Senate Employment, Workplace Relations and Education References Committee

Inquiry into Current and Future Skill Needs

Notes for the Inquiry Hearing: Sydney, 6 May 2003

Kaye Schofield, Independent Researcher and Consultant[1]

28 April 2003

"We know by now, that planning FE [Further Education] is an art. Getting it right involves a Picasso-like grasp of the relationships which lie beneath the apparent shapes and patterns of things. And, since the law of unintended outcomes applies here as nowhere else, the result can bear as much resemblance to the original plan as a Picasso figure to a human body. Bureaucrats think planning is a science. They collect data, analyse trends, predict future demand from present consumption and go home at night to find their spouse has left them". (Times Educational Supplement)

Note

1.1 These points draw extensively from the recently released report of the Ministerial Inquiry into Skills for the Future for which I was the Reviewer. This report, in turn, drew on a range of research studies including papers specifically commissioned for the review. Readers are referred to the Report for details of the contributing authors. The Report and the commissioned papers can be accessed at **Skill gaps** exist when the actual skill levels in the existing workforce do not meet the expectations of employers. There are many instances where the expectations of employers about the skills of their existing workforce are higher than the skills actually held by that workforce. There is a very clear solution to this problem – increased employer investment in work-related training. This is a matter for employers and not for public policy.

[1] Affiliations: Adjunct Professor, University of Technology Sydney; Chair, NSW Board of Adult and Community Education; Member, NSW TAFE Board; Trustee, Dusseldorp Skills Forum. The points raised here are personal perspectives and do not formally represent the views of any of the organisations with which I am affiliated.

Key Points

2. Take a closer look at the demand side

2.1 Many VET debates focus excessively on the question of supply. The VET system is therefore characterised by increasingly convoluted debates, accessible to a diminishing circle of cognoscenti, which focus on matters such as AQTF, Training Packages, VET in Schools, institutional arrangements etc.

2.2 It is a pity that the same level of critical attention has not been devoted to the nature of employer demand. The following notes are therefore directed largely to this question.

2.3 The training currently being provided, broadly speaking represents what employers consider their workforce needs to know. After 15 years of reform, the supply system is now relatively flexible and responsive to these patterns of demand, although there are many areas for improvement such as more localised planning and more flexible accountability systems etc which value results beyond contact hours. However, the fact that only 24% of employers were offering nationally recognised training in 2000/2001 suggests a mismatch between what the VET system is offering and what the majority of employers want.[2]

2.4 Patterns of demand reflected in work-based routes such as New Apprenticeships do not paint a picture of a nation moving towards a high-skill, knowledge based economy and a learning society.

2.5 In all the hype which surrounds the knowledge-based economy, it should not be assumed that current changes in the world of work reflect a wholesale shift to knowledge work. The realities are far more ambiguous. While the use of information and computer technologies is leading to a relatively higher demand for high-skilled labour and a relatively lower demand for unskilled labour, the demand for unskilled labour is not drying up and the cognitive content of jobs is showing only a small rise.[3]

2.6 The emerging version of the knowledge economy does not advantage everyone equally. In fact, research tells us that increasingly the workforce will look like an hourglass rather than a pyramid, with part of the workforce employed in knowledge-intensive high-waged and relatively secure work and another part comprising people with lower skill levels, churning through a series of relatively low-paid and insecure jobs interspersed with periods of unemployment. This is not a version of the knowledge-economy that we should accept for Australia.

2.7 The sum of individual employer choices either freely made or made in response to financial incentives to train does not necessarily reflect the wider needs of the economy for economic growth and stability or the national interest.

2.8 But increasing or changing the supply of skills is not the solution. More important are strategies which will drive up employer demand for high-order skills and this means ensuring that more firms adopt high-performance work practices.

2.9 Having skilled and creative people on the payroll is no guarantee of profitability for a firm. Nor is it an assurance that those workers, once employed, will be satisfied and motivated to give their best or that their skills will be used effectively. There is still a

---

[2] ABS 'Employer Training Expenditure and Practices, Australia, 2001' - 02 Cat No 6362.0

[3] Cully, M. (2003) 'Pathways to knowledge work', NCVER, Adelaide

gap between getting the right people, and having a working environment in place that allows them to develop and apply the full range of their potential skills and value.

2.10 Research around "high-performance workplaces" is beginning to close this gap. High performance workplaces achieve competitive advantage by developing, deploying and retaining worker skills. Practically, they use initiatives such as employee involvement schemes, extensive training, performance-based pay, information-sharing, and family-friendly measures to build co-operative, participatory, and high trust relations between managers and employees.[4]

2.11 While there are some outstanding examples in Australia of firms which are pursuing high performance work practices as part of their competitive strategy, these remain in the minority. Pushed by a tight business environment and global industry dynamics, too many Australian firms are choosing to compete on the low road rather than on the basis of knowledge-intensive products and services.

