The Australian Workforce and Productivity Agency

Expert Board – members from industry, academia, economics, representation of employees, education and training

Board membership

Back row (L to R):
Dr John Edwards, Heather Ridout, Keith Spence

Middle row:
Prof. Gerald Burke, Peter Anderson, Ged Kearney

Front row: Marie Persson, Philip Bullock (Chair), Dr Michael Keating AC
The Agency’s Focus

Policy

Priorities

Research

National Workforce Development Fund

Sectoral Workforce Development Needs
Our vision

Australia’s growth potential is realised through a highly skilled and adaptable workforce where skills are used effectively to meet the increasingly complex needs of industry and individuals are able to fulfil their potential.

To do this we need to ensure that:

• The skills needs for workplaces are being met and we have workplaces where skills are being used effectively.

• We address Australia’s productivity needs by enhancing a workforce development approach.

• The education and training system is forward looking and meets the skills needs of industry.

• As many people as possible are participating in learning and work.

• Skills and workforce development responses are tailored to meet specific industry and regional needs.
Work of the Agency supports productivity

- Research papers
- National Workforce and Development Fund
  - encourages organisations to undertake workforce planning and skills needs analysis
  - increases the supply of labour and skills in high priority sectors or local and national demand
- Workforce development strategy
  - will recommend high level approaches that will have a positive impact on meeting skills and workforce development needs
Human Capital

“Human capital refers to the set of attributes that individuals possess, including knowledge, skills, work experience, health and intangible characteristics such as motivation. Human capital may be acquired, or enhanced, through formal education or training, and by other, informal means (for example, through the experiences of undertaking daily activities at home or at the work.

Our view of productivity

• “Productivity isn’t everything, but in the long run it is almost everything. A country’s ability to improve its standard of living over time depends almost entirely on its ability to raise its output per worker.”  
  Paul Krugman

• “Most of what is required to lift Australia’s productivity is in the hands of individuals, especially managers of businesses. It will emerge through innovation in business processes within firms and more sophisticated relationships among firms, encouraging knowledge.”  
  Australia in the Asian Century, 2012

• The McKell Institute has recently called for government, industry and trade unions to look to innovate, improve management capability and focus on workforce development and upskilling in order to deliver long-term productivity growth.
Example: Vehicle Manufacturing

**Challenge**
- Exchange rate fluctuation from 85c to $1.05 increasing export prices

**Goal**
- Management set a target to reduce the price of each vehicle to offset exchange rate changes

**Solution**
- Tailored Cert III for staff
- Entire workforce collaborated together

**Outcome**
- Over 12 months, the price of each truck has reduced by $10k due to improved work processes
Contested space

Productivity Commission:
• Commissioned projects and supporting research

ABS:
• Estimates productivity

Treasury and other Departments:
• Advice to Government

RBA:
• Contributes to maintenance of full employment and enhanced welfare of Australians

Universities and think tanks:
• Private research
Where we are now?
Australia in the global environment

"... An objective observer coming from outside would, I think it must be said, feel that Australia’s glass is at least half full.”
Glenn Stevens, Governor, RBA, Address to the American Chamber of Commerce (SA) AMCHAM Internode Business Lunch Adelaide, 8 June 2012
Consensus view of where we are now?

**Weak productivity**

Source: ABS National Accounts 2011/2012 (5204.0;Table1)

![GDP per hour worked: Index percentage changes](image)

**Variable participation**

Source: Labour Force, October 1978 to October 2012, ABS Cat no. 6202.0 Table 1. Trend series

![Male and Female Participation Rate](image)

**Innovation – middle of pack**

Source: [www.globalinnovationindex.org](http://www.globalinnovationindex.org)

Global Innovation Index 2012 - OECD Countries

![Innovation rankings](image)

**Declining competitiveness**


![Competitiveness rankings](image)
“The gains in Australian living standards of the past decade were more easily achieved than in the 1990s, but they were achieved in ways that cannot be replicated. The gains of the next decade will rely overwhelmingly on improvements in productivity.”

