



Workforce Futures

A Paper to Promote Discussion

Towards an Australian Workforce Development Strategy

Skills Australia

Background Paper Two:

Powering the workplace:

Realising Australia's skill potential

September 2009



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Foreword to *Workforce Futures*

How can we best ensure that Australia has the workforce capability required for a productive, sustainable and inclusive future? Skills Australia is releasing *Workforce Futures*—a set of discussion documents—to promote debate about this question.

The ideas in these papers, modified in response to input from stakeholders, will form the basis for an *Australian Workforce Development Strategy* to be released later in 2009.

Skills Australia's approach to conceptualising workforce development encompasses three interrelated elements:

- the demand for future skills and what planning for the future entails
- improving the value from the skills investments being made in the existing and future workforce, through greater attention to how skills are used in a workplace setting
- joining up separate areas of government action on workforce participation, social inclusion and innovation so policies on skills connect with wider economic, employment and social strategies.

Two background papers provide evidence and arguments relating to these elements, accompanied by points for consideration and proposals for possible ways forward. These are:

- What does the future hold? Meeting Australia's skill needs
- Powering the workplace: Realising Australia's skills potential.

A discussion paper, *Workforce Futures*, summarises the arguments and proposals from the two papers.

These papers are not just about action for governments. Workforce development strategies need to be firmly based on the specific and connected ways in which governments,¹ employers, industry, individuals, educational providers and a host of services collectively shape Australia's skills base.

Consequently, both papers seek comment about the appropriate roles and responsibilities of all the key agents that drive change. They include suggestions about issues where shared frameworks may be beneficial, and offer options for such frameworks.

¹ 'Government' in this paper refers to State, Territory, national and local governments. The term 'industry' includes employers, employees, and their representative associations and covers the private, public and not-for-profit sectors. 'Education providers' includes tertiary sector public and private organisations – universities, TAFE colleges and other Registered Training Organisations, and their representative associations.



Issues for discussion

As you read this paper you might help us by considering the following broad questions.

- ***Do we need to stimulate the demand for high-level skills in workplaces to unlock the potential created by Australia's major educational effort?***
- ***How can we link educational and community-based strategies with job strategies to support workforce engagement in areas, or among groups, with high levels of disadvantage?***
- ***Is it timely to build on the momentum of Australia's workforce development initiatives to create a step change in the way we tackle skills in the workplace?***
- ***What type of ideas and actions need to be agreed on skills use and workforce participation to reinforce Australia's wider agenda for productivity, sustainability and social inclusion?***
- ***What is the role for governments and other actors in these agendas? What kind of leadership strategies might we expect of each?***



An overview of the key issues

Paper One has provided an overview of what the economy and employment profile of Australia might look like in the near future as well as the sort of skills we may need to sustain it. This paper explores what sort of workforce and workplace we envisage both to capitalise on those trends and to stimulate full employment. Issues concerning skills use are evident among the existing and the potential workforce across Australia and in comparison to international experience. It indicates areas where individuals, locations or industries are missing out on the potential gains of higher skills as well as areas where we are travelling well.

We seek feedback on better ways for Australia to ensure skills are used productively in the workforce and people of working age fail to benefit from the social, economic and lifelong learning benefits of meaningful work.

In particular, we seek feedback on potential areas for action in developing an *Australian Workforce Development Strategy*. We have identified four major priorities for such a strategy. The first priority—identifying Australia’s skill and workforce demands—was the subject of Background Paper One. This paper considers the remaining three priorities and makes the following suggestions about potential areas for action.

Establishing a shared agenda on the development of Australia’s future workforce

- Leading the impetus for change: Establishment of a whole of government approach and national framework for workforce development
- Resourcing change: Adoption of new funding principles to support workforce development initiatives
- Guiding reform and catalysing change: Identification of ‘change agents’ and the merits of possible activities such as a centre of excellence and lighthouse projects to build knowledge and expertise and diffuse best practice on workforce development

Focusing on workforce participation

- Addressing regional and local workforce participation challenges: Identification of opportunities to use skill ecosystem ‘locational approaches’ to complement work on workforce participation in areas of entrenched disadvantage.

Promoting demand for and the full use of high skills in workplaces

- Enabling new industry connections: Identification of industry clusters or regions in which to create multi-faceted solutions to address skill demand issues, business problems and lift performance and capability across a range of workplaces



- Addressing skill use directly at the enterprise level: Use of training and/or other interventions within enterprises to tackle job design, work organisation or organisational strategy and engagement of skills
- Developing the capacity of enterprises: Examination of how innovation and improved performance can be achieved through strategies that also create a workplace environment conducive to skills development and use.
- Developing the capability of service providers—identification of new skills or capability needed among education providers and other agencies working with enterprises to support more flexible workplace solutions to boost workforce development.



Section 1: Use and development of skills at work

As educational levels increase, a pertinent question is how effectively are people's skills being used in the workplace for social and economic benefit?

Background Paper One has described the rising level of educational attainment in the Australian workforce in recent decades, and noted renewed government commitments to higher qualification levels in the context of the 'Education Revolution'. It also discussed the significant aggregate demand for skills as the economy grows and the workforce ages.

At the same time, symptoms of skills under-use in the workplace have also been appearing, suggesting that boosting the demand for high skills may be as important as boosting the supply. This apparent contradiction reflects the complex and diverse nature of the economy, with acute skill shortages in some globally competitive industries and in some locations coexisting with less competitive industries which offer a constrained environment for skill use and development.

This section considers evidence on how people's skills are used in industry, and discusses the relationship between skills and productivity in the context of Australia's recent productivity performance.

While Australia's productivity rates tend to stabilise around a long-term norm, there is concern about a decline in multi-factor productivity growth, which may be related to low levels of innovation in Australian enterprises.

Enterprise issues, including those of management, culture and employee engagement are considered important influences on performance in this respect. Positive workplace policies and practices also help create expansive learning environments where workers have the opportunity to apply and develop high-level skills. Job design is clearly important, with correlations found between the complexity of work tasks, and the autonomy people have in their jobs and high reported skills use and learning opportunities.

The section concludes by drawing attention to the intersecting agendas around boosting Australia's productivity performance and innovation rates, and the creation of a more cooperative workplace culture following the Fair Work Act reforms.



1.1 Introduction

As education levels rise in developed countries, the assumption that a highly qualified population in and of itself results in increased productivity and economic growth is being re-evaluated. Researchers, industry and education leaders in Australia and elsewhere have started to look more closely at how a 'skills revolution' converts into a 'productivity miracle'.² As a Treasury Working Paper notes:

*The ability to use particular skills and knowledge in the production process, not merely acquiring them, is what really matters for productivity and income.*³

There is no debate about the intrinsic value of increasing education levels, or about the labour market and employment benefits these provide for individuals. However, there is growing recognition of the complexities that circumscribe, and in some cases, restrict the transformative power of high levels of education and training within workplaces.

This new focus on skill *use* at work is being pursued in other developed countries. The United Kingdom Commission for Employment and Skills last year began a Skill Utilisation Project. It found that:

*...evidence has failed to produce a conclusive and causal correlation between increased investment in skills (frequently shorthanded to qualifications) and increased productivity... it is important to understand that it is not simply about the acquisition of skills but a broader perspective that is concerned with both skills formation (stock) and their subsequent deployment (skills utilisation).*⁴

The concept of workforce development has emerged to address these complexities. It looks beyond the focus of the education and training sector's contribution to skills. It recognises the way that workplace, industry, regional and labour market conditions contribute to the development and utilisation of skills in work. As noted in pioneering work from South Australia, 'workforce development is an over-arching concept that links skills with the way work is organised.'⁵ The concept also broadens the focus to include all forms of learning and skills acquisition, following the spotlight in Paper One being primarily on educational qualifications.⁶

² Keep, Ewart, Mayhew, Ken and Payne, Jonathon (2006) 'From a skills revolution to a productivity miracle – not as easy as it sounds?' in *Oxford Review of Economic Policy*, Vol 22, no. 4 pp 239-539.

³ Davis, Graeme and Rahman, Jyoti (2006) *Perspectives on Australia's productivity prospects*, Treasury Working Paper 2006-04, p. 11.

⁴ The Scottish Government and the United Kingdom Commission for Employment and Skills (2008) *Skill utilisation literature review*, CFE, available at www.scotland.gov.uk/socialresearch

⁵ Government of South Australia (2005) *Better skills. Better work. Better State: a strategy for the development of South Australia's workforce to 2010*, p. 5.

⁶ See also on this point, Australian Industry Group (2008) *Skilling the existing workforce, final project report*, at www.aigroup.com.au



Workforce development is defined as those policies and practices that support people

- to participate effectively in the workforce
- to develop and apply skills in a workplace context
- and where learning translates into positive outcomes for enterprises, the wider community and for individuals throughout their working lives.

The development of strong partnerships, networks and collaborations between education bodies, industry and specialists is a feature of workforce development, helping overcome the fragmentation that the OECD terms ‘the challenge of governance’ in a network society.

This is an emerging area, and one where Australia has already made a mark in a wide range of initiatives being pursued across states and territories, within regions and at the enterprise level. What has been lacking to date is a comprehensive national understanding that skills on their own are an insufficient policy response in a time of dynamic economic change and entrenched social inequalities.

Skills Australia suggests a new commitment is required to ensure the approach to skills is embedded with complementary enterprise-based and geographical or sector-wide initiatives to ensure skills are well-used.

1.2 The match between education and jobs

The relatively high levels of educational participation and the increasing shares of the Australian population and workforce who hold post-school qualifications were described in Paper One. Such qualifications assist people to gain full-time employment and higher pay. The latest (2005) ABS survey found that the average weekly earnings of full-time employees was \$790 per week for those with Year 10 education or below, compared to \$1,620 per week for those with a post-graduate degree.⁷

However, when evaluating the public benefit from the funds spent on education and training, a key issue is the extent to which people’s skills and capacities are being used productively at work. Opportunities for skills to be applied, not just held, are crucial in achieving good economic and social results from the resources that governments, individuals and employers devote to education and training. Even in terms of individual financial returns, a salient question is, does a high level of education bring the same benefits if the person’s job does not *require* that level of education?

Research in recent years has looked at how closely the jobs that graduates end up in relate to their levels and fields of study. This is one way of assessing whether people’s education and training is vocationally useful, and provides relevant information for educational planners and individuals considering certain courses of study. In Paper One, usage of training is suggested as a criterion for identifying ‘risk occupations.’ It should of course be

⁷ ABS (2006) Education and training experience, Australia, 2005 Cat no. 6278.0.



seen as only one indicator of outcomes. Many people who work at a lower level or in a different field to that for which their education was intended may nonetheless have found their education valuable and continue to use the generic skills learned from it.

Asking employees directly about the extent to which their skills are used in the workplace also provides a gauge of skill use, as people perceive it, and is the focus of other research also discussed below. Studies that ask employers or employees directly about skills usage have the added benefit of including all the skills and knowledge people have developed, rather than limiting the inquiry to formal qualifications. Measures of perceived skill use are considered more accurate than measures of formal over-qualification because they include tacit skills and knowledge, often gained through experience, rather than relying on the qualification as the only proxy for skill.

Training destinations

Estimates of the numbers of people who have educational qualifications that exceed those required in the job find that some 30 per cent of Australian tertiary education graduates are in that situation. Linsley found that 21 per cent of university degree holders, and 46 per cent of vocationally qualified people had qualifications that exceeded job requirements in the early 2000s.⁸

Graph 1 overleaf shows 2007 data on the proportions of people working in occupations below the level commensurate with their qualification. It indicates that potential under-usage of educational qualifications varies considerably between different groups of graduates, and for some groups has increased between 2001 and 2007. The phenomenon is high among those with advanced diploma and diplomas; commenting on similar findings in an earlier study, Cully noted that this may be due to competition with university graduates for jobs at this level.⁹

The group where there has been the fastest percentage point growth in people at an employment level lower than their qualification level is people with post-graduate degrees, although the total number of people affected is much smaller than in the case of other graduates.

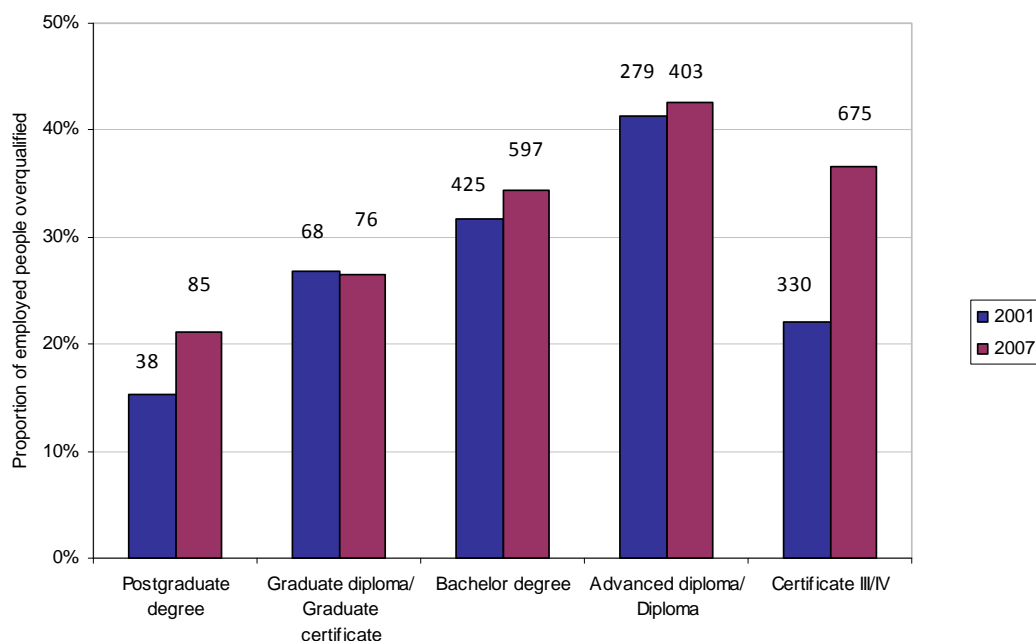
Occupations where there was an increase during the 2000s in the numbers holding qualifications above the expected level for their occupation were intermediate sales, clerical and service occupations, and road and rail transport drivers. Few occupations showed a decrease; those which did included electrical and electronics tradespersons (12 to 11 per cent); skilled agricultural and horticultural workers (15 to 13 per cent); and science, engineering and related associate professionals (22 to 20 per cent).

⁸ See also McGuinness, Seamus and Wooden, Mark (2009) 'Overskilling, job insecurity and career mobility', *Industrial Relations*, Vol 48, no. 2, April 2009 p. 271 who report that between 58 to 65 per cent of employees had jobs that were a reasonably good match with their skills, with the rest 'moderately' or 'severely overskilled'.

⁹ Cully, Mark et al (2006) *Matching skill development to employment opportunities in NSW*, NCVET for the Independent Pricing and Regulatory Tribunal of NSW p. 35.



Graph 1: People (number in '000s and per cent) with a non-school qualification employed at a lower level



Source: ABS, Survey of education and work 2001 and 2007, unpublished data using ASCO coding, Cat no. 6227.0. The bars are percentages, with actual numbers of students in '000s also noted.

Population: All employed people with non-school qualifications.

(a) Over-qualification is defined as follows: for those with a postgraduate degree, graduate diploma/graduate certificate or bachelor degree, working at ASCO major occupation groups 3 to 9; for those with an advanced diploma or diploma, working at ASCO major occupation groups 4 to 9; and for those with a Certificate III/IV, working at ASCO major occupation groups 6 to 9.

The discussion above focuses on qualification and employment level but there is also the question of whether graduates end up working in the fields for which they trained. The National Centre for Vocational Education Research (NCVER) has looked at occupational match for vocational education and training (VET) students from the perspective of fields of study. The conclusion is that although a high proportion of VET graduates see their training as having relevance to the jobs they actually enter, matches between training and jobs at a precise occupational level was quite low.¹⁰

A match at the level of 'food trades worker' or 'carer and aide' was observed in 2007 for 40 per cent of people who undertook their training for employment-related purposes (78 per cent of VET students are in that category). A better match existed in terms of the general type of employment, such as 'tradesperson' or 'community and personal services worker'. The closest match between education and occupational destinations was for the technician and tradespeople occupations, where the average match for specific trades was 64 per cent. But it was relatively low for most other groups of VET graduates.¹¹

¹⁰ Karmel, Tom, Mlotkowski, Peter and Awodeyi, Tomi (2008) Is VET vocational? The relevance of training to the occupations of vocational education and training graduates, NCVER Occasional Paper.

