skill requirements
can be found on NCVER's website
<http://www.ncver.edu.au/publications/1996.html>

Current vocational education and training strategies and responsiveness to emerging skills shortages and surpluses

Jack Keating

The Australian vocational education and training (VET) sector is a complex and multi-faceted entity which receives direction and funding from both the Australian Government and the state and territory governments, as well as being influenced by local social and economic imperatives and the historical structure and role of the sector.

This report examines the system's capacity to adapt to the current and anticipated demand for skills in the workforce, while taking account of the multiple demands imposed by government-determined priorities. Its focus was on the planning processes for publicly funded training.

Key messages

- The planning and funding arrangements for VET in Australia are relatively tight, with limited capacity for market responsiveness. Considerable resources are directed towards these processes, but planners have not paid enough attention to how public funding can stimulate fee-for-service demand and, to a lesser extent, industry and individual investment in training.

- The economic boom has reduced demand for formal VET. In some areas, technical and further education (TAFE) institutes have found it difficult to fill their funded places. The system needs to find ways to strengthen the individual demand for training.

- At the same time, TAFE institutes retain a role in providing tertiary education pathways for school leavers. TAFE institutes are the major provider of second-chance education and also have a growing percentage of teenage students. This poses new challenges for TAFE institutes.

- For the system to introduce greater flexibility, there needs to more interactive and responsive planning which allows for the flow of information from local markets to influence national thinking. This suggests that data collection must have more than a compliance focus.

- Cooperation between providers, public and private, and other agencies can increase local capacity for planning.

- Funding mechanisms should go beyond allocating student contact hours to financing contestable programs and programs delivered by private registered training organisations.

This report is one part of a program of work conducted by the National Institute of Labour Studies, Flinders University, and the Centre for Post-compulsory Education and Lifelong Learning, University of Melbourne. *A well-skilled future* by Sue Richardson and Richard Teese provides a synthesis of that work. Another suite of NCVER-commissioned work examined the role of VET in regional partnerships. This work is summarised in *Regional partnerships: At a glance* by Tabatha Griffin and Penelope Curtin (NCVER 2007).

Demographic impacts on the future supply of vocational skills

Yan Tan, Sue Richardson

This report examines the effect of an ageing population on the future skills supply. It gives a detailed analysis of projected vocational education and training (VET) employment and VET qualifications by occupation and age group to 2020, highlighting those occupations using VET-acquired skills. It also quantifies the compositional effects of changing demographics on both the quantitative ('how many?') and qualitative ('what type?') dimensions of the supply of vocational skills.

Key messages

- Over the next 15 years, the workforce will continue to grow but its age structure will change significantly. By 2020 people aged between 50 and 65 will comprise 45% of the working-age population. However, the age distribution of new entrants will remain constant for males and get a little younger for females.

- By 2020 almost all the non-trade occupations are expected to have more people aged over 55 than under 25. People in the trades have the youngest age profile and this is expected to persist for the next 15 years.

- The workforce will become more qualified as more qualified age cohorts move through the labour market (and because within VET-intensive occupations there will be an increase in associate professional and managerial and administrative occupations). Skill deepening will lead to even higher levels of qualifications.

- There will be a growing demand for the VET sector to:
  - assist in improving the skills and hence employability of people currently marginal to the workforce, including older workers
  - provide training that helps people upgrade or enhance their VET qualifications at higher levels (especially advanced diploma/diploma) and in the business/management disciplines
  - offer older workers a quick return on their training investment.

The report is part of a suite of research undertaken by the National Institute of Labour Studies, Flinders University, and the Centre for Post-compulsory Education and Lifelong Learning, University of Melbourne, whose findings are synthesised in *A well-skilled future* by Sue Richardson and Richard Teese. Two other NCVER publications address similar issues: *Will we run out of young men?* by Tom Karmel and Koon Ong (NCVER 2007) and *Higher-level vocational education and training qualifications: Their importance in today's training market* by Sue Foster et al. (NCVER 2007).

A well-skilled future

Sue Richardson, Richard Teese

In 2004 the National Centre for Vocational Education Research (NCVER) contracted the National Institute of Labour Studies, Flinders University, and the Centre for Post-compulsory Education and Lifelong Learning, University of Melbourne, to undertake a body of work focusing on the relationship between the country's future skill needs and the vocational education and training (VET) system.

A well-skilled future by the co-directors of the consortium synthesises the findings of the 12 projects undertaken. This body of work will be a stimulus to debate the role of the vocational education and training system in Australia's skills development.

Key messages

- Supply and demand for skills are very difficult concepts to pin down and measure, principally because many people learn their vocational skills informally, on the job. While greater local interaction between industry and VET will improve understanding of the market, at the national and state levels policy-makers must learn to live with uncertainty. They should focus on: areas where markets do not work well; skills that take a long time to train; or shortages that cause major bottlenecks.

- Higher-level skills are increasingly required by industry, so VET must re-focus on middle-level and advanced training. This should not be at the expense of people needing basic training, because VET plays a vital and unique role in providing opportunities to the many people who are following unconventional life paths, many of whom are relatively disadvantaged.

- In those areas where more and more jobs are casual and less training is occurring in the workplace, the importance of formal VET is likely to grow.

- The ageing of the workforce will increase the stock of vocational skills, especially white-collar skills, as the workforce becomes more experienced and more qualified.

- A well-skilled future means removing barriers to VET participation—caused by lack of employment incentives to training, problems of incomplete schooling, and weaknesses in how some providers work.

- The VET system can respond to the fluidity of the training landscape through both community partnerships and market-based models of provision. These multiply industry links, create more employment incentives to training, and have a greater focus on individual need through good inclusiveness strategies.

- A well-skilled future cannot be constructed by the VET sector alone. Improved quality of schooling will create the platform for VET to do its distinctive and value-adding work in skills training, while stronger employer commitment to training will make greater use of the workplace as a site for skills development.

A well-skilled future can be found on NCVER's website <http://www.ncver.edu.au/publications/2001.html>

Modelling the trades: An empirical analysis of trade apprenticeships in Australia, 1967–2006

Tom Karmel, Peter Mlotkowski

The idea that apprenticeship numbers in the trades may be affected by labour market conditions seems fairly obvious. But just as obvious is the idea that government policy may be able to promote the take-up of trade apprenticeships. The significant increases in trade apprenticeship numbers in recent years have occurred as the Australian economy has boomed. At the same time government policy has been active in the area of apprenticeships; the introduction of incentives to employers, the removal of age restrictions to apprenticeships and the extension of the apprenticeship model to existing workers are of particular note. *Modelling the trades: An empirical analysis of trade apprenticeships in Australia, 1967–2006*, by Tom Karmel and Peter Mlotkowski, looks at the relationship between trade apprenticeships and the labour market. The authors seek to address the following issues: which trade apprenticeships are more affected by labour market conditions than others, and have government policies been successful in increasing the number of trade apprenticeships?

This paper presents a rudimentary econometric analysis of trade apprenticeships within each traditional area of apprentice training (metal and vehicle, electrical, building, printing, and food trades). These models are used to understand how apprentice numbers in the trades respond to changes in labour market conditions. The method of evaluating the impact of recent government policy changes is to replicate the counterfactual or no policy change scenario, and then compare this with the actual level of apprentice activity.

Key messages

- Metal and vehicle, electrical, and building apprenticeship numbers are particularly sensitive to labour market conditions.

- Printing apprenticeship numbers have declined due to structural change in the industry.

- Historical relationships between apprenticeship numbers and the labour market in the majority of industries have broken down over the last 10 years such that apprentice numbers are lower than would otherwise have been the case.

- Government initiatives have been unable to completely counteract this trend, with the possible exception of electrical and food apprenticeships.

- The removal of restrictions on age and allowing existing workers to take up apprenticeships has made a significant but modest contribution to the number of trade apprenticeships.

Note: This publication was produced through the National Vocational Education and Training Statistical Program; see page 80 for details.

Cross-cultural training and workplace performance

Robert Bean

The 2006 census found that around 30% of people residing in Australia were born overseas, a trend unlikely to be reversed in the short-term, given the Australian Government's recent decision to significantly boost the places in the permanent skilled migration program to help employers redress their skill shortages. In light of this, employers are likely to increasingly favour employees who can work and interact with people from different cultural backgrounds.

This study by Robert Bean investigated the contribution to workplace performance of cross-cultural training, a term used to describe training that develops a person's ability to interact effectively with individuals from different cultures and in different cultural settings. The study is based on a survey of 134 vocational education and training (VET) graduates. The practices and views of 38 training providers and 31 employers on the current and future provision of cross-cultural training are also described.

The report highlights the positive experiences of VET graduates with cross-cultural training, as well as employers' support for it. It lists the challenges for cross-cultural training as perceived by trainers, a specific challenge being to ensure that there is sufficient and appropriate cross-cultural training embedded in training packages, particularly those covering sales and service industries, industries with high customer contact.

Key messages

- The increasing cultural diversity of the Australian population and workforce means that the ability to work across cultures is becoming a necessity for many workers.

- While employers acknowledge the benefits of having a culturally competent workforce, they do not yet see cross-cultural competencies as part of a generic skill set. Moreover, the current level of cross-cultural training provision in vocational education and training courses appears to be quite low.

- Acquiring cultural competence is a lifelong process that can be assisted by the formalisation of guidelines and criteria for the provision of cross-cultural training and the establishment of uniform benchmarks for learner outcomes.

Complex not simple: The vocational education and training pathway from welfare to work

Kate Barnett, John Spoehr

The Welfare to Work initiative aims to move people from income support to paid work. While the primary emphasis of this policy has been on getting people into jobs, many of those targeted need to undertake training in order to get sustainable employment, thus posing a new challenge to vocational education and training (VET) providers.