2.12 An important role for government is to foster economic, political and social environments that favour and speed the take-up of high-performance practices which, in turn, will drive up the demand for high-order skills. Without such a strategy, calls to firms to train more will fall on fallow ground.

3. We need to be realistic about what skills formation policies and programs can and cannot achieve.

3.1 There is no doubt that skills make a very real difference both to the life chances of individuals and to the economic competitiveness of firms, industries and the State.

3.2 But skills should not be presented by either governments or educationalists as the solution to a raft of wider economic and social problems - a tendency too common in contemporary public policy. Skill formation policies are no substitute for full employment and income distribution policies. Skills development programs or strategies of themselves cannot overcome structural weaknesses in the economy, create jobs, solve unemployment, address its social consequences for individuals and regions or shift poorly performing firms to a higher performance level.

3.3 For many firms, skill is a fourth order issue, following competitive strategies, organisational forms and broader issues of people management.[5] Tackling the fourth order issue of skill without tackling predecessor issues is bound to have limited impact.

3.4 While skills are not the only things which are important to Australia's long term prosperity, without them, future prosperity is likely to be limited at best. Therefore a deep and wide skills pool should be viewed as an absolutely essential but not sufficient condition for economic and social progress.

4. Skills need to be put back into a wider context

4.1 Skills formation in Australia has been progressively de-contextualised and it needs to be integrated into a wider context so that its impact and value can be maximised.

4.2 Different countries conceive of skill in different ways depending on their history, culture and institutions. This is most evident in the VET sector where the acquisition

---

[4] Healy, J. (2003) 'High Performance Work Practices', Working Paper, National Institute of Labour Studies Inc, Flinders University of Adelaide, at www.saskillsinquiry.sa.gov.au

[5] Coleman, S. & Keep, E. (2001) 'Background Literature Review for PIU Project on Workforce Development' , Performance Improvement Unit, UK Cabinet Office

of vocational skills has been de-coupled from the contexts in which those skills are actually used (workplaces). As a result, debate about vocational skill has been confined to discussion about its supply through the education and training system which produces the qualifications that certify skill rather than discussion about the workplaces in which those skills are (or are not) deployed or about the demand for skill.

4.3 Research indicates that in many other countries, skill formation is usually integrated with questions of how those skills are used and therefore questions of work organisation, job design, employee relations and other aspects of formal and informal people management systems. The OECD and the European Commission, for example, tend to link the need for enhanced skills with the need to achieve wider changes in the way work is organised in order to produce 'high performance workplaces' in which skills and worker capabilities more broadly can be used to maximise competitive advantage.[6]

4.4 Also unlike other countries, the link between skills for work and skills for citizenship has been broken in Australia as a narrow instrumentalist concept of skill has prevailed. Thus the difficulty of achieving any policy traction for the concept of lifelong learning and the reluctance of most governments around Australia (perhaps with the exception of Victoria and to a lesser extent NSW) to develop adult community education pathways or seriously invest in adult literacy and numeracy.

4.5 Skills formation policy needs to be integrated into a wider policy context which includes but goes beyond education and training policy to questions of state development, industry policy, innovation policy, employment policy and social policy.

5. Move beyond skill to workforce development

5.1 Skills - their development and their use - are inevitably embedded in a wider set of considerations to do with industry dynamics, innovation systems, competitive business strategies, strategic management, human resource management and industrial relations.

5.2 The existing language of 'education and training', 'VET' and even 'skills formation' does not capture adequately the dynamics of skill in the contemporary world of work where the content of skill is changing and where skills are developed formally and informally in multiple contexts through multiple pathways, physical and virtual throughout a working life. Nor does it reflect the multiple contexts in which skills which are acquired are actually used.