Source: Dolman, B., Gruen, D., Productivity and Structural Change, 10 July 2012
Contributions to growth in average incomes by decade

Source: Dolman, B., Gruen, D., Productivity and Structural Change, 10 July 2012
Australia’s terms of trade and working age population

Note: Working age population is the share of 15 to 64 year olds in the population
Source: Dolman, B., Gruen, D., Productivity and Structural Change, 10 July 2012
### Alternate view

**Productivity - indicative world trends**

<table>
<thead>
<tr>
<th>Country</th>
<th>GDP per hour worked, 2007 US=100</th>
<th>Annual productivity growth rate 2000-2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>US</td>
<td>100</td>
<td>2.0</td>
</tr>
<tr>
<td>Germany</td>
<td>95</td>
<td>1.4</td>
</tr>
<tr>
<td>Japan</td>
<td>71</td>
<td>1.9</td>
</tr>
<tr>
<td>UK</td>
<td>89</td>
<td>2.3</td>
</tr>
<tr>
<td>Canada</td>
<td>86</td>
<td>1.1</td>
</tr>
<tr>
<td>Australia</td>
<td>82</td>
<td>1.6</td>
</tr>
<tr>
<td>Norway</td>
<td>135</td>
<td>1.8</td>
</tr>
<tr>
<td>Ireland</td>
<td>92</td>
<td>2.5</td>
</tr>
<tr>
<td>Greece</td>
<td>71</td>
<td>3.1</td>
</tr>
</tbody>
</table>

“Strong productivity performance in recent times is an extremely poor predictor of economic performance today.”
Professor John Buchanan, *Director, Workplace Research Centre, University of Sydney Business School, Submission to the Fair Work Act Review, 17 February 2012*

**Source** L Mishel, J Bernstein and H Shierholz, The *State of working America*, Cornell Uni Press, Ithaca: 361
Why skills are important?
Education, Productivity and Participation
The basic argument – Professor Gerald Burke for the Brotherhood of St Lawrence

- Improvements in education and skills can lift the proportion of the population participating in employment and raise the productivity of those employed.
- Increased participation means a reduction in size in the non-working population and the cost of supporting it.
- For the least advantaged it means reduced dependency on welfare with benefits in income, health, social engagement and opportunities for their children.
- While there are costs in lifting the skills of the least advantaged there is overwhelming evidence that the economic and social payoff are considerably greater.
- The payoff will be greater if the education and training is efficiently and effectively provided.
- This includes providing skills that facilitate ongoing learning, that meet industry need, that are of high quality and if employers are able to make good use of available skills.
The pay-off from investment

• This investment can achieve a workforce participation rate of 69% by 2025 compared to the IGR projected rate of 64%\(^{(1)}\)
  
  – 69% is consistent with increased access to employability skills and experience overseas

• A participation rate of 69% will halve the projected age-dependency ratio and improve government budgets.

• Approximate estimates (Productivity Commission methodology) show an annual improvement in the operating balance of Australian governments of around $24 billion (05/06 dollars)\(^{(2)}\)

• In addition there would be improvements in productivity through upskilling. However, upskilling may have a relatively modest impact on productivity.
  
  – the additional up-skilling of the workforce, in terms of qualifications as reported in Australian Workforce Futures, increased productivity by around 1¼ per cent after 15 years\(^{(3)}\).

Source: (1)(2) Skills Australia (2012), Australian Workforce Futures (3) Keating, M. 2012, What is the Impact of Future Skills Upgrading on Productivity?, Canberra, unpublished
**Education matters to participation**

**Older workers**
- Increasingly, mature-aged people are participating in work, particularly in professional occupations.

**Young workers**
- In January 2012, 26.8% of teenagers of working age were neither working nor engaged in full-time learning.