The National Centre for Vocational Education Research (NCVER) commissioned two studies to investigate the role of VET in the Welfare to Work initiative: this report, *Complex not simple: The vocational education and training pathway from welfare to work* by Kate Barnett and John Spoehr, and one by John Guenther and colleagues called *The role of vocational education and training in welfare to work*. This report is the first of these two.

Key messages

The research found that most of those in the target groups—people with a disability, women returning to the workforce, long-term unemployed people—wanted to study. There were, however, barriers to their doing this, including:

- policies about eligibility to train and limitations on funding for longer courses

- difficulties in taking up training opportunities, for example, because of poor literacy and numeracy or other study skills, lack of transport and/or child care services

- inadequate understanding of the welfare and training systems among both Centrelink and VET staff

- the absence of sufficient student support services.

The study points to the importance of prevocational courses that address basic and remedial education needs, as well as offer personal support services. These courses provide entry into mainstream VET and, it is to be hoped, into jobs. The researchers concluded that, given its experience in promoting access and equity, the VET sector, particularly the technical and further education (TAFE) component, would be in a position to offer a pathway into work for the Welfare to Work target groups.

Course expectations and career management skills

Marnie L Kennedy, Ben Haines

This research is a little unusual for NCVER. While most NCVER research studies focus on issues of concern to policy or practice, this report essentially deals with a methodological issue. It considers whether the accuracy of students' course expectations is improved if the students have well-developed career management competencies.

The research consists of correlating the career management competence (as set out in the *Australian Blueprint for Career Development*) of 29 vocational education and training (VET) students with objective criteria—such as tasks required in a specific job, expected earnings, skills to be acquired from training— relating to the course they were undertaking. Each individual answered 12 questions to do with expectations of their future possibilities on completing the course, of the type of work likely to result from the course, and of the course itself. At the same time, each student was rated against the *Blueprint's* three areas of competence.

The results indicated that, on the whole, students had very realistic expectations of their course. There was, however, no clear relationship between the score and this overall level of realism.

Information gathered from the students during this project indicates that:

- young people develop the skills they need to manage their careers through learning that occurs in both formal and informal settings

- parents can play an important role in providing their children with relevant and realistic career information.

Readers interested in career development may also find the following report useful: Linda Rainey et al. 2008, *What choice? An evaluation of career development services for young people*, NCVER, Adelaide.

Course expectations and career management skills can be found on NCVER's website <http://www.ncver.edu.au/publications/2012.html>

Is VET vocational? The relevance of training to the occupations of vocational education and training graduates

Tom Karmel, Peter Mlotkowski, Tomi Awodeyi

Australia's vocational education and training (VET) system is characterised as being industry-led, with the content of courses based on the skills and competences specified by industry. VET courses have been packaged up into industry training packages developed by industry, with the aim of meeting the needs of an industry or a group of industries. This approach sits well with a view of VET as being about acquiring specific skills to be used in work. By contrast, we think of school and university education as having broader purposes, and often being ends in their own right. While university graduates tend to do well in the labour market, many have degrees which are generic in nature.

Is vocational education and training as narrowly vocational as the standard description seems to imply? *Is VET vocational? The relevance of training to the occupations of vocational education and training graduates* aims to throw some light on this question through a comparison of what VET graduates study and the jobs they get. To do this it uses data from the Student Outcomes Survey. For those graduates whose destination occupation differs from the intended occupation (obtained by assigning an occupation to each course), the study investigates the skill level of the destination occupation and the extent to which the graduates view their training as being relevant. The idea is to distinguish between training that is generic (in the sense of being relevant to a wide range of destination occupations) and training that is wasted. (Physicists driving taxis is the popular example.)

Key messages

- The match between what people study and the jobs they get is high for the technicians and trades group of occupations, but relatively low for most other courses.

- Most of the mismatch between intended and destination occupations reflects the generic aspect of vocational education and training. Graduates mostly report their training as relevant to their job, despite not ending up in the 'matched' occupation.

- There is some skills wastage, however, with graduates reporting that their training is not relevant to the occupation in which they find themselves. The two courses with the highest skills wastage are those for arts and media professionals and sports and personal service workers.

The study has three main implications. First, in thinking about the role of the VET system in addressing the needs of the labour market, it needs to be kept in mind that, with the exception of the trades, there is no neat match between courses and the occupations in which most people end up working. Second, those developing training packages need to be aware that many graduates will not work in their 'intended' occupation. Finally, potential students need to be realistic about the likely occupation that a particular course will lead to.

Note: This publication was produced through the National Vocational Education and Training Statistical Program; see page 80 for details.

Private returns to vocational education and training qualifications

Michael Long, Chandra Shah

Much attention has been given to thinking about how to respond to the current skills shortage in Australia. One response has been to encourage people to enrol in vocational education and training (VET). But why enrol in a VET course? An essential part of the story is the financial benefit from doing a course. This study provides estimates of the rates of return to students enrolling in VET courses.

An estimate of the rate of return from enrolling in a VET course considers the study as an investment by the student in his or her future income. It treats the costs of study as an investment and expresses future increases in income resulting from undertaking the course as a rate of return on that investment—akin to an interest rate. In other words, the higher the interest rate, the better the investment for the student.

The rate of return framework provides a very useful way of looking at the private benefits of various qualifications. However, it is important to understand how it is constructed because the structure plays an important role in determining the answers. Distinctive features of the model used in this paper include the following:

- The cost of education includes forgone income. This means that the rate of return is lower for full-time students than for part-time students because their forgone earnings are included as a cost. This values leisure as having no value, and doesn't include any personal satisfaction that might come from the 'full-time student experience'.

- Income is used rather than, as is more common, earnings. The advantage of this is that the calculations include the effects of qualifications in securing employment.

- Finally, the model excludes those with university qualifications, and so it cannot be used to compare the value of VET and university qualifications.

Key messages

- VET is a good investment for males undertaking diplomas or certificates III or IV and females undertaking diplomas, with rates generally exceeding 20% for those studying full-time.

- For males, the rates of return are similar for full-time students doing diplomas and those completing higher-level certificates. While incomes are higher for those undertaking diplomas, the period of study is longer.

- Rates of return increase greatly for part-time students because forgone earnings are lower.

- An increase in tuition fees would reduce rates of return, but they remain healthy even under high-fee scenarios.

This study provides valuable insights into the private returns from undertaking VET. However, many interesting questions remain, including whether these rates have changed in recent years, how they compare to the return from university level study and the exact nature of the interrelationship between the year left school and the level of VET qualifications.

Note: This publication was produced through the National Vocational Education and Training Research and Evaluation Program; see page 80 for details.

Private returns to vocational education and training qualifications can be found on NCVER's website <http://www.ncver.edu.au/publications/2011.html>

The role of vocational education and training in welfare to work

John Guenther, Ian Falk, Allan Arnott

The Welfare to Work initiative aims to move people from income support into paid work. While the primary emphasis of this policy has been on getting people into jobs, many of those targeted need to engage in training in order to get sustainable employment; this poses a new challenge to vocational education and training (VET) providers.

The National Centre for Vocational Education Research (NCVER) commissioned two studies to investigate the role of VET in the Welfare to Work initiative: one by Kate Barnett and John Spoehr called *Complex not simple: The vocational education and training pathway from welfare to work*, which can be found at <http://www.ncver.edu.au/publications/1987.html> and this report, *The role of vocational education and training in welfare to work* by John Guenther and colleagues. This report is based on 62 interviews with welfare clients, training providers, government agencies and enterprises, and will be of most interest to those who are directly dealing with the clients of the Welfare to Work programs.

The report focuses on what makes training programs effective for the target groups in the transition to employment and points out that there are many challenges to be faced—notably the personal circumstances of the clients and the constraints associated with contractual obligations and funding arrangements.

Key messages

Effective transitional programs must address the needs of the specific client groups. They must:

- develop employability skills
- involve considerable pastoral care from the training providers
- provide on-the-job experience and preferably a career pathway
- be flexible and allow for the personal constraints of the clients, for example, transport, child care and illness.

The role of vocational education and training in welfare to work can be found on NCVER's website <http://www.ncver.edu.au/publications/1986.html>

Second-chance vocational education and training

Tom Karmel, Davinia Woods

Key messages

The vocational education and training (VET) sector has a reputation for providing individuals with a 'second chance'. The purpose of this report is to critically examine this perception. Our approach is to define prospective second-chance students as early school leavers aged 24 years and below and adults aged 25 years and over who have not completed a non-school qualification. Due to the lack of longitudinal data, we can only *estimate* the role and impact of VET in providing individuals with a second chance in education.

The findings suggest that:

- The reputation of the VET sector as the 'second-chance' sector is fully justified.
  - The percentage of VET students who can be characterised as second chance is very substantial—second-chance students represented 41% of the VET student population in 2004.
  - The percentage of the eligible second-chance population who undertakes VET is also very substantial—around 50% of early school leavers and the vast majority of eligible adults over the age of 25 years participates in second-chance VET.

- Despite the fact that VET provides this opportunity to many prospective second-chance students, the percentage of second-chance students leaving the sector with a qualification is low. The percentage is particularly low when restricted to certificate III or higher VET qualifications.
  - Just over 10% of early school leavers complete a certificate III or higher VET qualification within four years of leaving school.
  - 10 to 30%[1] of adults eligible for a second chance in education will complete a certificate III or higher VET qualification (at least up to the age of 49 years).

[1] The estimate varies depending on the methodology undertaken.

Note: This publication was produced through the NCVER Core Research Program; see page 80 for details.