¹¹ ibid (2008) p.12.



Many people without relevant qualifications are employed across the occupational spectrum. All occupations contain a mix of people. For example, in 2008, nearly one-third (31 per cent) of tradespeople and technicians, and 36 per cent of managers had no post-school qualifications.¹² This loose link between qualifications and jobs is taken up in Paper One, where the implications for educational planning are discussed. Nevertheless, a situation where large numbers of people are unable to find work at a level or in a field for which they have been educated is a matter for discussion.

Skills use in the workplace

Whether people believe their skills are used at work is seen by some as a more important issue than that of employment destination mismatch.¹³ Skills under-use has been associated with low wage returns, job dissatisfaction and inefficiency from a productivity perspective. The trends are similar to those on over-qualification, although it is not possible to chart changes over the same period.

NCVER research provides some indications from an employer perspective. In 2005 and 2007, 37 per cent and 40 per cent of employers respectively reported that the current skill level of their staff was above what was required in terms of organisational needs.¹⁴ By comparison, just five per cent of employers in each survey year reported that their workers were under-skilled for their needs, while the majority reported that their workforce skill levels were 'adequate'. In 2007, the proportion reporting an over-skilled workforce was much higher in some industries, including finance (57 per cent) and education (67 per cent). The percentage of employers reporting skill levels above what was required was lower in manufacturing (30 per cent) which also had a larger percentage reporting skill gaps (11 per cent).

These results are interesting, considering that in the same surveys high numbers of employers reported some or a lot of difficulty in recruiting employees. Nearly half (44 per cent) reported this in 2007. The apparently paradoxical findings perhaps indicate the extent to which employers are proactive in bringing new employees up to speed, once employed, and perhaps reflect the extent of continuing work-related learning documented in Paper One.

The employer responses are about their workforce as a whole, and do not tell us about how many workers within the workforce experience skills over or under use. The HILDA survey¹⁵ which has been underway since the early 2000s asks individual employees about use of skills at work. The results are that 'over 11 per cent of employees were found to be

¹² ABS (2008) *Education and work, Australia 2008*, Cat no. 6227.0, unpublished data.

¹³ Mavromaras, Kostas, McGuinness, Seamus and Fok, Yin King (2009) 'Assessing the incidence and wage effects of overskilling in the Australian labour market', *The Economic Record*, Vol 85, no. 268 March 2009, p. 62.

¹⁴ NCVER (2008) *Australian vocational education and training statistics: employers' use and views of the VET system 2007*, Tables 1 and 2.

¹⁵ This paper uses unit record data from the Household, Income and Labour Dynamics in Australia (HILDA) Survey. The HILDA Project was initiated and is funded by the Australian Government Department of Families, Housing, Community Services and Indigenous Affairs (FaHCSIA) and is managed by the Melbourne Institute of Applied Economic and Social Research (MIAESR). The findings and views reported in this paper, however, are those of the authors and should not be attributed to either FaHCSIA or the MIAESR.



severely over-skilled, a further 30 per cent were found to be moderately over-skilled and the rest well-matched' in the period 2001 to 2006.¹⁶

Watson identified clear industry patterns in how skills are used, with two industries – retail; and accommodation, cafes and restaurants – standing out as having higher rates of skills under-usage. The high-training industries identified in Paper One – such as government, utilities and education, mining and also transport and logistics, and construction – had lower rates of skills under-usage.¹⁷

The HILDA data also indicates some of the job characteristics that are associated with higher skills use and with opportunities to learn new skills. Consistent with other research, the strongest causal relationship with high skill use is found with people who agree strongly with the statement: 'My job is complex and difficult'. A weaker but still important correlation occurs with those people who perceive themselves to have high levels of autonomy in their work.¹⁸

McGuinness and Wooden explored the effects of over-skilling on workers. They find that over-skilled workers are more likely to intend to leave their job within twelve months of commencing it, and are indeed more job mobile, leaving jobs more frequently than other workers. However, those that quit are not re-employed in jobs where their skills are better used. Instead, most either re-enter jobs where their skills are not adequately utilised or exit the workforce entirely.¹⁹

International comparisons

Comparative country data is not widely available as the topic of skills use is a relatively new one within research agendas. However, data from the United Kingdom (UK) suggests that Australia's experience has parallels elsewhere.

In the UK, as in Australia, the number of people obtaining a tertiary qualification rose rapidly in the 1990s and early 2000s. The series of UK Skills Surveys suggest that concurrently, potential over-qualification also increased steadily.

People working in a job not requiring the qualifications which they had attained rose from 23 per cent of people in the 1990s to 33 per cent in 2006, with the increase mainly occurring in the 2000s.²⁰

¹⁶ Mavromaras et al (2009) p. 71.

¹⁷ Watson, Ian (2008) Skill in use, labour market and workplace trends in skills usage in Australia, NSW Department of Education and Training, p. 12.

¹⁸ Watson, Ian (2008) p. 22.

¹⁹ McGuinness, Sean and Wooden, Mark (2009) p 284.

²⁰ Green, Francis and Zhu, Yu (2008) Overqualification, job dissatisfaction and increasing dispersion in the returns to graduate education, Economics Discussion Paper, p. ii.



1.3 Productivity, skills and organisational performance

Productivity rates

The rate of productivity, or the ability to create goods and services from a given amount of inputs, is widely regarded as a yardstick of efficiency at the organisation and industry level, as well as economy-wide. However, it is complex to measure and compare across time and between places.

The ABS and Treasury use GDP (or output) per hour worked to measure productivity:(also termed labour productivity) the amount of output achieved for a given amount of labour input.

Challenges include identifying the relative contributions of capital and other factors, how to assess productivity in the service and non-market areas of the economy, and the data-related intricacies involved in comparing productivity rates across nations.²¹ For this reason, economists usually refer only to broad trends.

The Australian Treasury observes that, after stagnating in the 1980s, Australia's productivity grew quickly in the 1990s with rates of over two per cent per year on several occasions. It notes that the slow down in the 2000s reflects a return to the longer-term average of 1.75 per cent per year.

Australia's catch-up during the 1990s, despite the general economic downturn at the beginning of the period, is seen to result from a number of reforms such as competition policy, employers' ability to vary working hours through enterprise bargaining, job shedding and the spread of ICT (information and communication technology).²²

The issue is how to bring about new improvements in productivity in the future. The Australian Government has identified a particular concern with low and declining levels of multifactor productivity growth since the mid-1990s. Multi-factor productivity growth reflects change that cannot be accounted for by combined inputs, and reflects the joint effects of research and development, new technologies, economies of scale, managerial skill and changes in the organisation of production.²³

Between 1983 and 1996 multi-factor productivity grew 1.4 per cent a year on average. Since then, growth has averaged only 0.9 per cent a year, which is no better than was achieved in the 1960s. Since 2004, Australia's multi-factor productivity growth has declined

²¹ Rahman, Jyoti, Stephan, David and Tunny, Gene (2009) 'Estimating trends in Australia's productivity', *Treasury Working Paper 2009-1*, February 2009.

²² Australian Industry Group (2008) *How fast can Australia grow? Mark III*, a Discussion Paper, February 2008.

²³ See US Department of Labor, Bureau of Labour Statistics, *FAQs on multifactor productivity*, at www.bls.gov



by just over one per cent, which the Government attributes to declining public and business investment in science and innovation in the previous decade.²⁴

Industry variation

Productivity varies widely between industries. The same advanced technological development can have variable impacts depending on the local context. For example, the information technology revolution helped spur productivity across the world. But it provided significantly less of a lift for productivity in the European and Australian retail and wholesale industries than it did in those of the US.²⁵

Australian industry trends in the 2000s showed considerable diversity. Productivity in mining and utilities slumped; in construction, hospitality and cultural industries, and (until the drought) agriculture, improved; and in other industries productivity remained steady or fell slightly.²⁶

Treasury concludes that in the long run productivity growth in Australia will remain determined largely by global technological advances.²⁷ Policy reforms, the improved functioning of labour markets, and a more educated workforce may contribute to Australia's productivity growth rates remaining steady.

International comparisons

Australia's productivity has been between 75 and 85 per cent of that of the US since the 1960s, while narrowing the gap slightly during the 1990s.

Australia has not fared so well in recent times according to analyses of micro-economic business competitiveness, slipping from 14th to 18th in overall position.²⁸

The relationship between productivity, competitiveness, innovation and skills

Competitiveness

Productivity should be considered as one among several indicators of organisational performance. Industry leaders may see others – such as returns on investment or improved market share – as equally relevant to their business.²⁹ Nevertheless, the ageing of

²⁴ Australian Government (2009) *Powering ideas: an innovation agenda for the 21st Century*, 12 May 2009, p. 2. See Productivity Commission for data on recent movements in multifactor and other productivity rates at www.pc.gov.au

²⁵ Davis and Rahman (2006) pp. 20-24.

²⁶ AIG (2008) pp 21-22.

²⁷ The US is generally used as a proxy for the global technological frontier and for comparative purposes, Treasury uses US rates as the benchmark.

²⁸ Porter, Michael, Delgado, Mercedes and Ketels (2008) 'The Microeconomic Foundations of Prosperity: Findings from the Business Competitiveness Index' *Business Competitiveness Report 2007-08*, World Economic Forum, World Bank, p. 62.

²⁹ Keep, Mayhew and Payne (2006) pp. 540-541.



Australia's workforce makes it more important than ever to focus on productivity growth to boost industry competitiveness and provide support for a larger non-working population.

Australian Treasury calculations show that productivity increases have been the main source of increasing the nation's wealth over the last forty years. Increasingly, discussion about boosting productivity is also discussion about increasing innovativeness of firms. For developed countries, innovation is the primary source of productivity growth today.

As noted above, education and skills can be an important contributor to improving productivity but there is no simple or direct relationship. Productivity rates can increase independently of skills as the result of changes in access to investment funds, regulatory policies, technology and, as the climate becomes more erratic, weather events. Research on company strategies to increase competitiveness indicates that there are a range of strategies that can be adopted, and no 'one size fits all' approach.

Porter et al³⁰ describe three factors that interact to influence enterprise competitiveness (which they see as a reflection of productivity)

- company sophistication and capabilities
- the quality of the business environment
- the state of development of clusters that provide benefits to companies and institutions within them.

Porter et al suggest:

Almost everything matters for competitiveness. Universities matter, the roads matter, financial markets matter, the sophistication of customer needs matters, and so on...Improving competitiveness is a special challenge, because no single policy or grand step can create competitiveness. Ultimately all dimensions of the business environment must be improved.

Culture, leadership and innovation

Noting the ease with which technological advances in one firm can be replicated by another, management literature today increasingly emphasises the competitive edge to be gained by leadership, culture and management style. In Australia, the Society for Knowledge Economics recently reviewed this literature for the Australian Government and concluded:

Part of the reason for [the] low level of innovation in Australia is a lack of encouragement of employee participation in all areas of the workplace and the design of appropriate leadership styles and workplace cultures to this end.³¹

³⁰ Porter, Michael, Delgado, Mercedes and Ketels (2008) 'The microeconomic foundations of prosperity: findings from the business competitiveness index,' *Business Competitiveness Report 2007-08*, World Economic Forum, World Bank.

³¹ Boedker, Christina and Vamos, Steve (2009) 'Background paper' for *Workplaces of the Future Forum* 27 July 2009, Melbourne, p. 3.
http://www.ske.org.au/download/SKE_2009_Workplaces_of_the_Future_July_2009_Website.pdf.



Innovation and Business Services Australia similarly argues that the enterprises which adopt the features of a 'learning organisation' that is, which develop 'an inbuilt capacity to gather, incorporate and use' information and skills will generate innovation and productivity advances.³²

Workplace development

A related but slightly different theme concerns what is termed 'workplace development' – the mode of operation of a workplace, including both technical and social systems, or more concretely, work processes, work organisation and human resources management. This concept has been progressed in Finland, whose knowledge-based innovative industries are considered to be world success stories.

A long-running innovation program (the Workplace Development Program, or TYKES) focuses on providing funds and consultant support for projects run in close cooperation between management and staff. The aim is to promote 'sustainable productivity growth' in the sense that innovations should also improve the quality of working life, thereby encouraging employees to stay on at work longer as they age.³³ (Workforce ageing is a serious threat to Finnish economic growth).

The thinking is that by developing and adopting new modes of operation, enterprises are able to cope better with the demands of their operating environment, promote innovation and create better preconditions for sustainable employment.

The results from the program are impressive. TYKES-supported projects show 'some' or 'clear' improvements in productivity, team-based working, cooperative workplace relations and opportunities for skill development in some 80 per cent of firms involved.³⁴ Importantly, for this paper, Finland represents the forefront of the European Union Member States in terms of the learning opportunities offered by work and infrequency with which employees report time pressure and a fast pace of work.

How productivity growth affects the demand for skill

Mutual influence

While skill contributes to enterprise productivity, productivity growth can also generate higher skill requirements. This is seen in Australia's most innovative companies, which are also above-average investors in training and development. But this is not always the case. In retail, for example, technological advance may mean more IT-related jobs associated with on-line and home shopping systems, in-store touch screens for consumer self-service, and radio technology to track goods through the supply chain. However, these technologies

³² IBSA (2008) *Innovation inside*, at www.ibsa.org.au

³³ Alasoini, Tuomo, Ramstad, Elise and Rouhiainen, Nuppu (2005) *The Finnish Workplace Development Programme as an expanding activity. Results, challenges, opportunities*, Tykes Report no. 47; and Ramstad, Elise (2009) 'Promoting performance and the quality of working life simultaneously', *International Journal of Productivity and Performance Management*, Vol 58, no. 5, p. 423-436.

³⁴ Alasoini et al, p. 80.



may reduce the need for sales staff, and/or reduce the need for them to have high level interpersonal skills.³⁵

Short-term productivity gains may even endanger skill formation, and hamper longer-term productivity growth. In construction, for example, in recent decades, costs have been squeezed in the sub-contracting sector, in turn increasing self-employment, casual employment and the share of employment taking place in small firms.³⁶ While generating productivity improvements and increased profits, this reshaped industry structure may inhibit the industry's ability for innovation and weaken skill formation in the longer term.

There are, in sum, many challenges in defining the relationship between skill formation, skills use and organisational performance. However, given the scale of the public investment in education and training in Australia it is timely to consider ways to strengthen the relationship and ensure that the performance dividend is maximised.

Stimulating demand for high skills through innovation

The Government looks to a strengthened national innovation effort, in combination with the education revolution and other investment and economic measures to help lift productivity growth. Key initiatives include the Building Australia national infrastructure program, the National Broadband Network and the Climate Change Action Fund. The Minister for Industry describes government industry policy as 'being all about innovation.'³⁷ *Powering Ideas* includes a \$3.1 billion investment over four years encompassing additional funding for science and research, the formation of Innovation Councils, business-level programs to encourage innovation in manufacturing and other key industries, and several new initiatives designed to increase linkages between researchers and industry.³⁸

Of direct relevance to the workforce development agenda is the Australian Government's commitment to a 25 per cent increase in the proportion of businesses engaging in innovation in the ten years to 2019 and the improvement of innovation skills and workplace capabilities. Today around one third (37 per cent) of Australian businesses are 'active innovators', a proportion that has remained unchanged for many years.³⁹ Complementing the Australian Government's innovation agenda, some States, such as NSW, Queensland, Victoria and Tasmania, have innovation policies and/or strategies focusing on specific industry sectors.⁴⁰ Other States and Territories promote innovation within industries, or facilitate high performance clusters.

The role of university-based and specialist research centres in generating and commercialising innovation is widely recognised and formalised in a range of public-private research partnerships.

³⁵ IBISWorld (2009) *Industry report: retail trade in Australia*, March 2009, pp. 18-19.

³⁶ Toner, Phillip and Coates, Nick (2006) 'Competition and the growth of non-standard employment: the case of the Australian construction industry' in *Labour and Industry*, Vol 17, No. 2 December 2006.

³⁷ Senator the Hon Kim Carr (2009) 'The future of the Australian manufacturing industry: is innovation enough?' *Speech to the Society for Australian Industry and Employment*, 21 April 2009.