**People with non-school qualifications are more likely to be in the labour force**

Source: ABS 6227.0 Education and Work, Australia, May 2011 (aged 15-64 years).
Achievement in education and training has considerable effect on employment

Employment by highest qualification, persons 25-64, Australia 2011 (% of population in each group)

Source: ABS 2011b
Higher qualifications = higher rate of return

Earnings, employed persons 15-64 by level of qualification, Australia 2009

Source ABS 2010
Gender segregation

Figure 25  Lifetime employee income of persons at age 25 years, by gender

<table>
<thead>
<tr>
<th>Education Level</th>
<th>Women</th>
<th>Men</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 11 or below</td>
<td>1.26</td>
<td>2.13</td>
</tr>
<tr>
<td>Year 12</td>
<td>1.52</td>
<td>2.55</td>
</tr>
<tr>
<td>Certificate</td>
<td>1.34</td>
<td>2.49</td>
</tr>
<tr>
<td>Diploma</td>
<td>1.70</td>
<td>3.08</td>
</tr>
<tr>
<td>Bachelor</td>
<td>2.14</td>
<td>3.66</td>
</tr>
<tr>
<td>Postgraduate</td>
<td>2.49</td>
<td>3.78</td>
</tr>
</tbody>
</table>

Lifetime earnings (Millions $)

Source: NATSEM calculation from 2009–10 Survey of Income and Housing Basic Confidentialised Unit Record.
Student returns – VET and HE

Payoffs from tertiary qualifications
(per cent pay-off compared to year 12 qualification – male)

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Certificate III/IV</th>
<th>Advanced Diploma/Diploma</th>
<th>Bachelor Degree</th>
<th>Postgraduate Degree or Graduate Diploma</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>13</td>
<td>11</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>Participation</td>
<td>0</td>
<td>15</td>
<td>40</td>
<td>59</td>
</tr>
<tr>
<td>Productivity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: KPMG Econtech, Economic Modelling of Improved Funding and Reform Arrangements for Universities (2010)
## Education qualifications forecasts

### Share of those employed with post-school qualifications, by 2025

<table>
<thead>
<tr>
<th></th>
<th>Long Boom</th>
<th>Smart Recovery</th>
<th>Terms of Trade Shock</th>
<th>Ring of Fire</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proportion with post school qualifications</td>
<td>75.4%</td>
<td>70.3%</td>
<td>73.7%</td>
<td>65.0%</td>
</tr>
</tbody>
</table>

| Annual number of additional qualifications required to 2025 | 831,900 | 643,800 | 726,100 | 411,500 |

*In 2011 the share of employed persons with a post-school qualification was 59.8%*

**Source:** Deloitte Access Economics (2012) ‘Economic modelling of skills demand and supply’ - derived from p.iv and tables 5.18-5.21
‘Higher-level skills are increasingly demanded by the knowledge-based economy’

Our three conceptual pillars in our response to aligning skills, qualifications and the economy’s needs

<table>
<thead>
<tr>
<th>Specialised occupations</th>
<th>Scenarios</th>
<th>Demand Driven Funding</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Apply concept of specialised occupations - those occupations with greatest risk of market failure</td>
<td>• Develop, test and model multiple scenarios to achieve flexible policy responses</td>
<td>• Fund users rather than providers – but only after you have sorted out quality and regulation</td>
</tr>
</tbody>
</table>
Approach to the 2012 strategy

Scenarios
- Plausible worlds (but not predicting the future!)

Modelling
- Projections of demand & supply side implications of the scenarios

Analysis
- Analysing the uncertainty, commonality, differences and risks of the scenarios

Strategy
- The policy recommendations balance aspirational goals and risks, after assessing key differences between the scenarios

Each process informs the next
The scenarios

1. The Long Boom
   - Sustained prosperity and a restructured economy

2. Smart Recovery
   - Uncertainty to 2015 with low growth and knowledge-based recovery

3. Terms of Trade Shock
   - Resource prices fall, a more balanced economy

4. Ring of Fire
   - Risky world – multiple shocks
Countries that have succeeded in linking skills with productivity have targeted their skills development policy towards three objectives:

• *Meeting skills demand in terms of relevance and quality* - equality of opportunity in access to education and work is needed to meet the demand for training across all sectors of society

• *Mitigating adjustment costs* - the reorganization of work in line with new demands and technologies results in some skills becoming redundant