Second-chance vocational education and training can be found on NCVER's website <http://www.ncver.edu.au/publications/1831.html>

What choice? An evaluation of career development services for young people

Linda Rainey, Michele Simons, Val Pudney, Elvie Hughes

This study evaluates a selection of career development services available to young people in Australia. It examines the characteristics of services provided, including the provision of information about vocational education and training (VET) and assistance with career decision-making.

Key messages

- Career service providers in technical and further education (TAFE) institutes, universities and government agencies believe they are most effective in helping young people to explore, and make decisions about, their options for work and further learning.

- Career providers find that, while many young people are willing to consider vocational education and training, they often express a preference for university pathways.

- Only a small proportion of eligible TAFE and university students are accessing available career services. Developing an understanding about what motivates young people to use career development services is an important step in providing services to attract them.

- Young people like to manage their own careers. Easy-to-use, comprehensive computer-based resources, and guidance in using these services, could further support their career development. Career providers need to present services in a way that is likely to enhance their take-up by young people; they also need to help young people to make the best use of available services.

What choice? An evaluation of career development services for young people can be found on NCVER's website <http://www.ncver.edu.au/publications/1943.html>

Disability and learning outcomes: How much does the disability really matter?

Tom Karmel, Nhi Nguyen

In 2005, the National Centre for Vocational Education Research (NCVER) produced a statistical compendium examining vocational education and training (VET) students with a disability as a whole group; it also compared different disability groups, focusing on their participation levels, achievements and outcomes from VET in 2003 (Cavallaro et al. 2005).

The report found that, on the whole, educational achievements and outcomes from VET are relatively poor for students reporting a disability, but there is considerable variability between types of disability.

In addition, educational achievement prior to commencing VET was found to have some bearing on students' results in VET. Generally, students reporting a disability in VET have lower prior education and poorer outcomes from VET than all other VET students. This implies that the poor educational performance of students reporting a disability may be due to their educationally disadvantaged position rather than their disability.

This paper, *Disability and leaning outcomes: How much does the disability really matter?* by Tom Karmel and Nhi Nguyen, seeks to highlight the direct effect of the disability by controlling for the background characteristics (notably educational background, but also age, level of study and field of study) in a simple statistical model.

Key messages

- The study finds that with disabilities such as hearing/deaf, intellectual, acquired brain impairment and vision, the actual disability explains little, once we take into account other student characteristics such as age, sex, educational background and course studied.

- By contrast, both student characteristics and the disability itself directly impact on the low completion rates of those with a physical or mental illness or a medical condition.

Overall, the significant point to emerge is that it is not helpful to treat students with a disability as one group. The different disability groups have students with different background characteristics, and the direct effect of the disability on academic performance differs between groups.

Note: This publication was produced through the National Vocational Education and Training Statistical Program; see page 80 for details.

Disability and learning outcomes: How much does the disability really matter? can be found on NCVER's website <http://www.ncver.edu.au/publications/2017.html>

Participation in vocational education and training across Australia: A regional analysis

Anne Walstab, Stephen Lamb

There are wide variations in participation and take-up of vocational education and training (VET) across regions in Australia. Investigating the reasons for these differences was one of the tasks undertaken by a consortium of researchers from the National Institute of Labour Studies, Flinders University, and the Centre for Post-compulsory Education and Lifelong Learning, University of Melbourne, in work commissioned by the National Centre for Vocational Education Research.

Walstab and Lamb set out to identify the main drivers of and barriers to participation in regional Australia. Having mapped regional participation rates, they went on to identify 'exceptional' regions, those with unusually high or low rates of participation, and to draw conclusions about what drives regional differences in VET participation.

Key messages

- Economic factors have a strong influence on participation in VET. The composition of industry structure plays a major part. So too do labour market conditions. As unemployment rates rise, participation tends to fall.

- These explanations do not, however, suffice when it comes to participation in the exceptional regions identified in the study, pointing to the significant impact that local policies, community partnerships and other specific factors can have on training rates.

- The large variations across the regions of Australia in rates of VET participation exist at all qualification levels but more so for basic and diploma levels.

- VET participation is stronger in the rural areas of Australia, particularly for basic- and middle-level VET awards. The reverse is true for participation in diploma-level VET.

- Patterns of participation across regions vary by type of provider, funding and mode of delivery. Some regions with lower levels of participation in technical and further education (TAFE)-based VET have high levels of participation in VET delivered by private providers.

- Demographic factors are also important. This is noticeable at higher award levels, where participation is influenced by the social, cultural and educational backgrounds of the population.

This report has a companion piece written by Richard Teese and Anne Walstab, *Social area differences in vocational education and training participation*. For a synthesis of this consortium's entire program of work, see *A well-skilled future* by Sue Richardson and Richard Teese.

Note: This publication was produced through the National Vocational Education and Training Research and Evaluation Program; see page 80 for details.

A peripatetic research perspective on older persons and vocational education and training

Tom Karmel

This paper presents a series of stylised facts from the research literature on vocational education and training and older people. It includes the following topics: Education is front end loaded; VET is really important in providing older people a second chance; Increases in educational participation of older persons have been very modest; Education makes a large difference to workforce engagement of older people; Qualifications obtained later in life appear to pay off, at least in terms of workforce engagement; … but training is no panacea; Skills learnt on the job are very important; Attitudes of both employers and employees create barriers for training for older people.

Reluctant learners: Their identities and educational experiences

Ruth Wallace

One of the National Centre for Vocational Education Research's (NCVER) objectives is to build the research capacity of the vocational education and training (VET) sector. To this end, NCVER sponsored seven new researchers to attend NCVER's 2007 'No Frills' conference. One of these awards went to Ruth Wallace. This paper is based on her presentation at the conference.

Formal education and training can have a range of benefits for regional and remote areas, such as helping communities to meet their local skill needs. However, it is not always easy for those in regional and remote areas to undertake formal learning. In addition to the logistical obstacles faced by geographically isolated learners, it can also be the case that the requirements of formal education and training conflict with individuals' identities and compromise their community membership.

This paper explores this dilemma. The paper draws on interviews with 15 students in regional and rural areas of the Northern Territory, including participants from Indigenous backgrounds.

Key messages

- Students' identities and community membership—including the attitudes and experiences of their families and communities—contribute to their behaviour and beliefs about undertaking formal education and training. Understanding these influences is a key element in successfully engaging rural and regional learners in education.

- Students are likely to succeed at their studies when their families and communities support their education.

- Learners who successfully reconcile their studies with their identity and their community membership make use of a range of strategies. These include: accessing a supportive and recognised group in the local community; negotiating their study off campus; negotiating practical components in a known workplace, with local experts; and rehearsing ways to explain their study to their peers and community.

School-based apprenticeships and traineeships

Tom Karmel, Peter Mlotkowski

Vocational education and training (VET) has been seen to be an important element of school education for some time now. More recently, school-based apprentices and trainees have been given more prominence as an element of VET in Schools, partly as a response to skill shortages in a wide range of areas. The purpose of this short paper is to provide data on school-based apprentices and trainees to enable a judgement to be made about how this policy push is unfolding.

Key messages

- The number of school-based apprentices and trainees is still small compared with all young apprentices and trainees.

- The number of school-based apprentices and trainees is growing rapidly. Numbers vary considerably by state, with Queensland and Victoria leading the way.

- School-based apprenticeships and traineeships are concentrated in the retail and hospitality training packages and are more likely to be at certificates I and II level than at certificate III and above level.

- Completion rates for school-based apprentices and trainees are a little higher than for their non-school peers at the certificates I and II level, but lower for certificate III level. The lowest certificate III completion rates for the school-based apprentices and trainees are in the trades.

- Early attrition is low among school-based apprentices and trainees, suggesting that drop-out after completing school is relatively high.

Note: This publication was produced through the National Vocational Education and Training Statistical Program; see page 80 for details.

Skills development for a diverse older workforce

Fran Ferrier, Gerald Burke, Chris Selby Smith

Australia's population is ageing rapidly, a result of declining fertility rates and rising life expectancy. Older people in the workforce are becoming more common. We are also likely to see many individuals adjust their retirement plans and stay in the workforce for longer than they had once anticipated.

These changes to the age mix of the workforce will have significant implications for the renewal and replenishment of skills. Even more than is the case currently, those aged 45 years or more and their employers will have to pay attention to strategies for effective skills development.

This may not be straightforward. Older working-age Australians are a very diverse group: in the types and levels of skills and qualifications they hold; in their workforce experience, including occupations and industries in which they work; in their retirement aspirations; and in their willingness and confidence to participate in learning and applying new skills.

This study, *Skills development for a diverse older workforce*, is based on a review of what we presently know about effective skills development for older workers and presents seven new case studies of the delivery of training to a primarily older workforce.

Given that people aged 45–64 years currently make up about one-third of the workforce and one-fifth of vocational education and training (VET) students, it is likely that the case studies will be of particular interest to those directly involved in the training of older workers.

Key messages

- As long as good practices for the teaching and learning of adults are in place—those based on a learner-centred and inclusive approach—only small adjustments to training programs and activities will be required to meet the needs of older participants.

- The differences among older workers, however, mean that skills development designed to support and encourage their participation in the workforce should be targeted to the needs and circumstances of specific sub-groups. In particular, different learning preferences, motivations and expectations should be considered when planning the type of training to be provided and how it is to be delivered.

- Trainers, as well as employers, also need to take account of the barriers (including age discrimination) affecting some older workers.

- The provision of effective skills development for older workers needs to go hand-in-hand with flexible arrangements which encourage continued working, such as semi-retirement circumstances that enable older workers to combine employment with increased leisure.

Readers interested in this topic should also see *Older workers' perspectives on training and retention of older workers* by David Lundberg and Zaniah Marshallsay (NCVER 2007).