³⁸ Senator Kim Carr *media announcement* 12 May 2009.

³⁹ Australian Bureau of Statistics (2008) *Innovation in Australian Business, 2006-07* Cat. no. 8158.0.

⁴⁰ See eg NSW Government, *Innovation strategy for NSW* at <http://www.business.nsw.gov.au/innovation>
Queensland's Smart Industry Policy targeting 15 industry sectors at www.industry.qld.gov.au and Victoria's *Energy technology innovation strategy* (2008) at www.dpi.vic.gov.au



The vocational education and training sector's role and potential within the innovation system is less well-known. Yet it is crucial for product and process innovation, and for the adaptation involved in technology transfer – the diffusion of *existing* knowledge and higher performing practices across enterprises. There are certainly cutting edge breakthroughs occurring in a range of nanotechnology, fibre technology, ICT, biotechnologies, green and marine technologies that will need to attract new skill sets in product design and supply chain management.

Even in more mature industry sectors, as Toner points out, VET-trained technicians and tradespeople generate a substantial proportion of the incremental innovation that is characteristic of Australian industry.⁴¹

So 'breakthrough' innovation is only one factor in the picture of future competitiveness. A feature of future success is likely to rest upon how well we harness skills, know-how and talent in the ordinary workplace. Importantly, it will need a renewed focus on workplace management and leadership and a new dialogue with industry about how we can maximise business innovation.

Recently, the Australian Government has emphasised the link between cooperative workplaces and innovation as a way of creating a future 'soft regulation' agenda that complements the 'hard regulation' of the *Fair Work Act, 2009*. The Minister for Education, Employment and Workplace Relations noted:

*Australians should now move beyond a focus with the law changes to a new focus on cultural changes in the workplace... Over the coming months and years we will be looking at ways of embedding change through workplace relations, innovation and leadership practices in workplaces.*⁴²

The power of Australia's considerable efforts and expenditure in education is arguably at risk if it can not be realised by appropriate links at the industry, enterprise and cluster level. Skill shortages have constricted growth in specific industry sectors and locations during the last decade. But skills are only one factor in productivity improvement and growth. In recent decades rapid economic growth has featured both low-skilled as well as high-skilled work. As education levels have increased, so too have signs of skills wastage – the potential under-use of people's education and skills at work.

The emphasis through a workforce development framework on the linkage of education directly to business strategy, on high skills, and on a broader role for educators and trainers can assist in the achievement of the Government's innovation agenda and related improvements in enterprise competitiveness.

Issues for discussion

- **What are the implications of skills under-use for skills policy into the future?**

⁴¹ Toner, Phillip (2007) *Skills and innovation, putting ideas to work*, Background paper for the NSW Board of Vocational Education and Training, pp. 26-7. Some 80 per cent of firms nominate 'within the firm' as the source of product and process innovation, as oppose to eight per cent which nominate universities. Managers identify 'production employees' as the source of innovation ideas more commonly than other types of workers.

⁴² The Hon Gillard, Julia, MP (2009) Speech to 15th World Congress International Industrial Relations Association, 25 August 2009, Sydney.



- *What responses to skills under-use are appropriate in a context of rising global competition?*
- *What is the best way to conceptualise the relationship between productivity and skills?*
- *What links need to be made to other program areas at national and local levels? At service provider levels? How does current practice need to change?*



Section 2: Engagement in the workforce

A range of social and individual factors influence whether people engage in the workforce as they move through different life stages. Aggregate workforce participation rates have been increasing slowly overall, but with significant changes for groups within the population: men and women, people of different ages and life stages, immigrants and people living in different regions. Some 16 percentage points currently separate States and Territories with low and high participation rates.

In terms of employment, strong overall growth has characterised recent decades. For example, the number of employed people grew by 25 per cent (2.2 million people) in the ten years to 2008. But this was accompanied by the rise of part-time and casual work and growth in the numbers of people wanting to work more hours. Today over 1.5 million people are under-employed, and another million or more are outside the workforce but would like to work. The employment rate of prime working aged men fell from the 1980s to the early 2000s, and is still some five per cent lower than in 1978. And some groups – such as Indigenous Australians – continue to face profound employment barriers.

Although Australia is better placed than most countries to withstand the recessionary pressures, there is considerable uncertainty about the course of the current recession.

A significant number of teenagers and young adults are in marginal labour market situations and young people are being hardest hit by job loss today. Older men without qualifications are most likely to face retrenchment through structural adjustment and now the recession.

This section summarises recent patterns and identifies key trends and concludes with a discussion of contemporary policy responses to workforce participation issues.

A key issue is the role of education and training in increasing workforce participation and employment, and how labour market, education and training and community services can be best aligned to improve opportunities for those currently with a weak attachment to the workforce. The diverse impacts of the recession require carefully targeted responses which also anticipate the likely employment landscape in the recovery.

In Section One, it was argued that strategies to stimulate productivity growth are multi-dimensional and vary according to the enterprise in question. Similarly, increasing people's engagement with work requires localised, tailored approaches that activate employers, individuals, education providers and community support services. Workforce development and contemporary social inclusion programs can complement each other. They both address skill development in the context of regional economic, employment and skill characteristics.



2.1 Introduction

The goal of increasing workforce participation is important in order to increase social inclusion and to compensate for Australia's ageing population structure. However, alongside the trend to increasing employment rates, there are many pockets where workforce participation is restricted.

The current economic downturn exacerbates the risk of longer term marginalisation of sections of the Australian community as seen in previous recessions. It is crucial to ensure no-one is left behind as the recovery takes off. As the recession continues, more people are seeking work or seeking additional hours of work – over 1.5 million in August 2009.⁴³ The economic downturn magnifies our already uneven track record in workforce participation among some population groups and regions across Australia in spite of Australia's generally buoyant job growth over recent decades. As well as low educational levels, caring responsibilities, discrimination, locational disadvantage and disability are among the main barriers to more intensive workforce engagement by various social groups.

The Australian Government has affirmed a strong commitment to improving social inclusion⁴⁴ to redress the polarisation in and between Australian communities and this goal is seen as supporting economic growth and adaptability.

Both the government's social inclusion and economic reform agendas emphasise a healthy, skilled and inclusive society as the foundation of Australia's productive capacity. 'Helping everyone get the skills and support they need so they can work and connect with the community, even during hard times'⁴⁵ is the second of the Australian Government's three social inclusion aspirations.

The groups identified as a priority in relation to this aspiration are: homeless people; Indigenous Australians; people living with a disability or mental illness; jobless families with children; and people living in disadvantaged locations and neighbourhoods. A wide range of state and territory policies and programs complements national efforts on social inclusion.

A feature of governments' work in social inclusion is 'place-based' approaches. The intention is to join up separate areas of government policy and programs, build partnerships among stakeholders, and devolve control to local agents who can develop tailored solutions.⁴⁶ This sort of 'locational' approach is also relevant to workforce development.

⁴³ ABS (2009) *Labour force, Australia*, August 2009, ABS Cat no. 6202.0.

⁴⁴ The Hon Julia Gillard MP (2009) 'A resilient Australia' address to the Sydney Institute, 19 February 2009.

⁴⁵ Australian Government (2008) *Social inclusion principles for Australia*, at www.socialinclusion.gov.au

⁴⁶ Address by the Hon Senator Ursula Stephens at University of Sydney, Workplace Research Centre Seminar 7 August 2009 'Crisis and renewal in Australian workplaces', "Emerging directions and social inclusion".



2.2 Workforce participation

Key workforce participation data

In recent decades, the labour force participation of working age Australians (15 to 64 years) has been slowly increasing. Between 1986 and 2006, it grew from 61 to 65 per cent and has remained at that level since then.⁴⁷ However, this relatively stable picture masks contrasting patterns in different parts of the country, and in the involvement of men, women and people of different age and social groups.

Gender patterns

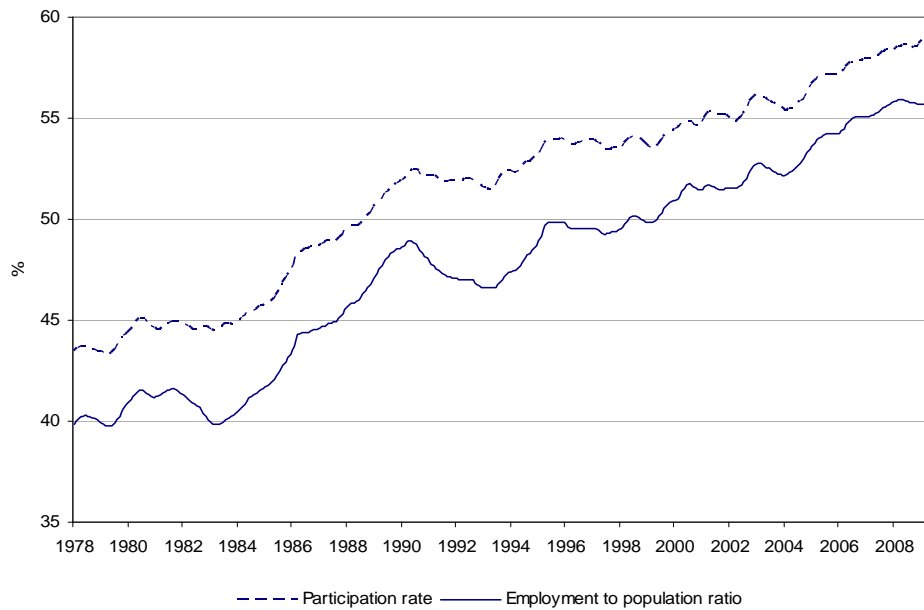
Women's labour force participation rate grew from just under 44 per cent in February 1978 to nearly 60 per cent in June 2009. Men's participation rate fell from 79 per cent to 72 per cent in the same period (graphs 2 and 3 overleaf). Similar trends occurred in the percentages of the female and male populations that were employed. The employment to population ratios for men in the prime working age group, 35 to 54 years, fell from 91 per cent in 1978 to 85 per cent in 2003, and remains relatively low at 87 per cent in 2009.⁴⁸ Employment ratios are shown separately on the graphs below (note that 'labour force participants' include both employed and unemployed people).

⁴⁷ ABS (2009) A picture of the nation: the Statistician's report on the 2006 Census, Cat no. 2070.0, pp. 138.

⁴⁸ All data in this section is from ABS, *Labour force, Australia*, Cat no. 6202.0, Trend series.



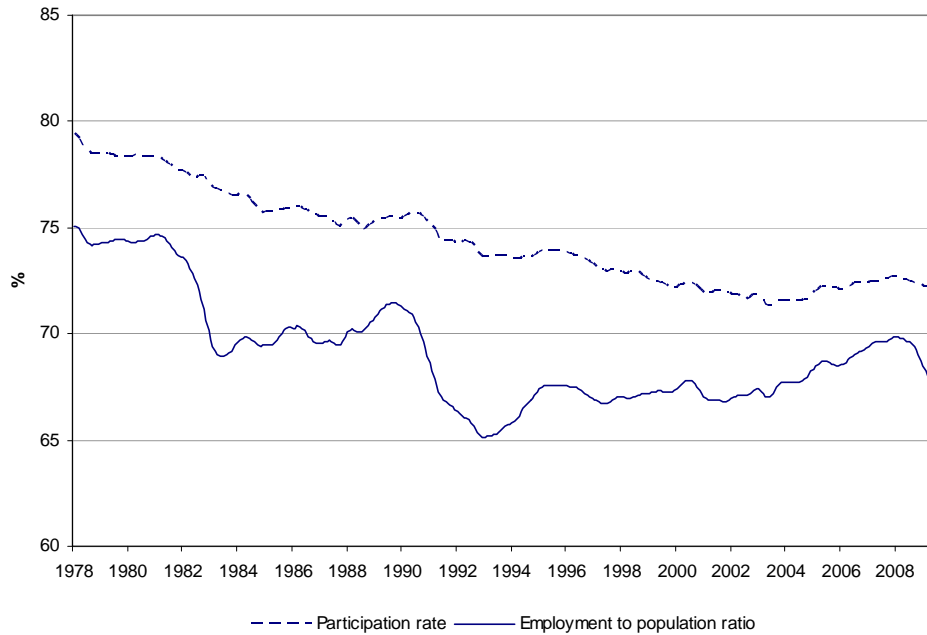
Graph 2: Female labour force participation and employment, Feb 1978 to June 2009



Source: Labour force, Australia, June 2009, ABS Cat no. 6202.0. Trend series.

Population: Female civilian population aged 15 years and over.

Graph 3: Male labour force participation and employment, Feb 1978 to June 2009



Source: Labour force, Australia, June 2009, ABS Cat no. 6202.0. Trend series.

Population: Male civilian population aged 15 years and over.



The changing occupational composition of the workforce appears to be the immediate cause of the decline in male workforce participation. Over the last several decades Australia has experienced substantial growth in skilled professional and managerial jobs (Background Paper One), but there has been a fall in the number of 'blue-collar' jobs typically filled by men over the same period, as can be seen in Table 1.⁴⁹

Table 1: Changing structure of employment from 1986 to 2005 for Australia

		Share of employment %		
		Managers and professional	Clerks and services	Blue collar group
Men	1971	18	19	63
	1986	32	16	53
	1990	33	16	51
	1995	33	17	50
	2000	39	15	46
	2005	40	16	44
Women	1986	25	54	21
	1990	25	55	20
	1995	27	55	18
	2000	34	52	14
	2005	40	48	12

Source: Keating, Michael (2006) 'Education, training and employment participation' at Jobs Australia National Conference. Female data not provided for 1971. The author notes that data series breaks mean the table should be read as indicating broad trends.

Geographical patterns

Engagement with work varies geographically within Australia as people move to gain work, or to service new communities. Although Australia is one of the world's most urbanised countries, with over 85 per cent of people living in urban areas and concentrated in seven capital cities, there is profound regional diversity.

As shown in Table 2, some sixteen percentage points currently separate states and territories with the lowest and highest participation rates.

Table 2: Labour force participation rates in Australian States and Territories, May 2009

Tas	SA	NSW	Vic	Qld	WA	ACT	NT	Aus
61	64	64	65	68	70	72	76	66

Source: Labour force, Australia, May 2009, ABS Cat no. 6202.

Population: Civilian population aged 15 years and over.

⁴⁹ Keating, Michael, (2006) 'Increasing employment participation in Australia and how to finance it,' *Australian Bulletin of Labour*, Vol. 32, No. 2, p.165.



The five-yearly censuses show that regional workforce participation rates change markedly over time. In 1986 many of the areas with high participation rates were in or near the ACT, due to expanding public administration. By 2006, four of the top five high participation areas were located in rural Western Australia, reflecting growth in mining and related industries. De Grey, near Port Hedland and Lakes, near Perth, had participation rates of near or over 80 per cent, while in Lismore on the NSW North Coast, the rate was just 57 per cent.⁵⁰ The ABS projects that rates in regional coastal areas will continue to fall as these areas attract retirees.

Australia's large cities also combine suburbs of wealth and privilege with areas where multiple disadvantages compound. A study based on 15 indicators of disadvantage finds people clustered in high and low disadvantage suburbs in most Australian capital cities.⁵¹ In these localities, low access to job opportunities intersect with high rates of poor health and imprisonment, lack of informal work and business networks, high rates of single parent families and so on, creating what Vinson describes as 'webs of disadvantage'.⁵²

There are certain social groups for whom participation rates diverge from the average, and also change over time. In 2007, the participation rate for migrant men who had arrived in the last ten years was 87 per cent, considerably higher than that of Australian-born men (75 per cent) and higher than for a similar cohort of migrant men ten years earlier (82 per cent). However, the rate for recent migrant women (59 per cent) was slightly *lower* than that of Australian-born women, and migrant women's participation had increased little compared to 1999 when it was 57 per cent.⁵³

The Indigenous labour force participation rate was lower, and the unemployment rate was higher, than for non-Indigenous people in all parts of Australia, states and territories and age groups.⁵⁴

People on the margins of the workforce

In 2007, the ABS used its labour force survey to investigate people's reasons for not working, or only working few hours. Around 80 per cent of the five million people not in the labour force did not want and were not looking for work. Almost two-thirds of these were retired, and around one-fifth had a long-term sickness or disability.⁵⁵ However, there remained a large number of people outside the labour force who did want a job: over one million people who were not in the labour force and therefore not counted as 'unemployed'. Most of these were women.

