The implications of globalisation and the aging population on skills formation in Australia

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Presentation to:

"The Skills Summit: Building a Regional Response: Skills and Knowledge for 21st Century Business"

Melbourne, 2 November 2001

Future directions in Australian skills formation

- 3 big picture issues
  - changing nature of work
  - impact of aging population
  - demand for customised learning
- What this means for provision of education and training
- Raising national investment
  - paying for lifelong learning

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Definition of globalisation

- Narrow definition
  - economic issue mainly focussed on global trade, global finance markets and global corporations
- Broader definition (Laxer 1995)
  - (1) economic changes
  - (2) ideological changes
  - (3) new information and communication technologies
  - (4) cultural changes

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Impact of globalisation

Marginson 2000, *'The changing nature and organisation of work, and implications for VET in Australia'*

- Globalisation is creating a more international economy and universal culture
- Increased international competition is accelerating technological change
- Rapid technological change leading to declines in 'blue-collar' work and increases in skilled 'white-collar' work
- Immense but uneven changes in workplaces
- massive increase in non-standard forms of work
- Growing polarisation in incomes and access to secure jobs and technology

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The rise of the information age/the knowledge-based economy

Drucker 1993, *'Post capitalist society'*

'Knowledge is the only meaningful resource today. The traditional factors of production—land, labour and capital— have not disappeared, but they have become secondary. They can be obtained easily, providing there is knowledge'.

The rise of the information age/the knowledge-based economy

Sheldrake 1997, *'Great Expectations: Education in the World of Work'*

'The current knowledge revolution arising from rapid technological change in the late 20th century is as profound for the way economies and work are organised as was the industrial revolution in its day'.

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Changing nature of work

Reich 1989, *'The resurgence of liberal and other unfashionable prophecies'*

- Transformation from 'old economy' to 'new economy'
- Old economy
  - high volume standardised production
  - decisions made by top management
  - rigid work rules and job classifications
- New economy
  - flexible and innovative modes of production
  - new types of jobs
    - (1) symbolic analytical services
    - (2) in-person services
    - (3) routine production services

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Emergence of new skills

Sheldrake 1997, *'Great Expectations: Education in the World of Work'*

'We are in danger of training the spinners and weavers of the 21st century: another generation of highly trained people who will not be able to apply their specific skills to anything. Moreover, just as then, we have no idea where the current process of change is leading: the only thing that can be said with any confidence about the vast number of books written about the future in recent years in that what most of them say will be wrong … the skills that are likely to be the most important over the next 30 years are likely to be generic skills'.

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Emergence of new skills

Sheldrake 1997, *'Great Expectations: Education in the World of Work'*

- New skills required are:
  - enhanced people skills
  - strategic skills
  - conceptual skills
  - ability to empower others
  - continuous learning skills
  - capacity to continually 're-think' approaches

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Emergence of new skills

Robinson 2000, *'New directions in Australia's Skill Formation: Lifelong Learning is the Key'*

- New skills required are:
  - excellent interpersonal and human relations skills
  - high levels of IT
  - critical analytical and interpretive skills
  - capacity to be innovative and enterprising
- These skills will be just as important as any technical, para-professional or professional skills that people have

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Two themes emerge

- New modes of employment are rapidly emerging
  - casual employment (i.e. 'just-in-time' employment) is getting much larger (now 25% of workforce) especially at start and end of a working lifetime
  - new modes of employment, e.g. project workers, home workers, labour hire companies, sessional workers, etc.
- Gone are the days of acquiring technical or professional skills need for a working lifetime at the start
  - continuous skilling/lifelong learning is the key

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Implications of demographic change in Australia

- Total population will grow by 1% per year over next 20 years
- No. of 15–24 year olds will remain at 2.7 million
- No. of 45–64 year olds will grow by 40%, from around 4 million in 2000 to 5.8 million in 2020
- Geographic location of population will change
  - fewer first home buyers in the suburbs
  - more people in city centre and convenient (‘nice’) rural locations

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Australian demographic trends/projections

Age (years)	Proportion of population (%)		
	1970	2000	2020
0-14	28.8	20.6	17.6
15-19	8.9	7.1	6.1
20-24	8.6	6.9	6.4
25-44	25.3	30.5	26.3
45-64	20.0	22.7	26.1
65+	8.3	12.3	17.5