Social area differences in vocational education and training participation

Richard Teese, Anne Walstab

Responsiveness is a familiar refrain in the vocational education and training (VET) sector. Training providers are being called upon to adapt to emerging skills needs and to build greater flexibility into the system. How they do this depends on how they manage their multiple roles and diverse clientele.

In their study, Teese and Walstab examined population differences in that clientele and identified social, economic and cultural barriers some people face in finding employment. Their report and its companion, *Participation in vocational education and training across Australia: A regional analysis*, should help the VET sector to find ways to respond to these obstacles and to motivate individuals to take up training options and, where necessary, to reskill in order to find good jobs.

Key messages

- The roles of VET are population-related. That is, VET providers respond to people's various needs during the different stages of their participation in the workforce.

- The age pattern of participation suggests that the VET sector performs four major roles:
  - a platform-building role for young commencing workers
  - a promotions or skills enrichment role for established workers
  - a re-orientation role for older workers
  - a personal enrichment role for older workers or people not in the workforce.

- These roles are highlighted by the award pattern of participation for different age groups.
  - Basic and skilled VET (certificates I and II, and III respectively) dominate the activity of teenagers and young adults.
  - Skills enrichment, re-orientation and personal development become more prominent for established workers and older people.

- There is a need for greater equity in the system. VET activity rises as socioeconomic status falls. That said, people with lower socioeconomic status are not achieving the higher qualifications which reap the greater rewards from participation in VET.

- These disparities can often be traced back to the type of schooling people received, suggesting that schools have a significant role in shaping aspirations and preparing young people for post-compulsory education and employment.

This report is one of 12 produced by a consortium of the National Institute of Labour Studies, Flinders University, and the Centre for Post-compulsory Education and Lifelong Learning, University of Melbourne, looking into the relationship between the country's future skill needs and the VET system. For a synthesis of the consortium's entire program of work, see *A well-skilled future* by Sue Richardson and Richard Teese.

Note: This publication was produced through the National Vocational Education and Training Research and Evaluation Program; see page 80 for details.

Who's supporting us? TAFE staff perspectives on supporting students with mental illnesses

Cydde Miller, Nhi Nguyen

Key messages

This report examines the perceptions of technical and further education (TAFE) staff in relation to supporting students with mental illnesses.

- A major issue for TAFE institutes is responding to the needs of students who do not disclose a mental illness. Mental health promotion needs to address this lack of disclosure.

- Staff felt that there was a lack of clarity about the extent of their roles in supporting students with mental illnesses. Staff acknowledge their responsibility to provide duty of care but agree that their roles should not cross over to actual provision of personal support.

- Staff require appropriate skills and collegiate support to respond confidently to the diverse needs of students with mental illnesses. This includes more opportunities for discussion and debriefing sessions with experienced staff.

The vocational education and training (VET) sector should be concerned with education, not therapy. Staff felt that community health services see VET as a therapeutic option for their clients, rather than as education in its own right.

Vocational education and training and people with a disability: A review of the research

Tabatha Griffin, Lisa Nechvoglod

One of the priorities of the Australian Government's social inclusion agenda is employment for people living with a disability or mental illness. This year the government has been developing a National Mental Health and Disability Employment Strategy which, in part, will examine vocational education and training (VET) issues for people with a disability.

It is therefore timely to assess what we know and do not know about how people with a disability engage with the VET system. This paper summarises what recent research tells us about VET participation, education and employment outcomes, and the costs and benefits of VET for people with a disability. In doing so, it also highlights further questions and indicates where research efforts could be focused in order to help shape future directions in policy and practice.

Key messages

- Data show that over the last several years there has been an increase in the proportion of VET students reporting a disability. Whether this is a consequence of an increase in participation or disclosure of a disability is unclear.

- Educational achievement and employment outcomes are generally poorer for people with a disability compared with the general VET population, although this does vary considerably by disability type. Other factors, such as previous educational attainment, identifying with additional equity groups, or having more than one disability also affect outcomes for people with a disability.

- The costs and benefits of VET for people with a disability from the point of view of both individuals and the government are not fully understood. These need to be investigated further to enable returns on investment to be explored.

- Future research need not focus on what the barriers are for people with a disability undertaking VET, but should concentrate on how barriers are overcome to improve outcomes. Effort should also be put into the appropriate dissemination of key findings to ensure that those working in the sector can use them effectively.

Getting on [line] with it … surveying student experiences

Sarah Sutcliffe

One of NCVER's research objectives is to build the research capacity of the vocational education and training (VET) sector. To this end, NCVER sponsored seven new researchers to attend NCVER's 2007 'No Frills' conference. One of these awards went to Sarah Sutcliffe. This paper is based on her presentation at the conference.

Student experience surveys are an important tool for vocational education providers to measure their performance and meet quality and reporting demands. Surveying students online is a cost-effective way to collect students' feedback; however, using an online survey tool is not always a simple matter of moving from a mail-out survey to an online instrument. In particular, motivating students to engage with an online survey can be difficult, which can mean lower response rates.

This paper explores the issues which the Canberra Institute of Technology came across in their move from a paper-based student experience survey to an online survey.

Key messages

- The benefits of surveying students online include lower costs, ease of administration, fewer data-entry errors and quicker data processing; however, surveying online can also have drawbacks, such as lower response rates.

- Successfully engaging students is essential to achieving good response rates. This can be done through effective promotion of student surveys which can include monetary rewards or prizes, and emphasising the intrinsic rewards students can obtain from having a voice in opinion surveys.

- Teachers play an important role in encouraging students to complete student experience surveys.

What has been happening to vocational education and training diplomas?

Tom Karmel

As part of the Council of Australian Governments (COAG) work on skills, there has been a policy push to increase the number of people completing higher-level VET qualifications—diplomas and advanced diplomas. The foundation for this paper was a set of projections prepared by the Centre for the Economics of Education and Training (CEET) which pointed to a significant shortfall in people with diploma and advanced diploma-level qualifications in 2016. The paper outlines recent trends in the provision of these qualifications; overall there has been virtually no growth over the period 2003–07, with growth in some areas offset by declines in others. It also looks at how those with diplomas and advanced diplomas are faring in the labour market. The picture is rather mixed, suggesting that people with diplomas and advanced diplomas fare, on average, better than those with other vocational qualifications or no post-school qualifications, but face stiff competition from degree holders and others who have obtained skills through experience.

Creating place: Design education as vocational education and training

Damon Cartledge, Mark Watson

Design education leads to an extensive range of jobs in architecture, interior design, furniture design and textiles at both professional and paraprofessional levels. Vocational educational and training (VET) offers a considerable number of courses in the paraprofessional level of design, mostly at the certificate IV and diploma levels.

Damon Cartledge and Mark Watson's project set out to focus on two issues of design education within the VET sector. The first was how design education can encourage creativity and innovation within national training packages; the second was to determine how design principles, which are embodied within design education, can be applied to management training.

The methodology comprised a national online survey and a number of focus groups. In total, over 200 stakeholders in design education shared their perceptions with the researchers. Research by its very nature is full of uncertainties and will challenge hypotheses. In this case, the research questions were framed on the assumption that training packages had become an accepted part of design education in the VET sector. It became apparent, however, that training packages had remained an ongoing challenge with those surveyed, who were not therefore in a position to respond to the original research questions posed by the authors. The two issues of innovation and design in management training remain areas for future research.

Nevertheless, the research was not in vain. What emerges is that design education practitioners feel very strongly about the way design is taught. The view of the practitioners is that design education sits uncomfortably within a competency-based training framework, and that the time-honoured pedagogies of problem-based and studio-based approaches offer a better way to instil innovation and creativity.

This finding provides a challenge to those with the responsibility for developing training packages that incorporate design. Can training packages accommodate the aspirations of the design education practitioners? Or is it time to rethink the teaching and learning approach in this area?

Assessing and acknowledging learning through non-accredited community adult language, literacy and numeracy programs

Darryl Dymock, Stephen Billett

Beyond the obvious acquisition of the three 'R's'—reading, writing and arithmetic—many other benefits derive from learning. Increases in self-esteem and confidence have often been cited as consistent, if unanticipated, outcomes of learning and have been achieved even when there has been limited gain in the competency being learned. Further, such confidence-building can have a positive impact on how and what an individual learns. While the measurement of objective competencies acquired through learning is well developed, the measurement of the wider benefits of learning is still in its infancy.

This report by Darryl Dymock and Stephen Billett identifies the extent to which indicators might be developed for a range of learning outcomes in non-accredited community adult language, literacy and numeracy programs. It follows Dymock's earlier work, *Community adult language, literacy and numeracy provision in Australia* (NCVER 2007), which attempted to gauge the extent of provision of this type of training in Australia.

Key messages

- It is possible to assess the wider benefits of non-accredited adult language, literacy and numeracy learning. However, different types of assessment instruments, which cater for the diversity and complexity of learners' needs, motivations and outcomes, are necessary. Special attention must be paid to the language adopted in the instruments so that these can be easily used by tutors and their students.

- Both learners and tutors derive personal and educational outcomes by participating in the process of assessing and acknowledging learning outcomes.

- Tutors in this field, many of whom are volunteers, are in need of professional development to fully understand the purpose and language of the assessment instruments.

- The right approach to assessment can build the self-confidence of students, many of whom are not suited to formal education settings.

Note: This publication was produced through the National Adult Literacy and Numeracy Program; see page 80 for details.

Creating learning spaces for refugees: The role of multicultural organisations in Australia

Beatriz Miralles-Lombardo, Judith Miralles, Barry Golding

Upon arrival in Australia, refugees are directed to various organisations, including multicultural community organisations. Multicultural community organisations are well recognised for helping refugees become self-reliant; what is not fully recognised, however, is the contribution these organisations make to the development of refugees' learning. This study sought to examine the extent to which literacy and numeracy provision occurs in multicultural community organisations serving three particular refugee groups: those from Iraq, Bosnia-Herzegovina and Sudan.