'Caring for children' was the most frequent reason women gave for not actively seeking work. A South Australian Government study notes that both the rising cost and the scarcity

⁵⁰ ABS (2009) A picture of the nation: the Statistician's report on the 2006 Census, Cat no. 2070.0, p. 139 and ABS 2006 census tables.

⁵¹ Baum, Scott (2008) 'Making space for social inclusion' in *People and Place*, Vol 16, no. 4, p. 32.

⁵² Vinson, Tony (2009) Markedly socially disadvantaged localities in Australia: their nature and possible remediation, Commonwealth of Australia, January 2009.

⁵³ ABS (1999 and 2007) Labour force status and other characteristics of migrants, Cat no. 6250.0.

⁵⁴ COAG (2009) *Overcoming Indigenous disadvantage, key indicators 2009* p. 19, data accessed at Productivity Commission www.pc.gov.au 'Indigenous' here refers to Aboriginal and Torres Strait Islanders.

⁵⁵ ABS (2008) 'Barriers to work', *Australian social trends, 2007*, Cat no. 4102.0, p. 4.



of child-care create barriers to women's participation, commenting: 'If women's financial return from work is lower than the costs of alternative childcare arrangements, they will opt out of the labour force.'⁵⁶

'Being considered too old by employers' was the most common reason for older people, and 'study' was the most common reason for 18 to 24 year olds.⁵⁷ Almost half of the men who wanted to work but were not available to start straight away reported 'long-term sickness or injury' as the barrier. Among carers, lack of flexible employment options was an additional factor. A recent study of women who provided informal care for people with a disability found similarly that nearly 30 per cent of carers not actively looking for work nevertheless wanted to engage in paid employment.⁵⁸

The ABS research also highlighted the range of activities that people undertake when they were not working and observed:

*Increasing labour force participation is generally beneficial for the economy. However, unpaid activities, such as caring for children or the elderly, undertaken by people with low or no hours of work, have considerable social and economic benefits.*⁵⁹

There is a clear association between the level of educational achievement and labour force participation, as the figures in Table 3 show. In 2008, some 86 per cent of people with a non-school qualification were in the labour force, compared to 71 per cent of those without one (these figures relate to 25 to 64 year olds). People who do not have non-school qualifications make up 44 per cent of 25 to 64 year-old people not in the labour force, compared to 39 per cent of all people in this age group.

The fact that 'lack necessary training, skills or experience' was the most commonly reported specific barrier among unemployed people (i.e. those in the workforce who could not get work) in the ABS 2007 survey, suggests that a proportion of those out of the workforce are discouraged job-seekers.⁶⁰

Table 3: Labour force participation and non-school educational qualifications, May 2008

Highest educational attainment	In the labour force	Not in the labour force	Total '000
Has a non-school qualification %	86	14	6,697
Does not have a non-school qualification %	71	29	4,281

Source: ABS *Education and work, Australia 2008*, Cat no. 6227.0, unpublished data. A non-school qualification refers to educational attainment other than those of primary or secondary education.

Population: Civilian population aged 25 to 64 years.

⁵⁶ Moskos, Megan (2007) *Workforce participation in South Australia, barriers and opportunities*, Report to the Department of Further Education, Employment, Science and Technology, p. 40.

⁵⁷ ABS (2008) 'Barriers to work', *Australian social trends, 2007*, Cat no. 4102.0.

⁵⁸ Gray, Matthew and Edwards, Ben (2009) 'Determinants of the labour force status of female carers', *Australian Journal of Labour Economics*, Vol 12, no. 1, pp. 5-20.

⁵⁹ ABS (2008) 'Barriers to work', *Australian social trends, 2007*, Cat no. 4102.0.

⁶⁰ ABS (2008) p. 4.

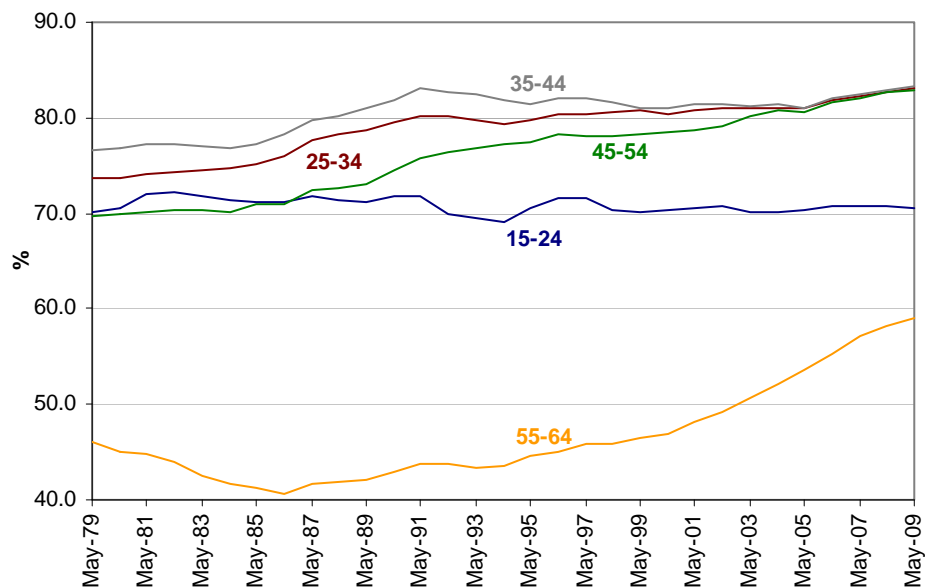


Kennedy and Hedley⁶¹ focused on the relationship between the level of educational attainment and workforce participation in the last two decades of the 20th century, noting that this effect was more marked for men than women (see also Table 1).

Of particular interest was their finding that exclusion from the workforce impacted most heavily on those males who left school early and have not acquired further qualifications. For this group, educational disadvantage was more important than age in explaining non-participation, while among the more qualified groups, ageing better explained participation rates.⁶² Indeed, almost all the decline in male participation is accounted for by the fall in participation by those early school leavers. This suggests it is most likely that prime working age adults who may not be able to get as much work as they want is potentially because they lack the contemporary skills or experience to be competitive in the current labour market.⁶³

Nonetheless, age is also a significant influence on workforce participation (see Graph 4). People of different ages participate in the workforce at markedly different rates.

Graph 4: Labour force participation rates, Australia, by age group, 1979 to 2009



Source: ABS Australian labour market statistics, July 2009, ABS Cat no. 6105.0.

Population: Civilian population of different ages.

⁶¹ Kennedy, Steven and Hedley, David (2003) *Educational attainment and labour force participation in Australia*, Treasury Economic Roundup, Winter 2003.

⁶² Kennedy and Hedley (2003) p. 5.

⁶³ Keating (2006), p 169.



The recent rapid increase in labour force participation among older aged people is noticeable in Graph 4, although it increases from a low base.

The effective retirement age has changed considerably for men and women over the last thirty years. Traditionally, 64 years has been seen as the upper boundary of the working age population. However, today nearly one-third (32 per cent) of people in the 65 to 69 age group are in the labour force (see Table 4).

Table 4: Labour force participation rates by age, Australia, June 2009

Age	15	20	25	30	35	40	45	50	55	60	65	70	15	15
	–	–	–	–	–	–	–	–	–	–	–	+	-64	+
	19	24	29	34	39	44	49	54	59	64	69			
% in labour force	57	84	91	92	92	90	90	88	78	59	32	7	83	72

Source: ABS *Australian labour market statistics*, July 2009, Cat no. 6105.

Population: Civilian population aged 15 years and over.

The low point in the participation of people over 55 years was the early 1990s. Since then, older women's participation has increased from 10 to 26 per cent, and older men's from 33 to 40 per cent.⁶⁴ This trend has continued during the current recession (see below).

⁶⁴ Healey, Ernest (2009) 'Population ageing and the employment surge among older Australian workers', *People and Place*, Vol 17, no. 2, p. 5.



International comparisons

Australia's overall participation rate is high relative to other OECD countries, mainly because of our relatively younger age structure. Australia has ranked 10th or 11th among the thirty OECD countries for the last fifteen years, ahead of the US and Germany, but behind countries such as Canada, the Scandinavian countries, New Zealand and Switzerland.

Australia ranks lower when we look at the participation of certain age groups of men and women, as the Productivity Commission has observed.⁶⁵ Our comparatively low participation groups include:

- women of child-bearing age (Australia ranked 11th lowest for 25 to 34 year old women in 2008)⁶⁶
- men of prime working age (where Australia ranked 6th lowest for 25 to 64 year old men in 2008)
- older men and women (where Australia ranked 14th for both men and women aged 55 to 64 years in 2008).

The Productivity Commission notes that increasing the participation of these groups to those in the highest performing comparable OECD countries (Canada for women and New Zealand for the other two groups) would add around four percentage points to Australia's overall rate of workforce participation.⁶⁷

2.3 Employment patterns

Key employment data

Australia has experienced consistent employment growth in recent years. The number of employed people has increased from 6.0 million in 1978 to 10.8 million in 2009.

Employment grew quickly in the last decade as a result of population growth, declining unemployment and increasing labour force participation for some groups. There was a 25 per cent (2.2 million) increase in the ten years from 1998 to 2008.

The number of hours of paid employment has not increased proportionally to the proportion of people in work. Linked to the changing patterns of workforce participation and the growth of service industries have been new patterns in the form that employment takes and the hours that people work. Given the rise of part-time and casual work, and the decline in full-

⁶⁵ Abhayaratna, Joanna and Lattimore, Ralph (2006) *Workforce participation rates – how does Australia compare?* Productivity Commission, Staff working paper, December 2006, p.x.

⁶⁶ This and other OECD comparative data is from the Online OECD Employment database found at www.oecd.org.

⁶⁷ Abhayaratna and Lattimore (2006) p. xii.



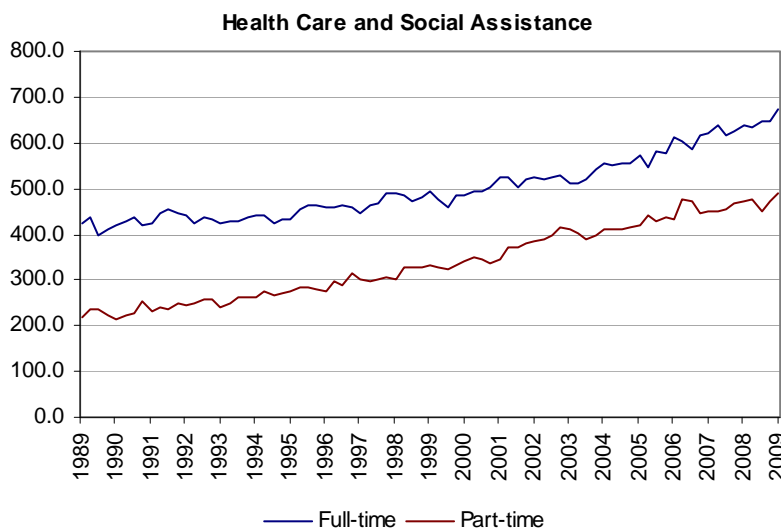
time employment, commentators note that the aggregate rate of employment participation in fact changed little in the last four decades of the 20th century.⁶⁸

Part-time work

Part-time work, associated strongly with the employment of women, younger and older people, has grown more quickly than full-time employment. The proportion of people employed part-time went from 15 per cent in May 1978 to 29 per cent in May 2009.⁶⁹ Today, nearly as many women work part-time as work full-time: 45 per cent of employed women worked part-time in May 2009. Sixteen per cent of men worked part-time at that time.

Part time work has increased in all industries, but more quickly where the majority of workers are women. In health care and social assistance, where nearly 80 per cent of the workforce is women, part-time job growth has tracked evenly with full-time job growth since the 1980s (see Graph 5).

Graph 5: Full-time and part-time employed Australia, 1989 to 2009



Source: *Labour Force, Australia*, Detailed, Quarterly, Feb 2009, ABS Cat. No. 6291.0.55.003.

An equally significant change in the balance of full-time to part-time employment has been among young people: for 15 to 24 year-olds, part-time work rose from 19 per cent of employment in 1985 to 47 per cent in 2009.

While part-time employment is high among older age groups, in recent years (since the early 2000s) the employment of men and women over 55 years in full-time work has grown faster than their representation in part-time work (which has also grown).⁷⁰ The ABS found that some two-fifths of the 2.8 million people working full-time in 2007 intend to switch to

⁶⁸ Keating, Michael (2006) 'Increasing employment participation in Australia and how to finance it', *Australian Bulletin of Labour*, Vol 32, no. 2 p. 165.

⁶⁹ ABS (2009) *Labour force, Australia*, Apr 2009, ABS Cat. No. 6202.0, Table 01: Labour force status by sex, trend series.

⁷⁰ Healey, Ernest (2009) 'Population ageing and the employment surge among older Australian workers', *People and Place*, Vol 17, no. 2, pp. 7-8.



part-time work before retiring;⁷¹ however, it seems that increasingly people are also continuing to work full-time, longer.

Casual employment

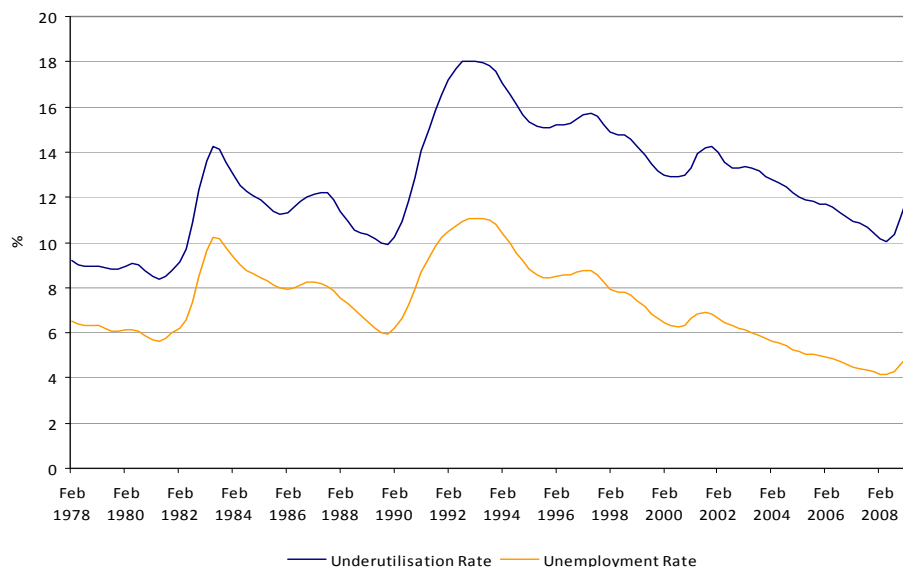
The engagement of employees on a casual, rather than on-going, basis has been another aspect of the growth in so-called 'non-standard employment' in recent decades in Australia. In the period from 1988 to the early 2000s, more than half (54 per cent) of all new jobs created have gone to casual workers.

Casual employment reached a plateau in the mid-2000s; today approximately 25 per cent of the workforce is casual. Women and younger people are more likely to be casuals, although the rate at which casual employment has grown is more pronounced within male-dominated jobs. Casuals tend to be less well-educated than the rest of the workforce, and experience inferior employment conditions, including access to training (see Paper One).⁷²

Under-employment

Under-employment – those people who are working but would like to work more hours – has been growing in Australia alongside part-time and casual work. Even when unemployment rates reached the low four per cent range during 2007, under-utilisation rates (unemployment plus under-employment) were still above 11 per cent.⁷³

Graph 6: Labour force underutilisation and unemployment rates, Feb 1978 to Feb 2009



Source: ABS *Labour force, Australia*, Cat no. 6202, Trend series.

Population: Civilian population aged 15 years and over.

⁷¹ ABS (2009) *Australian social trends*, March 2009, Cat no. 4102.0.

⁷² Parliamentary Library of Australia (2004) *Casual workers – trends and characteristics*, Research note no 53, May 2004.

⁷³ ABS (2009) *Underemployed workers, Australia*, 2008, Cat no. 6265.0.



Under-employment tends to follow the cycle of unemployment. As shown in Graph 6, it increased more quickly during and after the economic recessions of the early 1980s and early 1990s (see also below).