• *Sustaining a dynamic development process* - skills development policies need to build up capabilities and knowledge systems within the economy and society
Meeting skills demand in terms of relevance and quality

- VET system industry led and competency based
- Tertiary system demand led
- AWPA planning uses scenarios and focuses on areas of greatest potential market failure

- Significant quality issues in VET
- Declining areas in terms of international benchmarks – PISA
- Does student choice meet industry needs
Mitigating adjustment costs: the reorganisation of work

- Deferred payment schemes in Tertiary Education
- Comparatively low fees with exemptions in VET
- VET has wide geographic footprint
- Rise of flexible and web-based delivery
- Range of labour market training programs

- Trend for public subsidies to be limited to first qualification at level only
- Rising fees in lower level VET
- Competency-based training concentrates on specific rather than flexible and transferable skills
Sustaining a dynamic development process: skills development policies need to build up capabilities and knowledge systems within the economy and society

- Lots of reform – Bradley in HE; Entitlement systems in VET
- National Workforce Development Plan – emphasis on scenarios and identifying areas of potential market failure
- Competency-based VET can have its limitations in terms of transferable skills
- Skills development (compared with countries like Germany) too often seen as a Government rather than an industry responsibility
“The best companies now know that real and limitless productivity comes from challenged, empowered, excited and rewarded teams of people ... and from making everyone play a role in the success of the enterprise ... this raises productivity not incrementally, but by multiples”

Jack Welch, Former Chairman and CEO of General Electric
Skills utilisation
Key message

Skills utilisation is about how well employers harness and develop their workers’ abilities and talents to gain maximum value and thus improve the organisation’s productivity
What is skills utilisation?

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.
The case study organisations and industry

- Acquire
- CSL Australia
- The Chia Co
- GHD
- Leighton
- RSPCA
- Dexion
- Holden
- NSW Government
- Woodside
Skills utilisation strategies used by organisations

acQuire
- Employee participation and autonomy

The Chia Co
- Applying new learning

CSL Australia
- Job rotation and multi-skilling

Dexion
- Skill audits and applying new learning

GHD
- Mentoring and employee participation
Skills utilisation strategies used by organisations

Holden
- Job rotation and multi-skilling

Leighton Contractors
- Skill audits and multi-skilling

Murrumbidgee LHD
- Job redesign

Pottinger
- Autonomy and mentoring

RSPCA
- Applying new learning and job redesign

Woodside
- Applying new learning and job rotation
Better use of skills, better outcomes

What triggers skills utilisation?

How is skills utilisation delivered?

What are the outcomes of skills utilisation?

What enables skills utilisation?

What critical success factors allow skills utilisation to thrive?
What *triggers* skills utilisation?

External: other factors

- Product market competition
- Economic conditions
- Regulatory requirements

External: labour market factors

- Recruitment & skills shortages
- Retention

Internal factors

- Growth & innovation
- Leadership
- Reduce wastage
How is skills utilisation delivered?

- Job redesign
- Employee participation
- Autonomy
- Job rotation
- Skills audits
- Knowledge transfer
What **critical success factors enable skills utilisation?**

- **Culture & values**: Inclusive and encouraging
- **Leadership & management**: Effective, accountable; encourages innovation
- **Employee motivation**: Staff that feel valued are more likely to contribute
- **Good HR practices**: Supportive, allowing staff to optimise potential
- **Consultation communication, & collaboration**: Promotes frequent open clear & dialogue
Practical strategies for using skills effectively in the workplace

• Give employees **freedom and authority** to make decisions
• **Involve employees** in decision making and strategic discussions
• **Identify skills** that employees currently have as well as those that are needed
• **Rotate employees** through different jobs/roles/positions
• **Redesign jobs** to make sure skills of employees used effectively
• **Offer training** that is highly relevant and able to be used at work
• Organise for **experienced workers to mentor** and pass on their skills and knowledge
What are the *outcomes* of skills utilisation?

- Improved innovation
- Increased productivity
- Reduced staff turnover
- Increased competitive advantage
- Reduced waste
- Improved job satisfaction
Thank you