Given their diverse experiences, backgrounds and reasons for fleeing their homelands, refugees in Australia clearly have a range of different needs. The authors highlight that multicultural community organisations work to meet these needs by creating networks and relationships with refugees. The nature of these organisations, and the informal learning environment they provide, can help refugees to learn skills needed for life in Australia as well as build networks with other non-government and government organisations.

Key messages

- Trust is the foremost factor to be established between multicultural community organisations and the refugees they seek to serve. Bilingual workers are integral to building trust and establishing networks with other groups beyond these community organisations.

- Successful learning programs grow out of refugees' needs and incorporate the outcomes necessary for successful settlement—improved English language proficiency, cultural competence and enhanced employability skills.

- By providing informal learning spaces where cultures and languages are respected, multicultural community organisations play a central role during the resettlement process in the creation of social cohesion between refugees and their families and the wider community.

This report will be of interest to those providing services to refugees and migrants, such as multicultural community organisations, and to policy-makers dealing with refugees. It will also be relevant to providers of Adult Migrant English Programs and others involved in teaching English, literacy and numeracy or offering vocational education and training to refugees and migrants.

Readers interested in teaching and learning for refugee or migrant learners may also want to review:

- *Classroom management strategies to address the needs of Sudanese refugee learners*, by Ursula Burgoyne and Oksana Hull (NCVER, Adelaide 2007).

Creating learning spaces for refugees: The role of multicultural organisations in Australia can be found on NCVER's website <http://www.ncver.edu.au/publications/1964.html>

VET goes virtual: Can web conferencing be an effective component of teaching and learning in the vocational education and training sector?

Susan Todhunter, Toni-Maree Pettigrew

One of the research objectives of the National Centre for Vocational Education Research (NCVER) is to build the research capacity of the vocational education and training (VET) sector. To this end, NCVER made a number of new researcher awards to support the attendance of new researchers at NCVER's 2007 'No Frills' conference. One of these awards went to Toni-Maree Pettigrew, and this paper, of which she is a co-author, is based on her presentation at the conference.

New technology has revolutionised the delivery of distance education in recent years, as well as changed the educational experience of on-campus students. However, the educational benefits of personal interaction remain undiminished, and now the challenge is to harness technology to promote that interaction. One such technology is web conferencing, the subject of this paper. It chronicles the perceptions, expectations and practical experiences of 12 VET teachers and approximately 40 students across a range of vocational training areas in the use of web conferencing for learning and teaching.

Key messages

- The motivation for web conferencing is to reduce costs (especially travel) and to enrich the educational experience of students.

- The experience was generally viewed very positively. Collaboration and interactivity enabled a greater sense of connection to the learning experience for both students and teachers. The technology promoted flexible options for group learning and provided an ability to return to recorded sessions at a later date.

- Students are unforgiving of technical glitches and they require appropriate broadband and technical equipment such as headsets.

- Opportunities for business development with industry were also apparent.

Investigating the impact of intensive reading pedagogy in adult literacy

Helen de Silva Joyce, Susan Hood, David Rose

Reading is a crucial skill for participation in adult life. However, teaching those who cannot read or who have very poor reading skills is a complex process. This is particularly true for adults from a non-English speaking background, since classes often consist of learners with different reading abilities, sporadic attendance patterns and emotional impediments, such as a fear of failure or ridicule.

In this study, the authors introduced six adult literacy tutors to a particular reading methodology, known as Reading-to-Learn, and examined how this approach could help adult learners from non-English speaking backgrounds become efficient and independent readers. The Reading-to-Learn methodology is a commercial product developed by Dr David Rose and relies on very careful attention to the relationships between words in a text and is primarily based on his work in the schools sector.

A further focus of the study was how well adult literacy practitioners can implement the Reading-to-Learn methodology in their classrooms. While this particular methodology has been used successfully in other educational settings, such as primary and secondary schools and universities, this is one of the first studies to test its usefulness for adult learners from non-English speaking backgrounds.

Key messages

- While this report is based on a very small sample, it suggests that the teaching strategies that comprise the Reading-to-Learn pedagogy are effective in helping adults from non-English speaking backgrounds to improve their reading and writing skills.

- The study also shows that use of this pedagogy can increase teachers' knowledge about language and reading processes.

- Using this method demands careful preparation of classes and requires teachers to 'unlearn' some common practices that amount more to testing than teaching.

- The successful implementation of the Reading-to-Learn approach in the adult literacy sector requires intensive professional development and additional financial resources.

- While the teaching resources associated with the Reading-to-Learn pedagogy are commercial products, a Good Practice Guide has been developed to complement this report and can be downloaded at no charge from <http://www.ncver.edu.au/publications/2065.html>.

VET system

Vocational education and training providers in competitive training markets

Fran Ferrier, Tom Dumbrell, Gerald Burke

The training industry in Australia has been through a series of regulatory changes since the early 1990s, with the aim of making it more market-oriented. There are now several thousand private providers, typically small and serving niche markets, competing against one another and against about another 60 technical and further education (TAFE) institutes. They compete for the publicly funded training dollar, which is contestable to varying degrees across states and territories, and also for the business of employers and individuals who are willing to purchase training on demand.

Ferrier, Dumbrell and Burke have produced a report that explores how both public and private providers do business in today's market. They focus on three particular aspects of operating in a competitive environment: income sources and mixes; thin markets for vocational education and training (VET); and research and development activity. In an overall sense it is clear that competition has provided a tremendous spur to how providers operate, encouraging adaptability and creativity, and often collaboration. The study offers a number of interesting lessons for regulators.

Key messages

- Public and private providers are keenly interested in establishing and maintaining their financial security. They recognise that this means seeking out alternative sources of funds and reducing their reliance on one stream of income, especially when this comes from government sources of funding.

- VET providers earn income through diverse arrangements, including direct fee-for-service training, ancillary trading and by leveraging government funds to increase private investment. The variety of these arrangements is not well captured in current VET data collections.

- The extent of thin markets in VET may be overstated and sometimes used as a device to limit competition. Public and private providers argue that it is more costly to deliver training in thin markets.

- The number of providers who are engaged in research and development—beyond market research and innovation in teaching and learning—is very small. Those who are engaged report benefits, including in reputation, funding, staff development and better training.

Building organisational capability the private provider way

Hugh Guthrie

This paper, presented at the 2008 annual conference of The Australian Council of Independent Vocational Colleges, summarises what we know about building capability among the VET sector's private providers.

Its insights are based on a comprehensive program of research, *Supporting VET providers in building capability for the future*, conducted from 2005 to the end of 2007. The research explored factors which enhance or inhibit vocational education and training (VET) provider capability.

Private providers are numerous, usually small, and diverse. Individually, they aim to create unique goods and services which provide features or benefits of superior value for their customers, especially in niche markets. They are the 'boutique stores' of the VET sector and are, collectively, significant providers of vocational education and training.

Key messages

- To remain successful, private providers need strong and effective partnerships with their clients. They also need to build partnerships with other organisations and external people who have expertise which can complement and add value to their business, and with whom they can build a sustainable and productive relationship.

- Their capability relies on developing and maintaining a stable and uniform organisational culture. This requires effective leadership, good recruitment and induction processes, and a work culture which makes use of other peoples' skills and knowledge, and provides a rewarding working experience likely to attract new employees.

- Their human resource management practices are relatively informal and flexible. This flexibility bestows a real advantage over public providers. Nevertheless, private providers are very vulnerable when they lose key staff or make poor recruitment decisions.

- When they grow, they risk changing the culture which has made them successful. They also risk losing the flexibility their informal and flexible human resource management processes have given them. Growth may require the introduction of more formalised processes, but these must retain as much flexibility as possible.

The research program on building VET provider capability contains many useful insights for private providers. However, those of particular relevance are Smith and Hawke (2008) on human resource management practices, Hawke (2008) on workforce development, Callan et al. (2007) on leadership and Clayton et al. (2008) on VET provider cultures and structures.

Human resource management in Australian registered training organisations

Andrew Smith, Geof Hawke

The vocational education and training (VET) sector has an ageing and casualised workforce. Technical and further education (TAFE) institutes and private providers face a further challenge, in that both are attempting to meet client demands for improved flexibility and responsiveness in their services in an increasingly contestable marketplace.

Being able to recruit, reward and retain the right staff with the right skills is particularly important. So is having staff who enjoy what they do and who find their work and workplace rewarding. A high-quality, well-integrated and strategically focused human resource management system is key to organisational success and improved capability.

Nevertheless, private and public providers operate in different environments. In part this is a factor of size, but it is also affected by the relative degree of regulatory control.

Key messages

For TAFE institutes

- Human resource management is not strategic in TAFE institutes. TAFE institutes need to bring human resource management 'in from the cold' and give human resource managers a place in the most senior executive forums of the organisation.

- Human resource management is a well-established function in TAFE institutes, but it operates within the quite tight constraints imposed by state government human resource management policies. Governments need to relax their grip on human resource policies and procedures.

For private registered training organisations

- Human resource management in private registered training organisations is informal. While this gives private registered training organisations a high degree of flexibility, most of them will have to develop more effective human resource management policies and practices to ensure their successful future growth.

- With the rapid growth in their businesses, private registered training organisations face the challenge of formalising human resource management, but at the same time they need to find ways to avoid excessive bureaucratisation of this function.

Readers interested in this research should also refer to other research from the consortium on building VET provider capability, in particular the work undertaken by Callan and his colleagues, *Approaches for sustaining and building management and leadership capability in vocational education and training providers*, that of Clayton and her colleagues, *Study in difference: Structures and cultures in Australian registered training organisations*, and Hawke, *Making decisions about workforce development in registered training organisations*.