Indigenous Australians

At the time of the 2006 Census, just 48 per cent of Indigenous working aged people were in employment compared to 72 per cent of other Australians.⁷⁴ The last published ABS estimates showed Indigenous people with an unemployment rate of 14 per cent in 2007, compared to just four per cent for other Australians.⁷⁵ This is despite the fact that education and training rates have been rising more quickly for Indigenous Australians than for others, and the former receive a stronger benefit from education in terms of job outcomes. Hunter identifies a 'discrimination gap' as explaining more than two-thirds of the average employment differential between Indigenous and non-Indigenous people in Australia.⁷⁶

Young people

In May 2008 some 13 per cent of teenagers (15 to 19 years) and 21 per cent of young adults (20 to 24 years) were not fully engaged in either full-time study or work, and therefore 'at risk' of social exclusion. Although this is the lowest figure since 1990,⁷⁷ it still involves one in seven teenagers and one in five young adults. Young women are more likely than young men to be in a marginal earning and learning activity (that is, not in the labour force, in part-time work or unemployed).⁷⁸

There are also marked state and territory differences, relating to historic differences in compulsory school ages, and differing school retention rates. South Australia, Tasmania and the Northern Territory face greater challenges than the other states in this respect, with nearly half of Northern Territory 19 year-olds not in full-time work or study, compared to 23 per cent for Australia as a whole.⁷⁹

As with Indigenous people, there is good evidence that the rising educational qualification rates are helping to insulate young people from disengagement. There is a clear link between being socially excluded⁸⁰ and educational qualifications, and for those who miss out on education, catch up in later life is difficult. HILDA longitudinal data shows that 40 per cent of people who were aged between 21 and 24 years in 2001 and who had only completed Year 11 were still outside the labour force (and not studying full-time or parenting) in 2007. For those with university qualifications, 24 per cent were in that category.⁸¹

⁷⁴ This comparison is complicated by the existence of the Community Development Employment Projects Scheme.

⁷⁵ ABS (2008) Labour force characteristics of Aboriginal and Torres Strait Islander Australians, 2007, Cat no. 6287.

⁷⁶ Hunter, B. H (2004) *Indigenous Australians in the contemporary labour market 2001*, Australian census analytic program, Cat no. 2052.0, ABS, p. 79.

⁷⁷ Foundation for Young Australians (2008) How young people are faring '08, An update about the learning and work situation of young Australians, pp. vi and 22.

⁷⁸ Foundation for Young Australians (2008) p. 4.

⁷⁹ Foundation for Young Australians (2008) p. 8.

⁸⁰ Defined here as outside the labour force and not engaged in full-time education or parenting.

⁸¹ Watson, Ian, (2009) unpublished analysis of HILDA longitudinal survey data for Skills Australia.



Young people stand out in terms of their relative loss of full-time work in recent decades and the Foundation for Young Australians argues that the changing employment structure of the industries in which young people work contributes to their more precarious employment situation.

International comparisons

Australia's employment rate – the percentage of the working age population which is employed – is relatively high by international standards. In 2008, Australia ranked 9th with an employment rate of 73 per cent for the main working age population, compared to an OECD average of 67 per cent.

However, part-time employment is considerably higher in Australia than many other countries. It measures 24 per cent on OECD definitions, compared to 16 per cent for the OECD as a whole.

Casual employment as it is defined in Australia is a broader and more specific term than in many OECD countries. However, a rough comparison is possible with the European category of 'temporary work.' Compared to other OECD economies Australia has a very high proportion of temporary employees, ranking second only to Spain. While the share of temporary employment has expanded across many countries since the 1980s, Australia, along with Spain, is notable for the expansion from a relatively high base.⁸²

Among young people, those not engaged in education and training have a comparatively high rate of participation in employment in Australia. In 2005 this was some 13 percentage points higher for teenagers and eight per cent higher for young adults according to OECD figures.⁸³

2.4 The 2009 economic recession

Although Australia is better placed than most countries to withstand the recession pressures, there is considerable uncertainty about the course of the current recession.

Economic recessions affect short-term skill formation by throwing people out of work and reducing employer spending on training. At worst, people who lose their jobs also lose their skills and become long-term unemployed. Economic growth in the longer term can also be jeopardised, as the loss of skills and the reduced intake of new workers and trainees in the recession period creates skill shortages further down the track, combined with lower participation.

⁸² Burgess, John, Campbell, Iain, May, Robin (2008) 'Pathways from casual employment to economic security: the Australian experience' *Social Indicators Research*, Vol 88, Issue 1, pp. 163-4.

⁸³ Foundation for Young Australians (2008) p. 5240.



A key issue is sustaining Australia's skills base into the recovery when skilled workers may again be in short supply. Another priority is to minimise damage to vulnerable groups at risk of leaving the workforce or of long-term unemployment. This section looks at who is being affected by the current recession and what we might expect the recovery to bring.

The diverse impacts of the recession require a carefully targeted response that also anticipates the likely employment landscape in the recovery.

Key data on the 2009 recession

Unemployment

Male unemployment reached 6.1 per cent in June 2009, the highest rate since early 2003. Women's unemployment rate was lower at 5.4 per cent – similar to 2005 levels.

In the year to July 2009, men lost some 117,000 full-time jobs, and gained approximately 54,000 part-time jobs. Women gained both part-time jobs (47,000) and full-time jobs (6,000).⁸⁴

When framing the May 2009 Budget Treasury parameters were that unemployment would peak at 8.5 per cent in 2011 and fall to 6.5 per cent in 2013.⁸⁵ These may be revised: the June quarter unemployment rate was 5.6 per cent, whereas the budget-time forecast was 6 per cent. The Reserve Bank's August 2009 monetary statement notes that: 'concerns about unemployment, though still prominent, are lower than earlier in the year'.⁸⁶

High unemployment is of particular concern because it is concentrated in some locations, families and population groups – typically, new labour market entrants, people working in contracting industries and groups such as immigrants who are often overlooked when employers have an abundance of choice.

Borland notes 'the main aspect of recessions in Australia has been substantial job losses for males who had been working in full-time jobs'.⁸⁷ This is in part because recessions affect industries such as manufacturing and construction more severely than female-dominated industries, leading to job losses for mainly male blue-collar workers. This pattern is evident in the current recession as the unemployment rates suggest.

Youth

Another characteristic feature of the Australian experience is the extreme sensitivity of young people's employment to economic cycles. Young people appear to be suffering more from the current economic downturn, repeating the pattern of previous recessions. They are currently experiencing unemployment at nearly three times the rate of older people,

⁸⁴ ABS (2009) *Labour force, Australia*, July 2009, ABS Cat. No. 6202.0, Table 01: Labour force status by sex.

⁸⁵ Australian Government (2009) *Budget strategy and outlook 2009-2010 – Budget Paper No. 1: Economic outlook*, available at: www.budget.gov.au/2009-10

⁸⁶ Reserve Bank of Australia (2009) *Statement on monetary policy*, released August 7 2009 available at: www.rba.gov.au

⁸⁷ Borland, Jeff (2009) 'What happens to the Australian labour market in recessions?' in *Australian Economic Review*, vol 42, p 234.



reflecting their lower levels of skills and qualifications, especially of teenagers who are not continuing their studies.

Table 5 compares jobs lost or gained and unemployment rates for young and older people.

Table 5: Jobs lost and unemployment rates by age, July 2008 to July 2009

		People aged 15 to 24 years	People aged 25 or older
Job change	no.	-97,400	85,700
Unemployment rate	%	12.4	4.4

Source: ABS *Labour force, Australia*, July 2009, Cat no. 6202.

Population: Civilian population aged 15 years and over.

Despite the sensitivity of the youth labour market to the economic downturn, it seems that to date the fall off in apprenticeships and traineeships has been milder than expected. Toner reports that in NSW there has been a 14 per cent reduction in apprenticeships starts in 2008 to 2009 compared to 2007 to 2008.⁸⁸ This compares favourably with the more dramatic reductions in the early 2000s, and is being partly offset by increased completion rates and reduced cancellations.

NCVER data suggests that the decline in apprenticeship commencements is greatest in the construction, electro-technology, automotive and wood trades. Another positive aspect is that the experience of non-trade apprentices or trainees appears to be more favourable.⁸⁹

Immigrants

Just as young people are typically hit hard by economic recession, so too are immigrants from non-English speaking countries. As of mid-2009, all overseas born people who arrived later than 2001 had higher rates of unemployment than Australian-born people and longer-established immigrants. Those from non-English speaking countries who arrived in the last eight years were twice as likely to be unemployed as Australian-born people (see Table 6).

Table 6: Unemployment rates by birthplace, June 2009

		People born in Australia	People born overseas			
			Main English speaking country		Non-English speaking country	
			Arrived before 2001	Arrived after 2001	Arrived before 2001	Arrived after 2001
Unemployment rate	%	5.3	4.6	6.4	6.4	11.3

Source: ABS *Labour force, Australia*, June 2009, unpublished data.

Population: Civilian population aged 15 years and over.

⁸⁸ Toner, Phillip (2009) Paper presented at *NCVER Training for recovery experts forum*, Canberra, July 30, 2009.

⁸⁹ Loveder, Phil (2009) Paper presented at *NCVER Training for recovery experts forum*, Canberra, July 30, 2009.



As with workforce participation, there is a spatial dimension to unemployment. Jobless rates are higher and of longer duration in Tasmania and South Australia; in regional and rural towns as opposed to capital cities; and in outer low-income suburbs.

The Centre of Full Employment and Equity estimates that some 15 per cent of suburbs in capital cities and large regional centres are at high risk ('red alert') of job loss in the current recession. Another 27 per cent are considered to be at medium risk ('amber alert').⁹⁰

Under-employment

As in the past, under-employment is growing more quickly than unemployment in the current recession. Table 7 shows the change from May 2008 (before the financial crisis) to May 2009.

Table 7: Unemployment and under-employment in 2008 to 2009

Measure	May quarter 2009	Percentage point change from previous year
Underutilisation %	13.4	3.4
Unemployment rate %	5.7	1.5
Under-employment rate %	7.7	1.8

Source: ABS *Labour force, Australia*, May 2009, Cat no. 6202.

Population: Civilian population aged 15 years and over.

Over 1.5 million people (13.5 per cent of the labour force) were unemployed or under-employed in August 2009 (seasonally adjusted figures). Around 660 thousand were unemployed, and some 880 thousand had a job but wanted to work more hours.

Long-term unemployment

Long-term unemployment is defined as people who have been unemployed for over 12 months. It tends to increase quickly in the early stages of a recession and is hard to reduce in periods of upturn.⁹¹

Persistent unemployment, or repeated bouts of joblessness, can make it difficult for people to gain secure, continuing work again despite major efforts. A study conducted in 2001 showed that people who in 1995 reported being unemployed for two years or more had in fact spent over half of their adult lives since full-time education looking for work.⁹² The same study found five clusters of people over-represented among the long-term unemployed:

⁹⁰ CoffEE/URP (2009) *Employment vulnerability index*, http://e1.newcastle.edu.au/coffee/indicators/job_loss_index/index.cfm, accessed 30 June 2009. CoffEE's analysis is based on the both individual characteristics of residents and those of the suburb.

⁹¹ Chapman, Bruce (1993) 'Long-term unemployment: The dimensions of the problem', *The Australian Economic Review*, Iss 102, pp. 22-6.

⁹² Webster, A. M. and Webster, Elizabeth (2001) 'Long-term unemployment and work-deprived individuals: Issues and policies' Centre for Economic Policy Research, *Discussion paper* p 445.



- a slightly older, mainly female group who had worked in low or medium skilled jobs in the past and had a patchy attachment to the labour force
- non-English speaking background people with higher than average education but who did not speak English well
- younger than average men retrenched from low-skilled jobs
- slightly older than average people with non-English speaking background parents, many with a disability, and many living in a rural area
- young people who did not complete high school looking for their first job.⁹³

In addition, long-term unemployment is concentrated in certain households. This is part of a contemporary Australian trend towards polarisation between no-work and all-work families.⁹⁴ Even before the current recession, nearly 25 per cent of households headed by single mothers, single fathers and people with a disability had no household member working for three years or more. Nearly nine per cent of children in 2004 had been in jobless households for three years or more.⁹⁵

The recovery

A feature of past Australia recessions has been different rates of employment intensity and changes in the composition of the workforce on recovery. While globally exposed industries such as manufacturing are suffering, the global financial crisis may also generate positive impacts on jobs and skills stemming from reduced 'financialisation' of economic activity.⁹⁶

Graph 7 shows the contrasting patterns of employment growth following Australia's two recent recessions, and the pattern so far in the current one. It depicts the job-rich 1980s recovery and the relatively jobless 1990s one.

Some researchers have argued that greater attention to the intensity and quality of jobs coming out of the recession could help to avoid 'history repeating itself'.⁹⁷ One area of investment for the future is those industries likely to expand as a result of climate change. The Australian Council of Trade Unions has called for training support for rapidly growing industries such as renewable energy, increased investment to help Australian green industries compete globally, and 'a comprehensive workforce development plan to make existing and new jobs environmentally sustainable'.⁹⁸

⁹³ Webster and Webster (2001), p. 19.

⁹⁴ Vinson, Tony (2009) *Jobless families in Australia: their prevalence, personal and societal costs, and possible policy responses*, Commonwealth of Australia, January 2009, p. 2.

⁹⁵ Vinson (2009) p. 1.

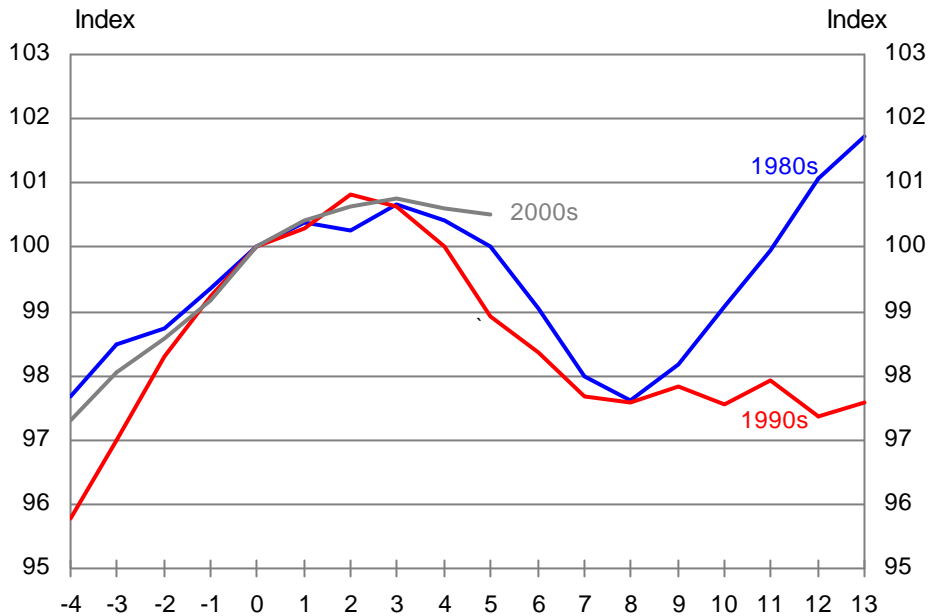
⁹⁶ More stable and secure employment systems, for example, could develop in industries where the heightened financial activity of the last decades has created intense competitive pressures.

⁹⁷ Buchanan, John, Yu, Marginson and Wheelahan (2009) *Education, work and economic renewal*, an Issues Paper prepared for the Australian Education Union (unpublished version), June 2009, p. 8.

⁹⁸ ACTU (2009) *Jobs and rights charter for working Australians* July 2009, available at www.actu.asn.au



Graph 7: Employment growth in Australia following recessions



Source: ABS *Labour force, Australia* Cat no. 6202.0 as analysed by Treasury

Population: Civilian population aged 15 years and over.

Note: Zero is the quarter in which the unemployment rate reached its lowest point in each cycle. The other numbers represent the number of quarters before (negative) or after (positive) this point. The index number shows how employment changed in percentage terms in each downturn. 100 = employment at 0 quarter.

International comparisons

Australia's current unemployment rate of 5.8 per cent is higher than Japan's at 5.4 per cent, and lower than Canada (6.6 per cent) and the US (9.5 per cent).⁹⁹ At the end of March 2009, Australia's unemployment rate was the tenth lowest among the 30 OECD countries.