5.3 The concept of skill formation needs to be replaced with the more relevant concept of workforce development.

5.4 Workforce development can be defined as those activities which increase the capacity of individuals to participate effectively in the workforce throughout their whole working life and which increase the capacity of firms to adopt high-performance work practices that support their employees to develop the full range of their potential skills and value.[7]

---

6 Coleman, S. & Keep, E. (2001) 'Background Literature Review for PIU Project on Workforce Development' , Performance Improvement Unit, UK Cabinet Office

7 This definition draws heavily on that in UK Cabinet Office (2001) 'In Demand. Adult skills in the 21st century', A Performance and Innovation Unit Report, www.cabinet-office.gov.uk/innovation

5.5 'Workforce development' emphasises that skill is a cross-cutting issue. Policies, strategies and programs intended to develop the skills of the workforce are not the sole responsibility of the education and training system, government or indeed of any single organisation. Rather, business, trade unions, individuals, communities, government agencies and the education and training system have a mutual interest in creating a world class workforce in Australia. Building on and deepening this mutuality of interest in workforce development is a productive and positive way of moving forward. This means going beyond the traditional VET stakeholders to engage with those involved in state and regional development, local government and industry and social policy.

6. Shift policy focus from enterprises to inter-firm and sectoral collaboration

6.1 Much VET policy rests on the assumption is that it is enterprises, not nations or regions that compete and that the demand from individual enterprises should be the sole driver of what skills are needed and for determining the content of those skills. Yet the evidence suggests that while the performance of individual firms remains vital, they are increasingly embedded in wider sectoral and networked systems which have a key role in shaping the collective demand for and utilisation of skill.

6.2 In particular, the changing structure of the economy is, in turn, changing how firms, industries and regions compete and are organised. Innovation will become more central to economic competitiveness and will be increasingly dependent on a wider system of inter-firm and inter-industry collaboration and flows of goods, services and knowledge which link firms and industries.

6.3 This suggests that skills policies and strategies need to balance the current emphasis on individual firms with strategies which seek to develop skill through industry networks, clusters and supply chains. Such strategies, if enough intellectual effort is applied to them, would also integrate small business more fully in workforce development systems.

7. All industries are not equally important to economic growth or to employment

7.1 Current VET policy assumes that all industries are equally important and that investment in skill formation should not 'discriminate' between industries. This raises a major dilemma for government.

7.2 Those industries most likely to deliver (part-time/casual/contract) jobs in the short term are not necessarily those that, through knowledge-intensive production have the potential to create new jobs in the long term but show little employment or even declining growth in the short term.

7.3 A stronger emphasis on skills for knowledge-intensive work is needed, to balance the current emphasis on skills for short-term and low-skill jobs.

8. One size does not fit all

8.1 Current policy assumes that the dynamics of skill are the same across all industries, leading to a 'one size fits all' approach to skill formation policy and programs. However it is clear that skills formation happens in different ways in different industries, and even within industries approaches vary vastly between the leading edge firms and the trailing end firms.

8.2 In an increasingly fragmented world, this 'one size fits all' approach has a limited life and public policies must adjust accordingly by more flexible and localised models of planning and skills development.

9. There are skills imbalances, but …

9.1 Despite the confident predictions of many commentators, and the sophisticated predictive tools available in the marketplace, it is impossible to know with certainty right now how the forces of change will play out or to forecast precisely what skills will be needed in three years time, let alone a decade from now. The important thing is to stay close to the trends and remain flexible.

9.2 The distinction made by DEWR between skill gaps, recruitment difficulties and skill shortages is a useful one.

9.3 **Skill gaps** exist when the actual skill levels in the existing workforce do not meet the expectations of employers. There are many instances where the expectations of employers about the skills of their existing workforce are higher than the skills actually held by that workforce. There is a very clear solution to this problem – increased employer investment in work-related training. This is a matter for employers and not for public policy.

9.4 **Recruitment difficulties** occur when employers have some difficulty in filling vacancies for an occupation. There may be an adequate supply of skilled workers, but employers are still unable to attract and recruit sufficient suitable employees. The recruitment difficulties may be due to characteristics of the industry, occupation or employer, such as relatively low remuneration, poor working conditions, poor image of the industry, unsatisfactory working hours, location hard to commute to, ineffective recruitment advertising and processes or organisation-specific and highly-specialised skill needs. There is no doubt that many Australian employers, especially those in regional areas are experiencing recruitment difficulties but these remain hard to quantify or respond to in public policy.

9.5 **Skill shortages** exist when employers are unable to fill or have considerable difficulty in filling vacancies for an occupation, or specialised skill needs within that occupation, at current levels of remuneration and conditions of employment, and reasonably accessible location.

9.6 There is little evidence to suggest that skills imbalances, where they exist, are the result of an inadequate training system. Unlike wheat or wool, skill is not a commodity that can be readily stockpiled for use when demand for it emerges. Rarely can the training system be blamed for skill imbalances nor will more vocational education and training necessarily reduce the gap between employees and the skills demanded of the market.