Human resource management in Australian registered training organisations can be found on NCVER's website <http://www.ncver.edu.au/publications/2041.html>

Impact of TAFE inclusiveness strategies

Veronica Volkoff, Kira Clarke, Anne Walstab

Given current patterns of employment and demographic projections, the aggregate labour force participation rate is set to decline in coming years. A priority for research in the area of vocational education and training (VET), therefore, is to examine how VET can support greater participation in the workforce, especially for groups whose participation is relatively low; for example, Indigenous Australians, people with a disability, refugees, young people 'at risk' and prime-age and older men and women with low educational attainment and literacy levels.

This report examines the nature and impact of the inclusiveness strategies implemented by technical and further education (TAFE) institutes in Australia. It is part of a larger suite of research undertaken by the National Institute of Labour Studies, Flinders University, and the Centre for Post-compulsory Education and Lifelong Learning, University of Melbourne.

Key messages

- Adopting effective inclusiveness practices can occur within both strongly market-driven and community-based models. These do, however, call for collaboration and expanding relationships with community stakeholders to meet the increasing and more complex needs of disadvantaged groups.

- Poor literacy and numeracy remain a significant barrier to accessing and completing training.

- It is important that TAFE institutes with high proportions of disadvantaged learners engage these groups in training that provides skills required by industry at sufficiently high levels to lead to sustainable employment.

- These learners also need a range of support mechanisms beyond the classroom to ensure successful study and employment outcomes. Over a third of TAFE institutes are yet to focus on ways to help their disadvantaged groups get a job.

- Strong institute leadership and enthusiasm for the inclusiveness agenda are crucial. If not embraced by mainstream staff, this agenda is at risk of being marginalised.

For a synthesis of the consortium's entire program of work, see *A well-skilled future* by Sue Richardson and Richard Teese.

Impact of TAFE inclusiveness strategies can be found on NCVER's website <http://www.ncver.edu.au/publications/2002.html>

In training we trust: Communicating regional training need and demand to vocational education and training providers

Peter Rushbrook, Richard Pickersgill

The industry-led nature of the Australian vocational education and training (VET) system requires it to be responsive to employers' immediate and emerging skill needs. To be attuned to these needs, VET providers must be able to communicate effectively with industry and their communities and to gather market intelligence from available statistics. They must also be able to tap into sources of local knowledge.

This report examines the ways in which VET providers gather intelligence about training needs in their regions. The study examines the methods of communication between VET providers, industry and communities. Formal communication methods include client partnerships and advice from industries bodies, while informal methods include friendships and networks between employers, communities and VET providers.

Using an in-depth case study of the Riverina Region, the research shows that, while formal methods of communicating training needs are important, local networks can be just as useful.

Key messages

- Regular consultation between VET providers and both large and small enterprises is likely to improve information transfer between them.

- VET providers make limited use of available statistics on local training demand. Making better use of these data could help providers to build profiles of program demand.

- Formal partnerships with relevant organisations, such as chambers of commerce and regional development boards, can provide effective forums for discussing course demand and supply issues.

- Informal relationships between VET providers play an important role in the creation and supply of VET programs.

Organisational planning and performance integration in a TAFE context

Denise Bell

One of NCVER's research objectives is to build the research capacity of the vocational education and training (VET) sector. To this end, NCVER sponsored seven new researchers to attend NCVER's 2007 'No Frills' conference. One of these awards went to Denise Bell. This paper is based on her presentation at the conference.

Finding productive ways to manage change is a challenge for all organisations. *Organisational planning and performance integration in a TAFE context* by Denise Bell details a change management strategy developed to assist two technical and further education (TAFE) institutes. It looks particularly at addressing and improving each institute's planning culture.

The researcher worked with teams in both institutes to develop strategies for effectively implementing a planning framework. Her report examines the principles that underpin the development of a culture of planning in TAFE.

Key messages

- There are three key phases to developing and changing organisational practices. These phases are: planning, implementation, and continuous improvement.

- Sound planning can effectively direct, guide and engage staff to assist an organisation in developing its change management processes. Plans can also assist with the management and implementation of strategies to continuously improve organisational practices.

- Converting the organisational plan into actions for implementation is critical for change to take place.

- A high level of staff involvement is needed when leading organisational change, and teamwork is a key element in change strategies. Staff members play a key role in finding solutions to problems and also testing and embedding these solutions.

A study in difference: Structures and cultures in Australian registered training organisations

Berwyn Clayton, Thea Fisher, Roger Harris, Andrea Bateman, Mike Brown

This report presents the findings of a study examining organisational culture and structure in ten Australian registered training organisations and is part of a program of research examining the factors which affect and help build the capability of vocational education and training (VET) providers.

This study found that public providers had initiated extensive and often rapid change in response to external pressures to be more competitive and client-focused. For some, the amount and rapid pace of change had placed considerable strain on their organisations. For smaller private registered training organisations, on the other hand, change tended to be simpler and more incremental.

Key messages

- Building organisational capability relies on the effective alignment of key elements within each registered training organisation. These elements include a clear vision and strategy, effective leadership and management, empowered staff and a workplace culture that encourages collaboration and networking.

- There is general acceptance within registered training organisations that both structural and cultural changes are positive and will be ongoing. However, there is evidence of change fatigue and a desire for a period of structural stability.

- Policy-makers need to carefully assess the potential impact of policies and regulatory arrangements on the sector's providers to ensure that these do not stifle the ability of providers to respond to their clients' needs.

- A lack of autonomy, administrative rather than strategic approaches. and a silo mentality constrain organisational agility, which is not evident in public registered training organisations.

Readers interested in other components of the research program on building VET provider capability, of which this report is part, should visit <http://www.ncver.edu.au>.

The Tasmanian Polytechnic: Some thoughts from a research perspective

Tom Karmel

The latter years of secondary schooling have received considerable attention from governments in recent years. Questions have been asked on how schools need to change so that all young people are provided with a solid foundation for transition to further study or the labour market. Developments such as VET in Schools and school-based apprenticeships and traineeships have been targeted at those students who may not be headed on an academic pathway.

The most radical innovation in the area has occurred in Tasmania. The structure of Year 11 and 12, and vocational education and training to both young people and adults, have been fundamentally re-engineered into:

- the Tasmanian Academy, catering for school students on track to university
- the Tasmanian Polytechnic, focusing on practical learning for Year 11 and Year 12 students and adults
- Training Tasmania, catering for the training needs of employers.

As part of the implementation of this model, the Tasmanian Department of Education and TAFE Tasmania conducted a two-day conference on the Tasmanian Polytechnic. At this, I presented some thoughts on the concept of the Tasmanian Polytechnic, drawing on a range of research mostly undertaken by the National Centre for Vocational Education Research (NCVER).

The presentation considers a number of 'goals' that are clearly relevant to judging the success of the polytechnic: Year 12 retention (or its equivalent); the completion of Australian Qualifications Framework (AQF) qualifications; university entrance; transition to the workforce; and the provision of opportunities for 'second chancers'. It then makes a number of observations on relevant issues, including that certificate I and II qualifications are considerably less valuable than higher level qualifications, that VET that has been delivered in schools is rather different than that delivered in the VET mainstream, that VET has a large degree of generic education in it, and that apprenticeships and traineeships outside the school setting are very important for young people.

All speakers at the conference were invited to pose three questions for discussion. My three questions are:

- How do you ensure that 'people are challenged to do their best'?
- How do you ensure that the polytechnic offers an alternative that does not cut off pathways?
- How do you integrate 'school VET' with 'industry VET'?

Regardless of these, however, the real measure of the polytechnic model's success will be the extent to which it equips Tasmanians with skills they need for a modern economy. And while generalisations are always dangerous, the possession of at least a certificate III or a diploma is a good benchmark to aspire to.

Note: This publication was produced through the NCVER Core Research Program; see page 80 for details.

Visions and options: A report on five forums introducing the research consortium on building vocational education and training provider capability

Berwyn Clayton, Pauline Robinson

This paper presents the outcomes of five state-based forums conducted to introduce the consortium research program investigating building vocational education and training (VET) provider capability. Despite being first published on the consortium's website in 2005, it presents visions and options that remain current today. This is hardly surprising as the forum participants were asked to consider how registered training organisations might position themselves to meet the future demands of their various clients.

Key messages

- Changes in the sector have offered new opportunities for improving client focus and responding to both community and industry needs. Nevertheless, the ongoing changes in the sector have caused turbulence. Many of those providers and staff who are trying to be more flexible feel themselves constrained by the operational environment.

- New structures and ways of working need to be fostered, including enhancing industry connections, having registered training organisations collaborate rather than compete, and increasing flexibility both at the whole-of-organisation and work-team levels. Collaboration needs to be encouraged, despite the push towards increased contestability of funding.

- A more strategic approach is needed to VET workforce planning. This includes recruiting staff with relevant skills and attributes, maintaining and building the skills of staff, and finding better ways to make registered training organisations employers of choice.

Readers interested in other components of this research program on building VET provider capability should visit <http://www.ncver.edu.au/workinprogress/projects/10345.html>, where all the consortium's research activities have been consolidated. The overview of the research findings: *Supporting vocational education and training providers in building capability for the future: Research overview* by Roger Harris, Berwyn Clayton and Clive Chappell <http://www.ncver.edu.au/publications/1827.html> is of particular relevance.

Measuring student satisfaction with vocational education and training services … and getting it right!

John Ward

One of the objectives of the National Centre for Vocational Education Research (NCVER) is to build the research capacity of the vocational education and training (VET) sector. To this end, NCVER sponsored seven new researchers to attend NCVER's 2007 'No Frills' conference. One of these awards went to John Ward. This paper is based on his presentation at the conference.