Australian unemployment is expected by Treasury to peak at 8.5 per cent in 2010 to 2011 (as discussed in the section on unemployment above). The OECD countries are predicted to average 10 per cent unemployment at this time.

Despite Australia's relatively positive results overall, Sweet observes that in recessions, Australia's social institutions and labour markets offer substantially less protection to young people than in almost any OECD country other than New Zealand.¹⁰⁰

Australia has a lower proportion of jobless households than is common among most industrially developed nations but the picture changes when the focus is on children growing up in households with no adults working. Viewed from that angle, Australia has a

⁹⁹ OECD.StatExtracts (2009) at www.oecd.org. Data is for June 2009 and was extracted on 5.8.2009.

¹⁰⁰ Sweet, Richard (2009) Paper presented at *NCVER Training for recovery experts forum*, Canberra, July 30, 2009. Sweet notes that in several European countries, higher rates of participation in education provide far greater protection from economic vicissitudes and this relationship is muted.



very high incidence of children growing up in those circumstances. This high incidence is similar to other English speaking countries (other than the US). OECD estimates converge on a figure of around 700,000.¹⁰¹

2.5 Growing complexity requires localised and collaborative solutions

Policy and program solutions have in the past tended to conceive of remedies for workforce productivity or unemployment simply in terms of either 'skill' or 'job' solutions. But a more complex and devolved approach acknowledges the interdependence of social, economic and ecological factors as well as global market influences affecting regions and industries.

There is often not just 'the one' workforce participation problem. Some regions or industry sectors operate in circumstances of low skill intensity as well as related environmental, market or regional workforce characteristics.¹⁰² These characteristics also affect the nature of employment, the demand for skill or opportunities for up-skilling available within particular communities. Regional or local skill issues experienced by employers may sometimes result from shortcomings in the education system, while in other cases, they will result more directly from industry practices and choices made by individuals and families. Up-skilling the unemployed, or those in jobs will only deliver positive outcomes if employers can offer immediate employment of a suitable quality where people can continue to develop and use their skills.

Effective approaches mean ensuring such strategies also include strong linkages to employers, workplaces and industries. Employer participation in recruitment and training, the creation of flexible entry-level jobs, and the development of collaborative relationships between the social partners are key strategies in bringing this about.

The role of education providers

Education and training currently play a strong role in providing pathways into work for those outside the workforce or weakly attached to it. The vocational education and training sector in particular caters to people from low socio-economic backgrounds and those on the margins of the workforce. In 2008, 19 per cent of Adult and Community Education (ACE) students, 15 per cent of TAFE and 10 per cent of private VET students were not in the labour force prior to enrolment. Nearly half of VET students in 2008 had left school before Year 12, and one-third had completed only Year 10 or below.¹⁰³

¹⁰¹ Vinson (2009b) p. 1.

¹⁰² Beattie, Lee (2008) 'Down the Track-Dairy 2020: Creating a strategic direction for the dairy industry in south west Victoria and south east South Australia', WestVicDairy. See also South Australia Works in the Regions program which operates through 13 Regional Development Boards and takes a targeted approach to training and employment.

¹⁰³ Watson, Ian (2009) Socio-economic background of VET students compared to university students, report to Skills Australia, p. 22. The figures quoted are derived from the NCVET Student Outcomes Survey.



Nearly half of VET students in 2007 described their household-of-origin circumstances as 'poor' or 'just getting along'.¹⁰⁴

Population ageing, demographic and lifestyle changes in Australian society suggest that, more than in the past, education providers need to offer diverse learning opportunities to suit people's different situations and preferences. Women's increased participation in paid work, and the reduced participation by men noted above, are indicative of other shifts in when people are timing key life events, such as entering a couple living arrangement, getting a job, having children, studying and retiring, over the course of their lives.

Today, the most common household in Australia is the couple household in which one person does paid work full-time and the other part-time.¹⁰⁵ This contemporary household contrasts with the traditional 'breadwinner' model of a male full-time worker coupled with a stay-at-home mother, the household arrangement characteristic of much of last century.

Students are far more likely to combine study with paid work today than in the past, and older people, as well as parents and students, are blending paid work and other activities. In addition, many people (20 per cent across Australia) undertake voluntary work whether they are doing paid work or not – especially those living in rural communities.¹⁰⁶

Such changes have implications for workplaces, workforce skills and education and training systems. On the basis of an investigation of Australian life courses between 1981 and 2001, Martin argued that:

- there has been a proliferation of common life pathways so that it is more difficult to predict when people will make their skills available on the labour market and who will be tomorrow's students
- there has been a sharp growth in the number of single mothers, and in people aged 29+ who have not studied before entering part-time post-school study
- men without full-time jobs and other 'non-conventional students' also began to study at different times in their life courses.¹⁰⁷

Social inclusion strategies involving, for example, 'wrap around services' to address the challenges associated with particular locations, or social characteristics such as disability complement this educational effort by helping to smooth transitions into and between jobs. The Australian Government Innovation Fund projects operating between 2009 and 2012, which include job-linked holistic strategies addressing the specific needs of job-seekers, will provide new opportunities to evaluate the effectiveness of such approaches in Australia.

Indeed, the complex and diversified nature of the contemporary workforce is one reason why localised solutions to workforce and skills issues are growing in popularity and success. In reviewing the Australian experience to date, the OECD notes:

¹⁰⁴ Watson, Ian (2009) p. 13. The figures quoted use HILDA longitudinal data on the 2001 household circumstances of students enrolled in 2007.

¹⁰⁵ Van Wanrooy, Brigid, Jakubauskas, Buchanan, Wilson and Scalmer (2008) *Australia at work, working lives: statistics and stories*, p. 14.

¹⁰⁶ ABS (2009) *A picture of the nation: the Statistician's report on the 2006 Census*, Cat no. 2070.0, pp. 103-5.

¹⁰⁷ Martin, Bill (2009) 'Skill acquisition and use across the life course: current trends, future prospects', *Australian Bulletin of Labour*, Vol 35, Iss 1, pp. 287-326.



*There is a need to translate and customise national labour policy to the local level.... Local institutions are best placed for developing processes of strategic employment planning, where available talent and demand for skills can be analysed to design interventions in a particular employment space.*¹⁰⁸

The above data indicate that Australia's employment potential is not being fully realised by certain segments of Australian society. One large group is men without non-school qualifications whose participation and employment rates are comparatively low. Under-employed people – those who want more work – and those on the margins of the labour force report a range of social barriers to increased engagement with work. There is a general tendency for those who have left school early or who have limited skills acquired in the workplace to be at greater risk of marginal attachment to the labour market.

While there are national programs in place to address these issues, there is also evidence that certain locations in Australia experience greater disadvantage than others. As such there are potential benefits in more customised services linked to local employment solutions that meet place-based demands.

The US National Fund for Workforce Solutions offers the following summary of its experience in assisting disadvantaged adults to advance into quality jobs:

- focus on solving the problems faced by workers and businesses, not on increasing worker skills and job placement
- create flexible partnerships ('workforce intermediaries') that have strong connections to employers and the community. Use them to address workers' career needs, which are broadly defined to include social and welfare support, financial literacy, basic and vocational skills and career management assistance
- build relationships, don't engage in transactions
- work to change business practices in terms of employment and government practices in terms of funding arrangements
- adopt a long- term orientation.¹⁰⁹

Similar themes, plus some additional ones, emerge in the more innovative Australian work. The Brotherhood of St Lawrence documented four community initiatives taking place in Victoria, and identified the following challenges such face if they are to expand:¹¹⁰

- use of intermediate employment – community-based 'host' employers, or temporary, supported placements in the private sector were successfully used to provide a transition between unemployment and open employment. Group Training Companies and other community based organisations offer scope to expand this strategy

¹⁰⁸ Giguère, Sylvain (ed) (2008) *More than just jobs, workforce development in a skills-based economy*, OECD, p.183.

¹⁰⁹ National Fund for Workforce Solutions (2008) *Experience and evidence*, November 2008, available at www.iff.org

¹¹⁰ Ziguras, Stephen and Kleidon, Jacinda (2005) *Innovative community responses in overcoming barriers to employment*, the Brotherhood of St Lawrence for the Department of Victorian Communities.



- partnerships – among program providers are seen as valuable. The complexities of government program silos need to be recognised and partnerships with a small number of organisations work best
- better direct links to employers – attention to stronger industry level and local employer links, with the aim of creating feeder pools into industries experiencing shortages in specific occupations.

Current government settings

A broad suite of national policy settings are aimed at tackling increased workforce participation. These include:

- increasing taxation rebates for childcare and removing welfare-based disincentives to workforce participation in order to boost workforce participation, especially among women. The proposed introduction of an 18-week paid parental leave scheme in Australia in 2011 is designed to add approximately half-a-year to average female lifetime employment¹¹¹
- progressive increase in the qualifying age for the age pension to 67 by 2023 in recognition of the expanding numbers reaching pension age and the increased time spent on the pension (currently 19 years on average for men)¹¹²
- the concept of 'learning and earning' for young people, national commitments to raising school retention rates and providing entitlements for publicly funded training. The Council of Australian Government's 2009 *Compact with Young Australians* involves a *National Youth Participation Requirement* which will make participation in education, training or employment compulsory for all young people until they turn 17¹¹³
- halving the gap in employment outcomes between Indigenous and non-Indigenous Australians was agreed by the Council of Australian Governments in 2008¹¹⁴ as one of its six key *Closing the Gap* targets for 2017; this will require the employment of an additional 100,000 Indigenous people
- the 2009 *Jobs and Training Compact* involves complementary measures to encourage young people into education and training, to help retrenched workers and to coordinate job creation in local communities. It is complemented by a range of education and training initiatives, described in Paper One, and including funding to give an additional 711,000 job-seekers and existing workers the opportunity to gain new non-school qualifications through the Productivity Places Program.

¹¹¹ Australian Government (2009) *Paid parental leave, support for parents with new-born children*, Productivity Commission Inquiry Report no. 47, February 2009, p. xiv.

¹¹² Australian Government (2009) *Budget overview - secure and sustainable pensions*, 12 May 2009 found at www.budget.gov.au/2009-2010

¹¹³ COAG (2009) *Communiqué* - April 30 2009.

¹¹⁴ COAG (2009) *National Integrated Strategy for Closing the Gap in Indigenous Disadvantage*, 2 July 2009.



Issues for discussion

- ***Young people are especially vulnerable in economic downturns – what are the best long-term protections to defend young people in these cycles?***
- ***Are there ways in which assistance to redundant or under-employed workers could be more effectively linked to retraining for growth occupations?***
- ***What measures might assist to promote high quality job growth during and after the recovery?***
- ***Do Australia’s programs for people out of work or outside the labour force connect effectively with the needs of employers and workplaces?***
- ***How could programs that are designed to link people into jobs also cater to under-employed people seeking to advance into higher quality jobs?***
- ***Characteristics of some communities with long-term unemployed have been described as ‘webs of disadvantage.’ What insights do we have from successful programs in these areas that can be more generally applied or built into other programs to address links of unemployment and disadvantage?***



Section 3: The elements of a workforce development response

This section indicates there is a wide range of activity currently undertaken in Australia related to workforce development. But there is often a disconnection between these initiatives, leading to duplication and missed opportunities to share and strengthen good practice.

A framework is outlined describing the elements for more concerted responses to underpin an Australian Workforce Development Strategy.



3.1 Introduction

Workforce development is concerned with the factors that encourage both skill formation and skill use. It therefore encompasses activities beyond education and training. This understanding of workforce development corresponds to the OECD definition derived from a recent study of current practice around the world:

*The comprehensive management of human resources, so as to better meet the demands of a global economy at both the national and local levels, through improving economic competitiveness and social cohesion.*¹¹⁵

Workforce development approaches are becoming widely adopted around the world. The OECD's new framework for workforce development derives from a series of projects in East Asian countries such as Korea and Japan that centre on local employment and skill initiatives. Similar thinking informs recent skills and workforce development strategies released by the Scottish, Welsh, Irish and New Zealand governments.

Australia is building a presence as a leader in the workforce development space. The OECD currently recognises Australia as an innovator in workforce development and skills utilisation and observes the sophistication of the industry discussions here, commenting that in Australia:

industry networks...increasingly understand the limitation of taking short-term approaches to filling labour shortages...

Within Australia, state and territory governments, Industry Skills Councils and industry associations, education providers, research organisations and intermediaries are embracing workforce development, and many of the options proposed in this paper are derived from the policies and projects they are trialling to better connect education with industry and enterprises.

The initial consultation process and scan of workforce development-related initiatives undertaken to inform the development of this paper has uncovered a rich and varied array of policies, projects, resources and services taking place across Australia under the banner of 'workforce development'. This section of the paper considers the options and opportunities to link, focus and advance capability to undertake this work.

'Workforce development' is defined as:

Those policies and practices which support people to participate effectively in the workforce and to develop and apply skills in a workplace context, where learning translates into positive outcomes for enterprises, the wider community and for individuals throughout their working lives.

¹¹⁵ Giguère, Sylvain (ed) (2008) More than just jobs. Workforce development in a skills-based economy, OECD, p 11.



3.2 Lessons on workforce development so far

Across Australia, various government-sponsored initiatives form part of our current workforce development response. Some support the goal of improving business capability, and approach human resources management and development issues from this perspective. Others come from an education and training angle, and approach workplace development and the effective use of skills in enterprises to varying degrees. These approaches are summarised below; not covered is the equally large range of commercial, consultant-based services, although there is some overlap as some government-funded programs are delivered by consultants and advisers.

Types of initiatives

VET-industry partnerships

The VET sector has undergone more than a decade of reform with the aim of developing a more industry-led, responsive system. Good practice training organisations today routinely work in partnership with their clients to meet an enterprise's specific workplace requirements. Some extend much further to offer whole-of-enterprise solutions spanning business and skills needs assessment, training and learning support services for all levels of an enterprise.

There are many examples of this work across Australia. A range of TAFE NSW industry-partnership models are described in *Improving the bottom line: why industry values partnerships with TAFE NSW*. In Victoria, Goulburn Ovens TAFE has established 'Innovent' as a dedicated service arm that partners with enterprises to analyse business needs and identify where and how education and training can improve performance for individuals and industry. This often requires collaboration with human resources, technical experts and business consultants to bundle holistic solutions. In Western Australia, Central West TAFE introduced the role of 'Training Alliance Manager' in the early 2000s, whereby individual businesses can purchase a number of hours of a training adviser's time to help them identify and respond to the learning needs of their workforce.

Such partnerships sometimes result in sharing of leading edge facilities that are used by both the industry and the education provider for training, often featuring substantial industry funds, equipment and in-kind contributions. Examples are the Australian Centre for Energy Process Training at Western Australia's Challenger TAFE; The Automotive Centre of Excellence at Victoria's Kangan Batman TAFE; and a plumbing and piping industry training centre at South Australia's Urrbrae TAFE College.



Higher education-industry partnerships

'Knowledge transfer', 'third stream' or 'engagement' activities by universities are enormously varied,¹¹⁶ with commercialisation of research seen as only a small part of the social and economic impact that higher education has on communities. Knowledge transfer is seen to be most effective when it involves structures for collaboration such as partnership, alliances and joint venture, indicating that demand side factors are influential in the success of networks applying research in business or other contexts. Both Philips KPA and Howard Partners describe a number of best practice examples where the industry-workplace-academic connections are strong. Those sponsored and supported through industry associations are seen as more effective than networks supported by universities and research organisations and others.¹¹⁷

Business capability programs

State and federal industry development agencies provide services to support business access to knowledge and ideas, and to provide business management and development assistance. Such programs typically fund an initial business review which links to further support including human resources management, export and marketing consultancy, and training.

The enterprise is generally expected to contribute 50 per cent of the cost of further assistance. Enterprise Connect, targeting some 1,500 businesses per year, is a new Australian Government program with this remit. Its main focus is on the manufacturing industry, as well as creative industries, clean energy, defence, mining technology and remote business. Some state-based initiatives provide a more specific focus on workforce development issues in business. For example, workforce and training specialists announced under the Victorian Skills for Growth program will provide direct assistance to 1500 small and medium enterprises each year. Expert brokers and advisers that can bridge the language and culture gap between business, education and training are also a feature of other State initiatives. Related approaches focus on streamlining access to information and resources through one-stop shop models and web-based resource and information links.

