Workforce Development
in an Environment of Skill Shortages

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Adelaide Convention Centre Tuesday 13th December, 2005
Challenges of Today’s Labour Market

Presentation to CEDA, December 05

Professor Sue Richardson

National Institute of Labour Studies
Flinders University, Adelaide, Australia
Outline

• The major demographic changes
• A full-employment economy?
• Running out of workers
• Immigration as a solution
• The market as a solution
Major demographic changes

- Fall in fertility from peak of 3.5 babies per woman in 1960, to 1.77 today
  - Today’s new entrants to LF born when fertility already below replacement
- Increased longevity
  - 1901, 1 in 25 were 65+
  - Today, 1 in 8
- Life expectancy at birth risen over past 20 years
  - 6 yrs for males; 4 years for females
Ratio of Age 20-65 in Total Population of SA

Series A
Series B
Unemployment rate 1978-2002

National Institute of Labour Studies
Flinders University, Adelaide, Australia
Is there a worker shortage?

At 5.1%, overall unemployment is the lowest for 30 years
  • though in the 1960s, it was under 2%

In a dynamic economy, always a mismatch between skills wanted and skills possessed

Firms are used to being limited by ability to *sell output*, not by ability to *produce output*

Seen as a serious failure (by somebody) if have buyers waiting but cannot find the workers
Changes in full-time and part-time employment by occupation, 1986-2001: SA

Source: Calculated from unpublished ABS Census data, 1986 and 2001 by the National Institute of Labour Studies, Flinders University

*National Institute of Labour Studies*
Flinders University, Adelaide, Australia
Factors Constraining Output

Per cent of respondents

Sales and orders

Availability of suitable labour

Source: NAB
Where to get the extra workers?

- Existing workforce is under-employed
  - 10% of workers want more hours (PT)
    - Though 17% want fewer hours (FT)
  - 11% are not employed but would like work
- Many retire early not by choice
- Participation rate is low by international standards
- Many people work below their skill capacity
Change in the distribution of hours worked all employed: 1979 to 2005
Will skilled migration help?

• To fill skill vacancies;
• To add to the general stock of human capital in Australia;
• Requires migrants to:
  • Have skills
  • Get jobs
  • Use skills
Are migrants skilled?

- Australia runs the world’s most successful skilled migration program
- Focuses on:
  - English language competence
  - Qualifications
  - Age
  - Occupation in demand
Labour Force Status of Skilled PA’s at 6 months: % of cohort

- Employed: 76% (C2W1), 83% (C3W1)
- Unemployed: 10% (C2W1), 12% (C3W1)
- Not in Labour Force: 15% (C2W1), 5% (C3W1)
How Often Skilled PA’s use Highest Qualification in Australian Job by MODL Status in Former Country: c3 at 6 months

<table>
<thead>
<tr>
<th>Frequency</th>
<th>MODL</th>
<th>Not MODL</th>
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<tbody>
<tr>
<td>Often</td>
<td>71%</td>
<td>51%</td>
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<tr>
<td>Sometimes</td>
<td>13%</td>
<td>24%</td>
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<tr>
<td>Rarely</td>
<td>15%</td>
<td>22%</td>
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</table>
Which migrants are doing well

- English matters
  - Experience (or older age) is beneficial
- FCMODL does not increase employment but is linked with greater use of quals and higher pay.
- Business sponsored do well
- Regional sponsored do not do so well
- Former students do not do so well
Responding to the future

- Skills system will need to cater well for older, employed workers
  - Including firm training
- Firms will have to rethink how to recruit, retain and develop the skills they need
- Firms, workers and the education system will adapt via market signals
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A skilled workforce for South Australia
Workforce Development Strategy

A High Skill Economy
- A skilled workforce
- Jobs through business & economic growth.
- High performance workplaces
- Responsive learning systems

Quality Employment
- Access to learning and jobs
- Flexibility for workers
- Fair and sustainable work

underpinned by

Better Workforce Planning
- Research excellence
- Better information and planning systems
- Coordinated government action
SA Training and Employment snapshot

- Unemployment: 4.8 per cent
- In employment: 741,000
- School retention: 72.4 per cent
- Apprentices and Trainees: 34,000
- Graduate outcomes: 91 per cent
- Migration: 6,300
- National Training Awards: Apprentice, Trainee, ATSI
Projected Demand and Supply of Labour in South Australia

<table>
<thead>
<tr>
<th>Year</th>
<th>Demand (15+)</th>
<th>Supply (15+)</th>
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<tr>
<td>2002-3</td>
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<td>2034-35</td>
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Youth Migration

Arrivals and departures, South Australia, 2002–2003(a)