Registered training organisations are currently required to collect and report information about learner satisfaction as part of their compliance with the Australian Quality Training Framework (AQTF). However, this information can also provide benefits to training providers themselves by helping them identify areas where they can improve their services and measure how well they are meeting their students' needs.

Measuring student satisfaction with VET services … and getting it right! examines ways of accurately measuring student satisfaction with VET. The paper highlights the importance of using good-quality survey instruments to collect data about student satisfaction. The author notes that, currently, the quality of this information tends to vary across the VET sector. The paper discusses the challenges involved in collecting good-quality student satisfaction data and describes a range of methodological issues that relate to measuring student satisfaction. A structural equation model is used to demonstrate a possible means of designing and collecting quality survey data.

The key point in this paper—that registered training organisations need a good-quality survey tool to improve the validity of learner satisfaction surveys across the VET sector—has been borne out by recent developments in the VET sector. A national survey instrument is currently being developed by the Australian Council for Educational Research to facilitate the collection of data for learner satisfaction by registered training organisations and, from June 2008, all registered training organisations will be required to use this survey to measure and report their students' satisfaction with their training.

Key messages

- Consistent and good-quality survey tools are essential for collecting reliable data about learner satisfaction.

- The majority of registered training organisations tend to measure levels of student satisfaction with their services; however, the definitions of learner satisfaction used by training organisations are not uniform and the elements of satisfaction they measure can vary.

- Greater uniformity in the fundamentals of survey design would assist in comparative analysis of registered training organisation performance.

- Improved learner satisfaction tools will provide information that registered training organisations can use to guide decisions aimed to improve the quality of their services.

Note: This publication was produced through the National Vocational Education and Training Research and Evaluation Program; see page 80 for details.

Investigating learning through work: The development of the *Provider Learning Environment Scale*

Clive Chappell, Geof Hawke

There has, perhaps, been too great an emphasis on formalised approaches to professional and workforce development in the vocational education and training (VET) sector. While formal programs like Reframing the Future are important, it is also time to give greater consideration to how to more effectively embed learning into the routine work of VET providers. If nothing else, more effective workplace learning will help them to achieve a competitive advantage through the people they employ.

This research, which is part of the wider research program examining ways to build VET provider capability, used a literature review (see the support documents) to explore the characteristics of organisations which have established effective workplace learning processes.

This information helped the researchers to develop and trial an instrument—the Provider Learning Environment Scale. The scale can be used by training providers to determine whether they have a working environment that encourages learning; it can also help them to consider how to create or improve that environment. It contains two domains—'organisational development' and 'job complexity'—and is supported by a user's guide (see the support documents).

The scale needs a sample size of 50 or more to get sufficiently robust data. However, a 'facts sheet' (see the support documents) provides a series of questions to help smaller providers and small organisational units within larger ones to assess the effectiveness of their learning through their work.

Those interested in other projects within the wider program on building VET provider capability should visit <http://www.ncver.edu.au>.

Making decisions about workforce development in registered training organisations

Geof Hawke

Building organisational capability relies on effective workforce development. This study examines the processes that registered training organisations use to make decisions about workforce development and also looks at how well these align to the personal decisions staff make about their own development.

The important drivers of workforce development are maintaining vocational currency and building the skills of the organisation's workforce to enhance teaching quality and the level of service to the registered training organisation's clients. It is also a way of building staff morale.

Key messages

- Large public providers, in some cases, see themselves as overly constrained by their training authorities.

- In addition, the top-down approach to workforce development adopted by the large registered training organisations can lead to local practices that are distinctly different from their strategic or operational intentions. Communication failures occur and, as a consequence, well-intentioned strategies are not implemented with fidelity.

- Managers and staff in private providers have a more consistent vision of their mission and this is reflected in their approaches to workforce development, such that organisational and personal development needs are generally in harmony.

- Most registered training organisations take a comprehensive approach to the development of their workforces. However, the effort is focused on teaching staff and managers and rarely addresses the needs of support staff, despite their often key role in assuring client satisfaction.

- For many staff, the terms 'staff training' and 'staff development' have unfortunately become too closely identified with performance management, through which poorly performing staff are assigned remedial training.

Readers interested in this topic should also read *Human resource management in Australian registered training organisations* (2008) by Andy Smith and Geof Hawke. Other components of the research program on building VET provider capability are available at <http://www.ncver.edu.au>.

Note: This publication was produced through the National Vocational Education and Training Research and Evaluation Program; see page 80 for details.

Making decisions about workforce development in registered training organisations can be found on NCVER's website <http://www.ncver.edu.au/publications/2049.html>

Making research matter

Francesca Beddie

This paper considers the role of evidence in public policy and how research can contribute to better policies and innovations in practice. It formed the basis of a keynote address given by the author at the inaugural Vocational Training and Education Research and Networking Conference, hosted by the Regional Centre for Vocational and Technical Education and Training of the Southeast Asian Ministers of Education Organisation in Bali in July 2008.

Making research matter argues that the right institutional and cultural settings need to be in place before the research can play its proper role in policy-making.

Key messages

- The vast growth in the volume and access to information in the twenty-first century presents opportunities to applied research organisations. They can assume the role of knowledge-brokers—the people who sift through the vast, confusing mass of information, and help others, politicians and citizens alike, to make sense of it.

- In addition to the typical skills researchers bring to their craft, those aiming to influence policy must develop a good understanding of the context in which their work may be used, especially political awareness. These attributes must, however, be balanced against rigorous and independent research.

- Evaluations have a place in applied research programs. To be effective in informing policy and practice, they need to be frank about failures as well as successes. This requires a greater tolerance of risk than prevails in Australian policy and research circles.

- Clearly articulated research findings, which are disseminated in a timely fashion, will also increase the impact of research efforts and, in turn, help to establish the parameters in which research is embraced as a policy tool.

Making research matter
can be found on NCVER's website
<http://www.ncver.edu.au/publications/2046.html>

The double helix of vocational education and training and regional development

Peter Kearns, Kaye Bowman, Steve Garlick

Australia has a mix of metropolitan, outer-metropolitan, rural and remote regions. In the recent past, economic growth has been biased towards knowledge-intensive industries and occupations, which take place mainly in metropolitan areas. While some non-metropolitan parts of Australia are doing very well, many rural and remote regions are in decline or are stagnating.

We know that human resources will be one of the most important factors in encouraging regional development. We also know that vocational education and training (VET) institutions have a significant presence in the regions and are usually integrated with the local economy. In order to find out more about the role VET can play in regional development, the National Centre for Vocational Education Research (NCVER) commissioned a suite of research.

This study, *The double helix of vocational education and training and regional development*, is part of that suite. It looked at five regions across Australia to assess how well VET is meeting the skills needs of those regions, such that these communities achieve sustainable development.

Key messages

- To enable communities and regions to be strengthened through learning and education, VET needs to become integrated with regional development in all key dimensions—economic, social, cultural and environmental.

- The VET role should not be seen in terms of matching VET supply to a given demand. Rather it needs to respond to a complex set of local needs and relationships, as well as to national and state policy settings.

- VET organisations require strategies which look outwards and engage with the local community and other agencies.

- To support sustainable regional development VET organisations need to move from bilateral partnerships towards arrangements that aspire to whole-of-region development.

Note: This publication was produced through the National Vocational Education and Training Research and Evaluation Program; see page 80 for details.

Examining learning partnerships in northern Australia

John Guenther, Ian Falk, Allan Arnott, Dorothy Lucardie, Helen Spiers

Partnerships between formal and informal training providers are often concerned with addressing skills shortages and local labour market needs. For this reason, the focus of partnerships is usually on skills acquisition and employment. However, forming partnerships can also result in other socioeconomic benefits that may be incidental, but are also valuable. These merit greater attention.

This report investigates the characteristics of partnerships between formal and informal training providers and how they can be focused to improve the socioeconomic wellbeing of communities and individuals. Interviews with key stakeholder groups at three northern Australian regional sites were used to gain an insight into the characteristics of successful partnerships. While education and employment outcomes still rated heavily, other identified outcomes were related to health, access to and use of resources, social activities, and family and community life.

The three locations investigated are diverse in terms of their economic bases and demographic characteristics; however, the authors found successful partnerships had common traits. These commonalities suggest that the findings of this report will be valid beyond the northern Australian case studies.

This report will be relevant to practitioners and policy-makers wanting to better understand the intersections between informal learning and training and the contribution that learning partnerships can make to strengthening communities.

Key messages

- Providers of formal and informal training do not 'naturally' come together to form partnerships. Rather, industry, community and government stakeholders instigate these partnerships for specific purposes.

- Employment-related outcomes are usually the primary goal of partnerships; however, they can also deliver other socioeconomic benefits. These include education and learning, health, social, leisure and financial outcomes. These additional benefits deserve the attention of funding bodies.

- Productive partnerships between training providers are realised when: the training supports the goals of industry, communities and government stakeholders; there is trust between partners; and there is a combination of formal, non-formal and informal learning offered.

Note: This publication was produced through the National Vocational Education and Training Research and Evaluation Program; see page 80 for details.

Examining learning partnerships in northern Australia can be found on NCVER's website <http://www.ncver.edu.au/publications/1972.html>

Sustaining effective social partnerships

Terri Seddon, Stephen Billett, Allie Clemans, Carolyn Ovens, Kathleen Fennessy, Kathleen Ferguson

Social partnerships are good tools for addressing issues which are too difficult for any single agency to tackle. Such partnerships—formed when people and agencies come together—are particularly useful in ensuring that a community has access to second-chance learning and to skills development that supports local industry.