Industry or regional initiatives

There are a number of examples of industry and regional workforce development initiatives underway across Australia.

For example, the development of the Australian health workforce has been the subject of wide ranging reforms across all states and territories and at the national level. This has been driven by a series of COAG intergovernmental agreements over the last several years. At one level it involves changes such as the introduction of a national regulatory

¹¹⁶ PhillipsKPA (2006) 'Knowledge transfer and Australian Universities and publicly funded research agencies', Department of Education Science and Training.

¹¹⁷ Howard Partners, 2005b, *Knowledge exchange networks in Australia's innovation system: overview and strategic analysis*, Report of a Study Commissioned by the Department of Education, Science and Training.



regime and streamlining of professional registration. At another it entails workforce innovation through the realignment of existing workforce roles or the creation of new roles with a greater focus on multidisciplinary and holistic approaches to care.¹¹⁸

Regional bodies often work with industry and education stakeholders to identify and address skill and workforce issues. In Western Australia, the Goldfields-Esperance Workforce Development Alliance describes its goals as ‘to share the intelligence, resources, knowledge and expertise across all stakeholders to determine the most effective and efficient approach to training and employment needs of the region. The end result being a skills ecosystem for the region that is self-perpetuating, increasing a skilled labour force, attraction and retention productivity and regional economics.’

Industry and regional cluster projects funded under the National Skill Ecosystem Program¹¹⁹ have undertaken a range of activities, including developing improved employment arrangements to support skill development in the racing industry; brokering new relationships between training organisations, small firms and researchers in the water industry; developing a strategy for inter-service cooperation in mental health services; redesigning allied health service roles in aged services; and the development of innovative models for linking business development with skill development in the digital content industry.

The Queensland Government has funded over 50 Skill Formation Strategies designed to develop capacity of specific industries and communities to address their workforce planning and development issues.

Tools and resources

There are a growing number of tools and resources designed to assist small and medium businesses with workforce planning, human resource management, training needs assessment and workforce development. Key players include state training authorities, Industry Skills Councils and their state counterparts.

Examples of web-based tools include the National Industry Skills Committee On-Line Workforce Development Starter Tool, the Tasmanian Government’s Better Workplaces web-site, the NSW Government’s Seek, Training Attract and Retain (STAR), the joint Industry Skills Councils skills audit tool, and resources on the Business Victoria web-site.

Bridging and brokering activities

Some state governments and Industry Skills Councils offer training advisory services to enterprises, some of which are linked to tools described above. These are aimed at helping enterprises analyse their training needs within a whole of business context, and steering them towards the education and training products and services most appropriate to meeting them, where these are necessary.

¹¹⁸ National Health Workforce Taskforce (2008) *Workforce innovation and reform: caring for older People* Discussion Paper.

¹¹⁹ See www.skillecosystem.net



Examples include Skills Victoria's 2009 Skills for Growth initiative targeting 5,500 small and medium enterprises and Government Services Australia's Get Smart, Get Skilled program. The NSW Department of Education and Training is moving to a client brokerage model delivered through regional Skill Centres. It also links workshops to its STAR resource.

Social inclusion

As noted in the previous section, there is a wide-ranging suite of separate initiatives at both the state and federal levels support improved opportunities to participate in work for marginalised groups. While these are not addressed in detail here, notable examples linked to place-based approaches are South Australia *Works* and the Australian Government's *Jobs Fund-Get Communities Working* stream. These approaches link job placement, training and workplace mentoring support and tailor them to individual need. The focus is also on building social capital in the longer term through the involvement of a network of partners in the program.

Features of workforce development initiatives

The initiatives outlined above involve activities that do one or more of the following:

- assist businesses to identify learning needs in a workplace context
- deliver skill development interventions
- address workplace systems and practices
- address common industry or regional issues through collaboration
- support and reinforce skill utilisation.

The intended beneficiary of the initiative is usually *either* an individual enterprise *or* a cluster of enterprises defined by industry, sector or region. The primary focus is on *either* skill development *or* the development of broader business capability. Many programs address both issues, but their initial focus is more strongly either skill or business capability. The matrix in Table 8 shows how different types of workforce development initiatives can be characterised and maps them according to these dimensions.



Table 8: Matrix of workforce development initiatives

Main activity	Enterprise level	Enterprise level	Industry level	Industry level
	Skills focus	Business capability focus	Skills focus	Business capability focus
Identify skill needs in a workplace context	<i>For example:</i> RTOs ¹²⁰ , Industry Skills Councils and their state counterparts support skills analyses	<i>For example:</i> Business analyses identify HR and skill development capability as barriers to business performance	<i>For example:</i> Industry Skills Councils and regional consortia develop regional and industry skill plans; revise training packages to reflect new needs	<i>For example:</i> Industry innovation and development plans which may include a collective response to workforce issues
Deliver skill development interventions	<i>For example:</i> RTOs work in partnership with enterprises to customise training to meet business and individual needs	<i>For example:</i> Business reviews and assistance which may fund skill development among other types of support	<i>For example:</i> Training provision is expanded eg industry coordinates to shared training facility and delivery	<i>For example:</i> Referral and liaison with relevant skill development program areas (across government)
Address workplace systems and practices	<i>For example:</i> RTOs partner to: Reinforce learning eg through mentoring; extend service offerings to training management.	<i>For example:</i> Business support programs which provide individual or group advisory services on improving competitiveness	<i>For example:</i> Industry association or network identifies workplace changes to address common problems such as high turnover, stunted career opportunities, inflexible employment practices.	<i>For example:</i> Industry centres of excellence, Innovation Centres, business foundations.
Support and reinforce skill utilisation	<i>For example:</i> RTOs partner to support enterprises to apply and evaluate skill needs and use	<i>For example:</i> Business analysis advice covers strategic and work organisation issues and implementation proceeds jointly	<i>For example:</i> Collective opportunities to retain and use skills are developed eg shared industry or regional workforce data base	<i>For example:</i> Industries establish arrangements to promote and foster priority skills eg cadetships, alumni and technical groups.

3.3 A way forward

A co-ordinated approach

The diversity of workforce development activities as described above has allowed opportunities to refine practices in this emerging area of work and to examine the effectiveness of different models. However, without a coordinated framework, it can also mean duplicated efforts, inconsistent advice and services to businesses, isolated initiatives, missed opportunities to share learnings and the frustration of promising but non-sustainable models established as one-off projects. Policy and program silos at a government

¹²⁰ Registered Training Organisations.



level, e.g., between agencies concerned with industry development and innovation, those concerned with education and training and those that focus on regional development—exacerbate this problem.

The ideas included below are based on input provided so far by industry and training organisations and are presented in order to stimulate, not confine, thinking.

This Section discusses the elements that could make up an *Australian Workforce Development Strategy*. Section Four outlines potential areas for action towards such a Strategy that could be agreed in one or more government forums, such as inter-governmental councils dealing with education and training, industry policy and/or regional development. The Strategy could also be adopted by other stakeholders, such as Industry Skills Councils or industry and education and training peak bodies.

Levels of co-ordination

AT THE ENTERPRISE LEVEL

This includes actions that further the development and use of workers' skills to support organisational performance. The enterprise focus involves workplace development programs that focus on productivity or innovation at the workplace, their intersection with education and training strategies and broader community actions or industry actions to reinforce such initiatives. Changing how work is organised and job redesign, or different employment policies may be needed to attract or retain a specific group of workers, along with training and mentoring. Similarly, for existing workers, achieving improved performance may require adapting technology and work techniques, as well as skill development.

AT THE INDUSTRY LEVEL

This level includes actions that industry bodies take to strengthen workforce capability and ensure the availability of a suitable workforce to meet short and long term needs. It could range from a collective training facility or program, to a common process/job redesign project, to a quality initiative across a supply chain involving work practices changes and upskilling.

AT THE NATIONAL LEVEL

This level includes actions that governments take to increase individuals' capacity for effective participation throughout their whole working life; to chart the country's future skill and workforce needs and plan provision to which high risk is attached; and support enterprise and individual activities.

What is the role of governments in workforce development?

Governments are interested in unlocking potential – at the individual level and at the workplace level. As noted in Section One, this interest stems from three key goals for Australia: a more innovative, competitive and productive economy; workplaces



characterised by collaboration and cooperation, not conflict; and a society where all people have the opportunity to develop the skills for and gain access to employment.

But governments cannot achieve these goals alone. They can provide leadership and be proactive in establishing new initiatives to encourage and support the education sector and industry to participate in activities related to workforce development. They can also intervene where there is risk of market failure. In times of economic downturn, in particular, they are focussed on retaining jobs. At the end of the day, it is up to enterprises, industries and regional clusters to choose to adapt to become learning organisations, innovators or high performing operations that engage skills well. But governments can also work with partners to remove barriers to ensure funds and incentives – ‘soft’ or persuasive forms of intervention support business decisions that have strong public benefits.

The success of a workforce development focus at the national level will be defined not just in terms of additional training or qualifications, but in terms of organisational performance (for example, higher productivity or return on investment) and individual benefits, such as improved ability to apply skills, expanded job opportunities and re-entry into sustainable employment.

Elements to enhance a co-ordinated approach

In stimulating a fresh approach to the development and application of skills in the workplace, Skills Australia suggests the elements of an *Australian Workforce Development Strategy* could include:

- agreeing on a shared understanding and language for describing and evaluating workforce development
- adopting and applying common principles and agreed outcomes to strengthen current workforce development activities
- strengthening linkages between different types of programs and between state, territory and federal government initiatives and clearer accountability for workforce development
- supporting flexibility of resource allocation to promote change
- addressing systemic connections through new industry-level initiatives.

Each of these is discussed in turn in the remainder of the Section.

Adopting a shared language

The term ‘workforce development’ means different things to different people. Any emerging field of practice benefits from a period of creativity and innovation to generate new approaches and this is certainly true of workforce development. However, it can also hamper efforts to build on this experience, improve synergies and share lessons.

Workforce development action is played out in different industry, regional and organisational contexts and supported by all tiers of government. The same terms can be interpreted quite differently depending on background and expertise of the key players.



The definition of workforce development advanced in this Background Paper encompasses both the development *and* the application of new skills and knowledge. It acknowledges that skills are part of business solutions but are only effective if a clear diagnosis exists of the problem or opportunity that the enterprise or industry faces. This is why industry, regional and organisational context are the critical starting points.

Following the diagnosis, skill development is one of a suite of responses to address business challenges. It sits alongside other related responses, such as investing in new technologies or processes, expanding markets or service offerings, redesigning jobs and work arrangements to provide work opportunities that are more attractive and engaging.

This understanding of workforce development establishes a broader role for educators and trainers and is the reason that partnerships and networks are a fundamental aspect of the approach.

While the workplace frames an understanding of skill development, skill application extends beyond the workplace and underpins broader capabilities to engage and contribute in home and community life. The boundaries between those in work, and those who are not, are not fixed. Meeting people needs in workplaces will increasingly rely on attracting and engaging people who have been marginalised or who find current job arrangements too challenging to balance alongside their commitments outside of work.

Agreeing on principles for funding and indicators of success

Agreed outcomes

Agreement on the desired specific outcomes of workforce development is a critical element in developing a broader shared understanding of what exactly workforce development means.

Some possible industry level outcomes could be:

- improved economic and industry performance supported by the application of skills
- reduction in chronic and ongoing skill shortages
- increased industry capacity to plan and manage workforce development priorities
- a more engaged workforce available to the industry.

At the enterprise or organisation level they could include:

- better business performance
- greater employer satisfaction with the skills of the workforce
- more engaging and rewarding work opportunities
- improved capacity to attract and retain people with the required skills
- lower labour turnover and better return on investment in skills
- increased capacity to develop and apply skills to achieve business outcomes.



Common principles

In addition to clarifying the outcomes of workforce development activities it may also be useful to define and reinforce the circumstances under which these activities yield positive outcomes. Most activity to date targets the enterprise and this could provide a starting point for establishing shared principles.

The first step is a diagnosis to identify the elements of a workforce development response that are appropriate in the enterprise or organisation. Industry development programs offer general business diagnostic tools to assist businesses to identify priorities for improvement. These tools consider such issues as: business planning and strategy; product/service design; market access and opportunities; work process and technologies; sustainability and people-related issues.

A workforce development diagnosis builds on this industry and enterprise level information to specifically explore people related issues. The principal objective of this analysis is to ascertain the alignment of skills with business and organisational processes and the use of technology. Elements might be recruitment and retention issues; work organisation and job design; employee engagement; performance management; succession planning; reward and recognition arrangements; skill development and application.

Where skill issues are identified, shared principles could be adopted to guide funding for initiatives, including but not limited to training and assessment, to meet identified needs. Designing new opportunities for the use or development of skills should take account of the range of ways people learn workplace skills, including formal and non-formal training, mentoring, coaching and informal learning from experimentation or exposure to new work challenges.

A draft approach to principles for funding workforce development initiatives

The following features underpin various models of good practice across Australia, and could form the basis for funding conditions:

- the enterprise has established business goals and identified related skill requirements
- the proposed training or other skill development activity is an appropriate response to the enterprise/organisation's skill needs
- senior and operational managers, or in the case of small enterprises, the owner/manager, and the potential learners, support the training request and have the capacity to foster, reinforce and apply or support application of the skills
- potential learners have adequate English language, literacy and numeracy to undertake training or will develop these skills as a part of training delivery
- the inclusion of all workers, including part-timers, contract workers and casuals is considered where relevant
- work arrangements give trainees opportunities to practice and refine their skills



- the workplace commits to evaluating and reporting the impact of training and related enabling arrangements (such as mentoring) on achieving business goals and improving quality of working life for participants.

Where such features do not yet exist, enterprises could draw on existing skill and business capability programs to develop them. This may be particularly pertinent for small and medium enterprises.

The above principles describe the conditions in which structured enterprise-level training is most likely to yield positive outcomes. Some education and training service providers and workplaces (particularly small and medium businesses) will need support to lay this groundwork. The following section suggests ways to meet this need.

Strengthening linkages between programs and governments

Workforce development activities are often isolated and uncoordinated. Better linkages between programs, and in particular between business capability and skill focused programs, would improve the nature and consistency of workforce development advice and support. It would also facilitate an exchange of information and learning between programs and encourage standard rather than ad hoc referral practices.

Feedback from state and federal program managers suggests that there is a need to clarify portfolio responsibilities and accountabilities for workforce development. Workforce development, like social inclusion activities more generally, crosses jurisdictional and portfolio boundaries. New ways to engage across the breadth of layers of government and different portfolio areas are needed.

At the same time, the strength of this framework relies on different program managers adapting and embedding core concepts and principles into their own policies and programs. In early consultations on this paper, the question has arisen about the potential role for a national resourced network, body or centre to provide a vehicle to more effectively co-ordinate, exchange and build new knowledge and expertise in workforce development.

Possible roles for such a network, body or centre of excellence could include:

- building an evidence base and establishing an international workforce development think tank
- developing indicators that allow the national system to better understand skill usage, and measure the value of workforce development activity
- facilitating a national professional development strategy for education providers
- providing an information and knowledge clearing house, offering guidance and support on models for applying, reviewing and refining workforce development principles; and
- supporting robust methods to track and report on outcomes.



Supporting flexibility of resource allocation

Workforce development activities extend well beyond traditional notions of education, training and skill development. One of the challenges is to develop and bundle the expertise required to support this work. Although there are many examples of excellent innovative education programs and services, taking the agenda forward will require a shift from these being exceptional to becoming part of 'business as usual' for more tertiary education providers. Changed or more flexible funding arrangements could provide an effective lever to influence service development.

There have been a number of experiments to provide Australian TAFE Institutes and other registered training organisations limited flexibility to apply public training funds to support new service development. For example, the Victorian Innovation Fund initiative established in 2003 enabled some TAFE Institutes to trial new skill development approaches to meet the needs of students, workers, businesses and industry. It may be timely to review the results of such initiatives to identify opportunities to support more widespread capability to adopt and implement agreed workforce development principles.