Number of people

0 500 1,000 1,500 2,000 2,500 3,000 3,500 4,000 4,500


Age-group

Arrivals
Departures
The Potential to Engage More People in Work

WANT TO WORK
98 800

Actively looking for work
4 500

Not actively looking for work
94 300

Not available to start in 4 weeks
28 700

Available to start work within 4 weeks
65 600

DISCOURAGED JOBSEEKERS
7 600

No jobs in locality/field
2 800

Considered too old/young
2 100

Lacked necessary training/experience
1 500

No jobs at all
800

Language/ethnic difficulties
400

OTHER REASONS
58 200

Personal reasons
27 700

Family reasons
21 000

Had a job to go to
3 700

No jobs in suitable hours
1 200

Other reasons
4 400

Own ill health/pregnancy
12 200

Attending Education
11 900

No need to work
2 200

Moved house/on holidays
1 300

Child Care
15 400

Other family considerations
3 900

Ill health of other
1 700

Around 40,500 people not currently engaged may be able to be assisted into work
Activities

- Workforce Development Fund
- South Australia Works
- Industry Skills Boards
- Youth Engagement
- Traineeships and Apprenticeships
- Migration
- Major projects
Workforce Development

right skills

right place

right time
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ENGINEER SHORTAGES

Barry J Grear AO
Past President, Engineers Australia
President-Elect, World Federation of Engineering Organisations
Scientists and Engineers as a percentage of total employment, 2001

Source: DEST, Australian Science and Technology at a Glance, 2004
Australia’s Science and Engineering graduates, 1990 to 2002

Year 1990 to 2002

Number of S&T graduates

% of total graduates

Source: DEST, Australian Science and Technology at a Glance, 2004
Student enrolments in engineering and science, 1983-2000

Source: The Engineering Profession: a statistical overview 2003, Edition 3, Engineers Australia
Participation of Women in Higher Education 1983 and 2000

Source: Lewis, S, Harris, R, Cox B, 2000, Engineering a Better Workplace. Engineers Australia
Engineering degrees as a percentage of total degrees, 2000

Source: DEST, Australian Science and Technology at a Glance, 2004
Net gains in engineers through migration - selected occupations 2002-03

Mathematicians, Statisticians & Actuaries
Mining & Materials Engineers
Engineering Technologists
Civil Engineers
Mechanical, Production & Plant Engineers
Other Building & Engineering Professionals
Electrical & Electronics Engineers
Building & Engineering Professionals
Computing Professionals

Source: DEST, Australian Science and Technology at a Glance, 2004
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Steve Larkins CEO
Construction Industry Training Board (CITB)
Key Points

• Definitions
  – Recruitment Gap (shortage of applicants prepared to do the work)
  – Skills Gaps (applicants don’t have the right level or mix of skills)
  – Skills Shortage (not enough skilled people to do the work)

• Labour Market characteristics

• Report Card
  – Numbers
  – Trends
Labour Market Characteristics

- Fragmentation of employment
  - 93% of companies employ < 5 employees
  - Apprentices are in the main employed by self-employed tradesmen
- Training is seen as a cost in time and cash
- Emphasis in our education system has been on university pathways
- Numbers of young people choosing careers in construction
- Ageing of our skilled workforce
SA Construction Industry Age Profile

- Age Profile:
  - 15-19: 30.00%
  - 20-24: 20.00%
  - 25-34: 25.00%
  - 35-44: 15.00%
  - 45-54: 10.00%
  - 55-64: 5.00%
  - 65 & Over: 0.00%

Comparison with All Industries
Report Card 1
Long Term Commencements
(ASCO 44)
Historical Data - 68-00

Building Tradespersons Commencements

Report Card 2

Construction Trade Commencements (NCVER)

- Non-GTS
- GTS

- Graph showing the trend of construction trade commencements with two lines representing Non-GTS and GTS.
Report Card 3
Change in Construction Trade Commencements (NCVER)

NSW  Vic  Qld  SA  WA  Tas  NT  ACT
Current Worker Training Places over time 2000 - 2005

- 2000: 19,565
- 2001: 15,490
- 2002: 23,644
- 2003: 22,604
- 2004: 24,558
- 2005: 24,562
Doorways 2 Construction Student Destinations
2004 School Year

- Continued Secondary Education: 32%
- Civil Construction: 0%
- Bricklaying: 1%
- Painting: 1%
- Plastering: 1%
- Roof Plumbing: 1%
- Wall & Floor Tiling: 2%
- Cabinet Making: 3%
- Construction Pre Vocational: 3%
- Electrical: 4%
- Construction Assistant: 5%
- Other B/C employment: 12%
- Seeking Employment: 10%
- Another Industry: 9%
- Tertiary Studies: 1%
‘Fixes’

• Quick
  – Import labour
    • Interstate and/or overseas migration
    • Poach (other employers / other industries)
      – It’s all about price
• Strategic - Take a medium – long term view
  – Develop and maintain interest / information among school students
  – Recruit for attitude train for skills
  – Ensure that training is dynamic and keeps up with market needs
  – Retain talent – invest in good people
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