9.7 Many of the skill imbalances currently being experiences by employers should be viewed as a normal part of the business cycle. Sustained growth in some industries and, conversely, industry downturns will impact on the demand for skills, as will one-off and unpredictable events such as bushfires, hailstorms, introduction of a new technology or new regulations and the effects of structural/evolutionary changes in specific industries. Equally importantly, imbalances between demand and supply may simply be the result of low pay and unattractive working conditions.

9.8 Skill imbalances should not be interpreted as evidence of systemic market failure. In most cases, the market will adjust although there will be some lag time before it does so. Governments need to resist urgings and the urge to 'do something about them.'

9.9 However, there is a cause for real concern in the **manufacturing industry** and evidence of systemic market failure in this industry is mounting. Apprentice training rates offer a useful indicator of skill shortages. The training rate is the ratio of apprentices in-training to employed tradespersons. Declining apprentice training rates signal that the level of employment of apprentices is declining at a faster rate than the fall in the employment of tradespersons.

9.10 Despite its strategic significance, between 1987 and 2001 the total number of metal tradesperson employed nationally declined by 14%. Over the same period the number of metal apprentices in training fell by 36%. The number of electrical and electronic tradespersons fell by just 4%, but the number of apprentices in these trades fell by 20%.

9.11 The reduction in the supply of new tradespersons from domestic training sources is contributing to the decline in apprentice training rates in manufacturing, and this has significant implications for the long-run supply of skilled trades for production and maintenance activities in the manufacturing sector. I agree with the findings of an AEGIS study which suggests that wide variations in trends between the training rates in different trade areas do not imply a systemic problem with the apprenticeship system, but rather that a range of industry and/or occupational specific factors are inhibiting employer investment in training. This implies that any responses by government need to be tailored to the individual industry sector rather than to industry generically.

9.12 If the current situation continues in the manufacturing industry, it will have major implications for general industry growth and the sustainability of employment levels in key occupations and even alternative approaches such as skilled migration will be unable to supply the number of skilled people needed by the industry. The shortage of toolmakers for example has prompted South Australian businesses to import 35 skilled tradespeople from the UK but such a strategy is not sustainable.

10. 'Employability Skills' need to be treated with caution

10.1 The concept of 'employability skills' has recently become fashionable in VET, replacing the more rigorous distinction between technical, cognitive and behavioural skills.

10.2 There is a tendency, particularly among employer associations, to identify personal/ personality attributes (loyalty, commitment, honesty and integrity, enthusiasm, reliability, personal presentation, commonsense, positive self-esteem, sense of humour, balanced attitude to work and home life, ability to deal with pressure, motivation and adaptability) as 'skills' to be developed both in workplaces and education and training institutions.[8] Many of these personal/ personality attributes are not amenable to structured learning and should lie outside the scope of a formal skills formation system. They are also deeply-rooted in class distinctions.

[8] See Australian Chamber of Commerce and Industry & Business Council of Australia (2002) 'Employability Skills for the Future' report written with support from DEST and ANTA

10.3 Employer preferences for certain attitudes, personality attributes and employee behaviours within their workforces should not be confused with or translated into government policies for and funding of skills development.

11. We need to solve the free-rider problem

11.1 The free-rider (or poaching) problem is a well-known feature of labour markets.

11.2 A skilled labour force requires individual firms to invest in the provision of apprenticeship and technician-level training. This leaves these companies open to the possibility of other firms poaching their skilled workers before they (the firms which do train) have been able to benefit from the investment. Individual companies have an incentive to free-ride on the efforts of other firms which do train, creating a vicious circle which creates a disincentive to train. As one example only, credible sources suggest that one prime South Australian company is paying up to 33% more for key trades than smaller companies and ransacking the workforce of their suppliers as a result, yet holding supplier prices down so that they cannot match wages.

11.3 As skilled workers in strategically critical areas such as metal trades become scarcer, the poaching problem (and associated wage spirals) will become more apparent.

11.4 The solution is to get companies to co-operate so that they all train and all reap the benefits, despite the temptation to free-ride.

11.5 An approach to training based on employer voluntarism in areas of strategic importance to Australia – such as manufacturing –is simply not working.

11.6 The various State-based building and construction industry training funds provide a good example of how industry-based levies can operate successfully in practice to solve the free-rider problem, especially at entry-level.

11.7 Commonwealth and State Governments need to actively support industries/regions to introduce training levies, closely modelled on the building and construction industry example. New arrangements will require widespread consultation and debate since a high degree of consensus amongst the social partners will be critical to their success. But it is achievable, despite the negative press given to the Training Guarantee Levy.

12. We need to solve the equity problem

12.1 Not everyone is benefiting equally from economic and workforce change or from the existing skills formation system and individual access to training in South Australia is very unequal.