In a similar vein, the role of university-based and specialist research centres in generating and commercialising innovation is widely recognised. These are formalised in a range of public-private research partnerships including some 170 Cooperative Research Centres involving researchers, students and companies. The recently announced Researchers in Business initiative, places researchers from universities or public research agencies in small and medium-sized businesses for two to twelve months to help develop ideas into commercial opportunities.

Looking to program initiatives outside the education and training sector is also important to address how effectively skilling can be woven into such investment. For instance, the Clean Energy Trade and Investment Strategy promoted through a \$14.9 million Austrade and Enterprise Connect partnership over the next three years to assist clean energy companies to globalise their operations is an example of where enterprise focused policy and programs can effectively integrate with broader economic or social policy.

The question has arisen as to whether Australia's national investment and resource agreements for tertiary education and other programs that work in enterprise and industry settings clearly support workforce development initiatives. In addition to promoting flexibility in the way current funding design supports customised solutions for enterprise skills issues, specific initiatives have been suggested which require stakeholder feedback. The redesign, or earmarking of a segment of an existing program, such as those noted above, or a new program, could be trialled to support education and training organisations to develop and extend their services to undertake activities to improve learning outcomes and skill utilisation. Together with the contributions that are currently made by industry and enterprises, this could facilitate higher quality outcomes from training as well as productivity outcomes for enterprises.

Access to a specific funding stream of this sort would need to be linked to indicators or outcome measures such as those proposed above. It is envisaged that over time, public funding seeded to such program initiatives would be offset by industry contributions as



greater enterprise profitability emerges from the better utilisation of skills and improved operations. An aspirational view is that such programs might become partially or fully self funded, as returns on investment become readily apparent to enterprises and they are able to assess the potential value of the investment made in workforce development initiatives. Consideration could also be given to alternative or complementary uses for the nearly \$900 million of employer incentive payments currently attached to the employment of apprentices and trainees.

Further consideration of the dimensions of resourcing workforce development also relate to many of the traditional assumptions about 'training' – in terms of what is paid for, who leads it and what it constitutes. For instance, international and Australian researchers¹²¹ have pointed to the importance of non-formal, informal and co-operative workplace based learning and the fact that public policy tends to concentrate on a fairly narrow range of formal learning, with little attention to these other important modes. The wide variety of informal and non-formal approaches to learning, and employees' and employers' ongoing interest in them, have been a characteristic of recent workplace training, and will be increasingly important as learners age. But these forms of learning – and importantly their relationship to workplace innovation, are not well recognised in current policy and skill investment settings.

A further aspect of this discussion is the nature of specialist skills that may be required to facilitate or support the integration of workforce development approaches to skills. On the one hand, management culture and human resource skills within organisations will play a role in leading new approaches to design of goods or services or other organisational developments. On the other hand, assistance outside the enterprise may be required to address a range of complex skill and human resource issues- particularly among small to medium level operations. Typically, this support has been provided by the education and training sector – but the traditional role definition and resourcing framework of educational and training practitioners providing services in the workplace will be challenged as they embrace the wider expectations of a workforce development agenda.

Addressing systemic connections: new industry-level initiatives

As noted above, most government-supported effort has been directed at enterprises. While this is valuable for the enterprises involved, some of the systemic issues influencing the choices and decisions of individual enterprises require industry-level responses. There is a risk that individual enterprise solutions leave untouched the institutional changes that might prevent the same issue emerging in other contexts.

There appears to be a gap in terms of industry-level initiatives that tackle institutional and systemic workforce development issues. Where industry-level initiatives are taking place,

¹²¹ See eg Australian Industry Group (2008) *Skilling the existing workforce, final project report*, at www.aigroup.com.au; Felstead, A in Keep, Ewart 'New directions and new possibilities in workplace development' delivered at Sydney University Workforce Research Centre seminar 7 August 2009.



they usually involve workforce planning rather than workforce development as defined above.

One option to address this gap is to consider the potential of industry-level skill ecosystem or cluster-based approaches.¹²² This style of workforce development activity draws in a broad range of stakeholders, including the key employers and trade unions, business and skill development experts, researchers and regulators. It also seeks to build the capacity of key industry bodies to identify and manage skills issues for the industry, independently of government.

The term 'ecosystem' captures the notion of an intersecting and mutually reinforcing equilibrium between skills supplied by the training system and skills demanded and applied in workplaces. While this equilibrium can be understood at the enterprise level, an industry approach goes beyond finding solutions to specific problems to promote broader industry capability to plan and manage skill development. It offers potential to engage, influence and share learning with larger numbers of enterprises. It also positions industry to develop a critical mass of workforce development activity that is mutually reinforcing and sustainable.

Issues for discussion

- ***Is it timely to consolidate Australia's diverse workforce development activities and articulate a national workforce development framework? What priority actions need to occur?***
- ***What should a national workforce development framework include and who would it address?***
- ***Who are the key parties responsible for workforce development? What is governments' role? What is the best way to get an invigorated national focus on workforce development?***
- ***How can education and training best support workforce development and the use of skills in enterprises?***
- ***Should an industry-level program focus on priority industries or issues, such as industries of national economic importance, or industries and regions facing structural adjustment in the face of environmental pressure***

¹²² As well as skill needs, skill ecosystem projects address aspects of the industry environment that influence the development, application and replenishment of skills in the workplace. Projects seek to strengthen and sustain the whole 'skill ecosystem' and explore new ways of doing this that will benefit the sub-sector as a whole. See appendix (1) for details. The initial Skill Ecosystem pilot ended in 2007. See www.skillecosystem.net.au



Section 4: Scoping a workforce development response

In this final section we outline possible actions to assist in developing a more concerted national focus on workforce development issues.

We focus on the remaining two of the three interrelated action dimensions outlined in the Forward. Background Paper One has covered the first dimension—the demand for future skills. Here we consider how to improve the use of and value from workplace skills and how to join up separate areas of government and industry action that envelop wider economic and social strategies.



4.1 What do we need to achieve?

Three interrelated actions

Within Australia, state and territory governments, Industry Skills Councils and industry associations are embracing workforce development, and many of the options proposed in this paper are derived from the policies and projects they are trialling.

These local, as well as international examples noted earlier provide the seeds for a co-ordinated Australian initiative on *'powering the workplace'* at the enterprise level to harness and capitalise on the record national investment in education and innovation.

Skills Australia's approach to conceptualising a comprehensive approach to a national workforce development strategy seeks to encompass three interrelated actions:

- addressing the question of future jobs, to understand the risks and opportunities, and know what we need to plan for —the major focus of Background Paper One.
- improving the use of and value from the workplace skills that are acquired, including through improved workforce participation, job retention, productivity and job design, and
- joining up separate areas of government action on workforce participation, social inclusion and innovation so policies on skills envelop wider economic, employment and social strategies.

Why have an Australian workforce development strategy?

The rationale for governments' and others' engagement in a workforce development strategy is to offer a way of integrating education and training policies with economic development, social inclusion and sustainability measures. Such a national strategy has the potential to ensure governments, education and training providers and industries bodies collaborate to:

- sharpen the way we think about and plan for future skills
- improve access to development and job opportunities among workers who are currently under-employed
- help ensure better use of people's skills in Australian workplaces
- maximise the participation of the working age population in the workforce
- increase the demand for high skills
- develop customised and collaborative local solutions
- improve coordination between government programs that focus on enterprise and industry capability.



A workforce development strategy would aim to overcome disconnections or missed opportunities to share and strengthen good practice occurring at government level—eg. between agencies concerned with industry and innovation, those concerned with education and training and those that focus on regional development. The development of strong partnerships, networks and collaborations between education bodies, industry and specialists is a feature of workforce development.

Strategic priorities

Skills Australia has envisaged four strategic priorities in conceptualising a concerted national approach to workforce development. We suggest actions that might take place at the national, industry and enterprise level to underpin them.

Skills Australia seeks feedback from consultations on the following priorities for a workforce development strategy to explore the challenges of each and opportunities for change and also to identify the key actors needed to work as partners to drive change.

- Identifying and meeting Australia's skills and workforce needs into the future consistent with sustainable economic growth, but also adequately preparing for the risks of alternative economic, demographic and social scenarios.
- Establishing a shared national agenda on a comprehensive strategy for Australia's future workforce to support people to better connect with work, capitalise on our skills and position ourselves for future challenges in the globally community.
- Improving educational and workforce participation levels where barriers continue to exist – with a special focus on localities, or groups experiencing high levels of disadvantage.
- Promoting demand for and the full use of high skills in workplaces to complement public investment in education and training – powering the workplace to make the most of Australia's education revolution and innovation strategies.

4.2 Potential areas for action

Following discussion in Section Three of the suggested elements of a more concerted national agenda on workforce development, Skills Australia outlines a number of potential area for action and seeks feedback from stakeholders on how best to take forward a new approach to better realising Australia's skills potential. The aim is to contribute to further coherence in the national debate on skills and guide public and industry level activity to better outcomes. We hope to consolidate, not to complicate, what is already complex policy terrain.

We also seek comment about the appropriate roles and responsibilities of all the key agents that can drive change in these four priority areas.



Priority 1: Identifying Australia’s skill and workforce demands

There are two major elements to this priority area:

- developing a nationally agreed approach to skills and workforce planning
- using current investments wisely – areas where current provision of post-school education and training needs to be reconsidered

Both of these elements were addressed in Background Paper One.

Priority 2: Establishing a shared agenda on the development of Australia’s future workforce

Leading the impetus for change

Skills Australia sees merit in lifting national effort on workforce development through the introduction of a comprehensive whole of government framework. The goal of a national framework would be to achieve a co-ordinated focus and better outcomes at enterprise level from education and training through stronger links to other government work on innovation, workforce participation and social inclusion. Such an approach might include shared principles, agreed national outcomes and indicators of success from such a national action. It could be agreed at COAG level, so as to engage those beyond the traditional education and training sector.

As well as strengthening the linkages between different types of programs and between state and federal government initiatives, clearer accountability for workforce development would be established. It might also promote stronger program connections and assist agreed reforms needed at industry, regional cluster or community level to tackle workforce development.

- ***Is such an approach important and how should industry and education partners be involved?***

Resourcing change

There is potential to identify either redirected, or newly earmarked funding sources to address broad-based analyses and solutions to skill-related issues in organisational development at the enterprise or industry cluster level.

Existing workforce development activities point us towards ways in which continuing development of skill *within* the workplace can be supported. This currently occurs in many enterprises across Australia, and there are well-documented examples of what can be called ‘learning organisations’. Taking the agenda forward will require a shift from these being exceptional to becoming part of ‘business as usual’ for more education and other service organisations. Changed funding arrangements could provide an effective lever to influence service development.



There have been a number of experiments to provide TAFE Institutes and other registered training organisations some flexibility to apply public training funds to support new service development. The results of these initiatives may indicate opportunities to support more widespread capability to adopt and implement agreed workforce development principles.

A new funding stream, with additional or reallocated funds, could be trialled to support education and training organisations to develop their services to improve learning outcomes and skill utilisation in the workplace. Together with the contributions that are currently made by industry and enterprises, this could facilitate services and outcomes of increased relevance to both individuals and employers.

A greater challenge exists in changing how mainstream funding arrangements in both the tertiary education sector and other program areas can better assist and support workforce development. Funding for these traditional responses does not easily translate to the demands of more effective skill use among the existing workforce, nor to those who are on the margins of the workforce and need more holistic support.

Access to any new or changed stream of funding would need to be linked to indicators or outcome measures to ensure that increased flexibility delivers value to enterprises and individuals. The balance between public and private resourcing of workforce development initiatives is also relevant when addressing how workforce development can be promoted.

- ***How can education providers be supported to work with enterprises on the continuing development of skills, playing a consultant, adviser and facilitation role as much as that of ‘provider’?***
- ***And should new funding principles be adopted to support workforce development initiatives?***

Guiding reform and catalysing change

Developing a change agenda and strategy on workforce development may need ‘champions’ and ‘quick wins’ to demonstrate the elements of success so they can be more widely diffused and replicated.

Skills Australia sees potential for governments and industry to nominate a national network, body or centre of excellence to guide national reform on workforce development. Such a body might catalyse a new approach, build knowledge, evidence and expertise, link programs and practitioners effectively, advocate international and national benchmark best practice and capitalise on developments to promote change in the ways skills are used.

Such an initiative could be complemented by a selection of ‘lighthouse’ industry or regional activities to ‘test drive’ new methodologies, build momentum and act as lead agents of the new approach. Possible industry areas are those of national significance such as: clean energy, health, manufacturing, marine, space and ICT that have been singled out as priorities for Australia’s innovation agenda. Industries and regions facing structural adjustment or issues of renewal in the face of economic, social or environmental pressures could also be selected.



- *How might such actions, or similar initiatives, build momentum and diffuse more widespread activity on workforce development?*

Priority 3: Focusing on workforce participation

Addressing regional and local workforce participation challenges

There is potential for local skill ecosystem / industry cluster initiatives to complement employment participation in areas of entrenched disadvantage. These take a broader focus than a worker's skills and individual job placement.

The emphasis is on the range of issues confronted by workers – both in employment and not in employment – and enterprises. These might include the environmental, social or economic issues shaping local workforce development challenges (such as in rural or regional industries subject to global pressures; or in remote and isolated Indigenous communities – issues of over-supply of skills and limited employment). It might also focus on assisting employers in addressing job or service design to improve job quality and underemployment – particularly in low skill industries and occupations.

Skills Australia is seeking stakeholder feedback on how best to address the complementary linkages in 'locational approaches' that tackle both workforce participation and workforce development.

- *How can employment programs and education and training programs better reinforce local skill ecosystem solutions? Are there examples of where this is happening that might be replicated?*

Priority 4: Promoting demand for and the full use of high skills in workplaces

Enabling new industry connections

There are good examples and potential to expand, workforce development actions being undertaken at a whole of industry level. A national skill ecosystem or cluster-based initiative is envisaged to investigate multi-layered solutions within an industry or a regional cluster to create a sustainable, appropriately skilled labour supply.

These are potentially large scale collaborations which may also involve companies, researchers, government and others to address practical business problems and pilot new goods, service, strategies or processes to lift performance and capability across a range of workplaces. Local program solutions involve wide-ranging networking and collaboration and are designed to suit diverse regional economic and social characteristics. Varying models, alternative lead agencies and flexible funding guidelines may be adopted to suit the issues to be addressed in the cluster.

- *Are whole of industry approaches seen by stakeholders as effective in addressing workforce development issues?*



- *How could these be implemented?*
- *What sort of expertise is needed?*
- *Are there priority areas where these should occur?*

Addressing skill use directly at the enterprise level

As more of the workforce gain tertiary qualifications, workforce development measures linked to the workplace are needed to ensure the competitiveness dividend is realised. Research highlights the need for the application of skills in the work context and raises the risk of over-supply of qualifications and skills under-utilisation within Australian workplaces. Risks from not acting may include the demotivation of highly educated people and potentially high rates of emigration to countries where people feel their skills will be better used.

Skills Australia seeks feedback on how industry-led projects might be trialled to look specifically at how training and other interventions can improve use of skills and performance within enterprises.

- *What sort of analytical and advisory capacity and tools are needed within industry bodies and among training providers to work effectively with enterprises on whole of business diagnostics?*
- *What is the best way to encourage enterprise engagement and investment in such activities?*
- *What strategic initiatives are needed at the national level to facilitate this?*

Developing the capacity of enterprises

Some workplaces and industries have much stronger records as learning organisations, in regard to both formal and informal learning.

Research has pointed to the need to develop the internal 'training' or human resource management capacity of enterprises so over the medium and longer term 'skilling from within' is more achievable. The development of 'communities of practice' among enterprises or organisations may also occur so that workforce development among networks of smaller businesses might be supported.

There has also been a renewed emphasis on management and leadership skills for 21st century high performing enterprises.

- *Is there the need address the leadership styles, organisational cultures and people management practices of enterprise as drivers and/or impediments of skill use and innovation at the workplace level?*
- *What strategic initiatives are needed at the national level to facilitate this?*



Developing the capability of service providers

Identification and support of new skills or capability among education providers and other agencies working with enterprises is needed to address and expand more flexible workplace solutions offered by providers to boost workforce development.

Background Paper one also indicates all education professions are risk occupations in terms of longer lead time for their supply and other criteria. Ageing of the VET and higher education workforces are also imminent challenges.

- ***What changes need to occur in the skills and capability of education and other service providers to support enterprise level workforce development?***