This report, *Sustaining effective social partnerships*, builds on an earlier project that identified key principles and practices underpinning the development and maintenance of social partnership (see Stephen Billet, Allie Clemans and Terri Seddon 2005, *Forming, developing and sustaining social partnerships*, NCVER). It used four case studies to see how these principles and practices operate and trialled the self-evaluation tool developed in the first phase of the project.

Key messages

- Forming and sustaining effective social partnerships depends upon five principles: having shared purposes and goals; having strong and well defined leadership; establishing trust and trustworthiness; maintaining good relationships between partners; developing the capacity for partnership work; having inclusive governance practices.

- The success of transposing these principles into practice is influenced by the size and complexity of the partnerships. If they become unwieldy, then the partnership can crack.

- By using the self-assessment tool developed out of this research, those involved in a partnership can reflect on the health of the partnership. The tool could also prove useful for evaluation.

Future skill needs: Projections and employers' views

Diannah Lowry, Simon Molloy, Samuel McGlennon

To assist the vocational education and training (VET) sector respond to changes in the skills required in the Australian workforce, the National Centre for Vocational Education Research (NCVER) commissioned a program of research from the National Institute of Labour Studies, Flinders University, and the Centre for Post-compulsory Education and Lifelong Learning, University of Melbourne.

This report examines one of the central questions in this research area: how can the VET sector adapt to the fluid environment of the workplace when the dynamic nature of the labour market makes it impossible to predict with any certainty future skills needs?

In tackling this question, the authors had to take into account the growing complexity of the skills being demanded of workers. They did this by adopting the notion of cognitive skills (for example, compiling, analysing, coordinating), interactive skills (for example, serving, supervising, mentoring) and motor skills (for example, handling, driving, precision working), rather than using indirect measures (or proxies) of skill such as qualification or occupation. They concentrated their research on those industries expected to have the main employment growth to 2011: property and business services; health and community services; retail; construction; accommodation, cafés and restaurants.

Key messages

- Proxies for skill such as 'qualifications' and 'earnings' do not always capture the actual skill requirements of jobs because many people with a qualification do not use that qualification directly in their work and others without formal qualifications have the skills to do their job.

- The demand for interactive and cognitive skills is projected to grow, whereas the demand for motor skills is likely to fall. Employers interviewed for this study considered interactive skills to be the key skills required over the next decade.

- A process of 'skill deepening' is occurring as increasing job complexity requires workers to move up the interactive and cognitive skill hierarchies.

- To accommodate the demand for interactive and cognitive skills, training packages and curriculum design need to incorporate consideration of worker functions contained within the interactive and cognitive skill sets.

For a synthesis of the consortium's entire program of work, see *A well-skilled future* by Sue Richardson and Richard Teese.

Future skill needs: Projections and employers' views can be found on NCVER's website <http://www.ncver.edu.au/publications/2004.html>

Matching supply of and demand for skills: International perspectives

Jack Keating

Skills for the future, changing employment patterns and their intersection with the vocational education and training (VET) sector was the broad research area investigated by a consortium of researchers from the National Institute of Labour Studies, Flinders University, and the Centre for Post-compulsory Education and Lifelong Learning, University of Melbourne. Included in the suite was an investigation by Jack Keating into what some other countries—Singapore, China, the United Kingdom, Norway and Germany—are doing to match the supply of skills with current and projected skill needs.

Keating's investigation found that Australia's vocational education and training system is held in high regard, with many elements copied by other countries. And while comparisons are difficult to make because of the strong influence of historical, cultural and political contexts on national training systems, getting an international perspective can help in considering how to tackle weaknesses in national systems, including Australia's.

Key messages

- Most countries recognise that investments in:
    - high-level skills are an effective contribution to productivity
    - low-level skills reduce social inequities
    - intermediate-level skills address unemployment
    - school-level VET means lowest opportunity costs.

- The key variable in national training systems and the associated mechanisms for the planning of training is the degree of autonomy of civil society, in particular industry from government.

- Most Organisation for Economic Cooperation and Development (OECD) countries have major issues regarding the ageing of the workforce, making adult training and lifelong learning key policy areas. This, and regional economic patterns, have also led to the encouragement of labour mobility and an increased demand for migrant workers.

- Australian secondary education is more generalised than almost all OECD secondary school systems. Its relative absence from the VET planning processes is therefore atypical.

- Comparisons between the international and the Australian VET sectors reveal that one of the Australian system's major strengths is a highly integrated model of national skill standards and a national framework for the awarding of qualifications.

- Weaknesses include the fact that industry-based planning processes are confined to the VET sector and that there is only a limited impact of market principles across the sector.

For a synthesis of the entire research program see *A well-skilled future* by Sue Richardson and Richard Teese.

Reality check: Matching training to the needs of regional Australia

Sue Gelade, Trish Fox

Does training in regional Australia match local skills needs? This is the question posed by Sue Gelade and Trish Fox in their report, *Reality check: Matching training to the needs of regional Australia*. It is an important question, given that clusters of high- and low-growth regions across the country are becoming more apparent and more entrenched. In particular, building the skills base of those areas doing less well economically will be crucial to their further growth.

We know that regional training providers are committed to meeting the training needs of local industries. Therefore, Gelade and Fox decided to concentrate on gathering the views of small and medium employers to see if they were succeeding, using Cairns (Queensland) and the Limestone Coast (South Australia) as case studies. Their research echoes the refrain for greater flexibility in training delivery and for creative collaboration among the players in regional economies.

Key messages

- Desk-based research indicates that training courses offered by technical and further education (TAFE) institutes and private registered training organisations match the needs of identified current and emerging industries relatively well.

- For many regional industries, the most common and pressing issue is not the availability of training courses, but competition for employees.

- TAFE institutes structure their offerings on industry needs and state government priorities. Often these reflect metropolitan influences as much as regional needs.

- Time lags between identifying relevant courses and their provision mean that regional industry tends to manage its skills development needs without relying on TAFE provision. Private registered training organisations, which develop courses more rapidly, are often industry's first choice.

- Delivering the training required by regional enterprises is a difficult business. As a result, enterprises tend to rely on their own workplace training systems and are happy to use a mix of options from TAFE institutes, private registered training organisations and in-house trainers. They will sometimes also cooperate across industry to enable training in common skills sets to be delivered in a region.

This report points to the importance of partnerships among vocational education and training (VET) providers and across sectors. These themes are also explored in a suite of work commissioned by the National Centre for Vocational Education Research (NCVER) on VET in the regions, a synthesis of which can be found in Tabatha Griffin and Penelope Curtin's *Regional partnerships: At a glance* <http://www.ncver.edu.au/publications/1938.html>.

Note: This publication was produced through the National Vocational Education and Training Research and Evaluation Program; see page 80 for details.

Reality check: Matching training to the needs of regional Australia can be found on NCVER's website <http://www.ncver.edu.au/publications/2005.html>

Vocational education and training and casual workers in the home and community care sector

Susan Dawe, John Saunders, Nhi Nguyen

Over the last two decades, a feature of the Australian labour market has been the growing prevalence of casual employment; around a quarter of all Australian wage and salary earners are casual workers. Casual workers are, in general, less likely to have access to training opportunities than those in ongoing employment. In industries that rely on a pool of highly skilled casual workers, a major concern is that the pool of skills diminishes if it is not replenished by adequate training. In such circumstances, can casual employment be maintained as a long-term strategy?

Susan Dawe, John Saunders and Nhi Nguyen seek to answer this question in respect of the home and community care sector in which vocational education and training (VET) has a prominent role in developing the skills of workers. Their findings indicate a rather more complicated picture than the stylised world outlined above.

Key messages

- Some organisations employ no casual workers, some use casual employment for all their home and community care workers, while others use almost entirely unpaid workers or volunteers.

- Casual employment provides flexibility, as employee numbers can be increased or decreased in line with the needs of business.

- Occupational rules and government regulations require employers to either hire qualified workers or train new recruits, and provide ongoing mandatory training. This applies equally to casual and ongoing employees.

- Casual workers are here to stay in the home and community care sector and government regulations ensure they get ongoing mandatory training. However ,where employers pay for further training, they usually do so for ongoing part-time employees rather than casuals to ensure the benefit of that training remains with their organisation.

Note: This publication was produced through the NCVER Core Research Program; see page 80 for details.

Vocational education and training and casual workers in the home and community care sector can be found on NCVER's website <http://www.ncver.edu.au/publications/1971.html>

NCVER acknowledges the programs for the various reports as listed below.

- **National Vocational Education and Training Research and Evaluation Program**

    This work has been managed and produced by NCVER on behalf of the Australian Government and state and territory governments, with funding provided through the Australian Department of Education, Employment and Workplace Relations under the National Vocational Education and Training Research and Evaluation Program. The author/project team was funded to undertake this research via a grant. These grants are awarded to organisations through a competitive process in which NCVER does not participate.

- **National Vocational Education and Training Statistical Program**

    This work has been produced by NCVER on behalf of the Australian Government and state and territory governments, with funding provided through the Australian Department of Education, Employment and Workplace Relations under the National Vocational Education and Training Statistics Program.

- **National Adult Literacy and Numeracy Research Program**

    This work has been managed and produced by NCVER on behalf of the Australian Government. Funding has been provided under the Adult Literacy National Project by the Australian Government, through the Department of Education, Employment and Workplace Relations. The author/project team was funded to undertake this research via a grant. These grants are awarded to organisations through a competitive process, in which NCVER does not participate.

- **NCVER Core Research Program**

    NCVER's inhouse research and evaluation program undertakes projects which are strategic to the vocational education and training sector. These projects are developed and conducted by NCVER's research staff and are funded by NCVER.

- **NCVER consultancy work**

    Through its commercial arm, NCVER provides professional research, development and implementation services to Australian and international clients. These projects are funded by the client and some of these are made publicly available with client approval.