12.2 Investment in post secondary skills development, particularly enterprise training, tends to be concentrated on those who already have higher skills.

12.3 More workers are getting fewer hours of training – and in aggregate the total workforce is getting fewer hours of training overall.

12.4 Those least likely to participate in skills development opportunities are people who have left school early; those who are jobless; contingent (part-time, casual and short-term contract) workers; older workers affected by structural change; those working at lower skill levels; those working in small businesses; and those working in the private sector.

12.5 Literacy demands of training and workplaces are increasing and workers performing at lower literacy levels face considerable barriers to participation in work and citizenship. Surveys show that in Manufacturing, the proportion of people

performing at the lower Literacy Levels 1 and 2 is just over 50% and that more than half of those employed in Construction, Agriculture, Forestry and Fishing, Manufacturing, and Electricity, Gas and Water Supply perform at the lower Levels 1 and 2 for prose literacy. But simply offering more literacy and numeracy without attention to job design and work organisation which ensures those skills are used are not likely to be effective.

12.6 This suggests that across-the-board efforts to achieve greater equity in participation, especially in the work-based training route, are not likely to reach those with the greatest needs.

12.7 Tightly focussed strategies (including vouchers) targeted to individuals and not to firms will be required.

Related Publications 1999-2003

Schofield, K. (2003) "Skills for the Future", Report of the Ministerial Inquiry, South Australia

Schofield, K. (2003 forthcoming) "Australian Trade Union Views of Lifelong Learning and the World of Work", paper for National Key Centre in Industrial Relations, Monash University, to be published in a monograph *Trade Unions and Training. Issues and International Perspectives*, edited by Richard Cooney

Schofield, K. (2003) "Think strategy: corporate e-learning in four companies" in Guthrie, H. (ed) *Online learning: Research readings*, NCVER, Adelaide

Noonan, P., Schofield, K., Land, R. & Draca,, M. (2003) "Adult Skills for a Smart State", Report for the Queensland Government's Learning for Life Project

Schofield (2003) "An industry-led VET system: Issues for Policy", OVAL Research Working Paper 03-02, University of Technology Sydney

Schofield, K. (2002) "Skills for the Future", Ministerial Inquiry Discussion Paper", Adelaide

Schofield, K. (2002) "On-Line Learning: Case Studies of the Corporate Experience", Oval Research Working Paper 02-01, University of Technology Sydney

Selby Smith, C. Ferrier, F., Burke, G., Schofield, K. Long, M. & Shah, C. (2002) "Lifelong Learning and the World of Work, CEET's surveys for the ACCI, ACTU and ANTA", Monash University-ACER Centre for the Economics of Education & Training

Schofield, K. (2002) "A new balance: investing in public infrastructure to sustain Victoria's training and skills development system: Final Report", Victorian Office of Training & Tertiary Education

Buchanan, J, Schofield, K., Briggs, C., Considine, G., Hager, P., Hawke,G., Kitay, J., Meagher, G., McIntyre, J. Mounier, A. & Ryan, S. (2001), "Beyond flexibility: Skills and the future of work, Key findings and recommendations", Research report for NSW Board of Vocational Education and Training by ACIRRT, University of Sydney and UTS Research Centre for Vocational Education and Training

Schofield, K. (2001) "Quality in context: Reflections on factors impacting on the quality of apprenticeship & traineeship training" in Smart, N. (ed) *Research readings: Australian Apprenticeships*, NCVER, Adelaide

Schofield, K. (Chairperson) (2001) "The Next Generation, report of the review of TAFE NSW product development system", NSW TAFE Commission

Schofield, K. (2000) "The good, the bad and the ugly: perspectives from three states on the quality of the Australia apprenticeship and traineeship system", paper to the 9th Annual Vocational Education and Training Research Conference, North Coast Institute of TAFE, Coffs Harbour, NSW, 4-7 July.

Schofield, K. (2000) *You can make a difference: the story of the ACTU-Lend Lease Foundation 1980-2000*, Potstill Press, Sydney

Schofield, K. (2000) "Delivering Quality. Report of the Independent Review of the Quality of Training in Victoria's Apprenticeship & Traineeship System", V1&2, Office of Post Compulsory Education, Training & Employment, Victoria,

Schofield, K. (1999) "A Risky Business. Review of the Quality of Tasmania's Traineeship System", Vols.1&2, Office of Vocational Education & Training, Tasmania

Schofield, K. (1999) "Report of the Independent Investigation into the Quality of Training in Queensland's Traineeship System", Vocational Education, Training & Employment Commission, Qld