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Customisation

- Increasing world-wide demand for customisation of products and services
- USA research on what drives customer satisfaction (for all types of products and services) shows
  - quality is more important than price
  - customisation is more highly valued than standardisation

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Implications for education and training institutions because of changes in work

Waterhouse et al 1999, *'Changing nature and patterns of work and implications for VET'*

- Greater flexibility and responsiveness
- Customisation
- Collective learning
- Learning communities
- Strategic approaches to workplace learning

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Implications for education and training institutions because of changes in work

Marginson 2000, *'Changing nature and Organisation of Work, and the implications for VET'*

- Become engaged in global environment or face obsolescence
- Focus on cognitive and interactive skills
- Innovation a high priority
- Education and training practitioners need to become more global, better networked and closer to leading edge technology
- Need policies to deal with growing polarisation

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Implications for VET from the aging of the population

Illustration of possible effects of aging on VET student profile*

Age	No. of students		% of students	
	2000	2020	2001	2020
15-19	392 800	396 900	22.5	20.4
20-24	274 300	294 400	15.7	15.2
25-44	717 400	772 000	41.0	39.7
45-64	329 500	420 900	18.8	21.7
65+	35 300	59 000	2.0	3.0
	1 749 400	1 943 200	100.0	100.0

* According to current population projects
* If VET participation rates in each age group remain constant
* If VET participation behaviour remains unchanged

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Implications for universities from the aging of the population

Illustration of possible effects of aging on university student profile*

Age	No. of students		% of students	
	2000	2020	2000	2020
15-19	189 300	191 200	27.3	25.7
20-24	233 300	250 400	33.5	33.6
25-44	226 300	244 400	32.6	32.8
45-64	45 400	56 300	6.5	7.6
65+	1 200	2 000	0.1	0.3
	695 500	744 300	100.0	100.0

- According to current population projections
- If university participation rates in each age group remain constant
- If higher education participation behaviour remains unchanged

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Implications for education and training institutions because of more customisation

- Learners will be far more discerning and will demand more
  - could be more litigation over failures to provide
- Greater competition between providers for students
- Flexible delivery to everyone
- New packages and products will give particular providers the edge
- Learning in ‘bite-size chunks’, not large courses
  - but that articulates to multiple pathways and qualifications
- TAFEs will need to specialise more and develop their areas of ‘world-leading excellence’
- Universities will need to develop a much more diverse set of ‘education products and services’

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Investment as a percent of GDP

	Govt	Private	Total
1992-93	4.9	0.7	5.6
1993-94	4.7	0.7	5.4
1994-95	4.6	0.7	5.3
1995-96	4.5	0.7	5.2
1996-97	4.5	0.8	5.3
1997-98	4.4	0.8	5.2

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International comparisons

- World's leading investors (6%+)
  - Israel, Denmark, Canada, Norway, Sweden, USA, Finland, France, South Korea
- Good investors (5–6%)
  - Germany, Czech Republic, Spain, AUSTRALIA, Chile, Mexico, Austria, Hungary, Portugal, Ireland, New Zealand, Poland, Malaysia, Belgium, Brazil
- Moderate Investors (4–5%)
  - Netherlands, Italy, Japan, United Kingdom, Thailand, Argentina
- Lower investors (under 4%)
  - Greece, Russia, Paraguay, Philippines, Singapore, Uruguay, Vietnam, India, Turkey, China, Indonesia

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The need to increase national investment

- Australia is in a comparatively sound position, but more national investment is needed to make lifelong learning a reality
- If we are to become a world leading skills nation, as we must, then we need to raise investment to at least 7% of GDP over next 20 years

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New education and training policies are needed

- Skill formation at the centre of economic policy
- Education and Training policy will need to focus as much on adults as youth
- Strategies to consider to increase national investment in skills
  - Raise not reduce public contribution
  - Introduce lifelong learning HECs
  - Measures to encourage enterprise investment such as an ‘Australian version’ of the UK Investors in People scheme

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Conclusions

- Future skill needs impossible to predict
- Education and training programs need to place as much emphasis on generic skills as on professional or technical skills
- Need to develop ‘adult pathways’ for lifelong learning
- Need to diversify much more beyond entry level courses
  - long degree programs will not be the only major ‘core business’ for universities in the future
- Universities and VET institutions must be much more flexible and responsive because skill requirements are changing so rapidly

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