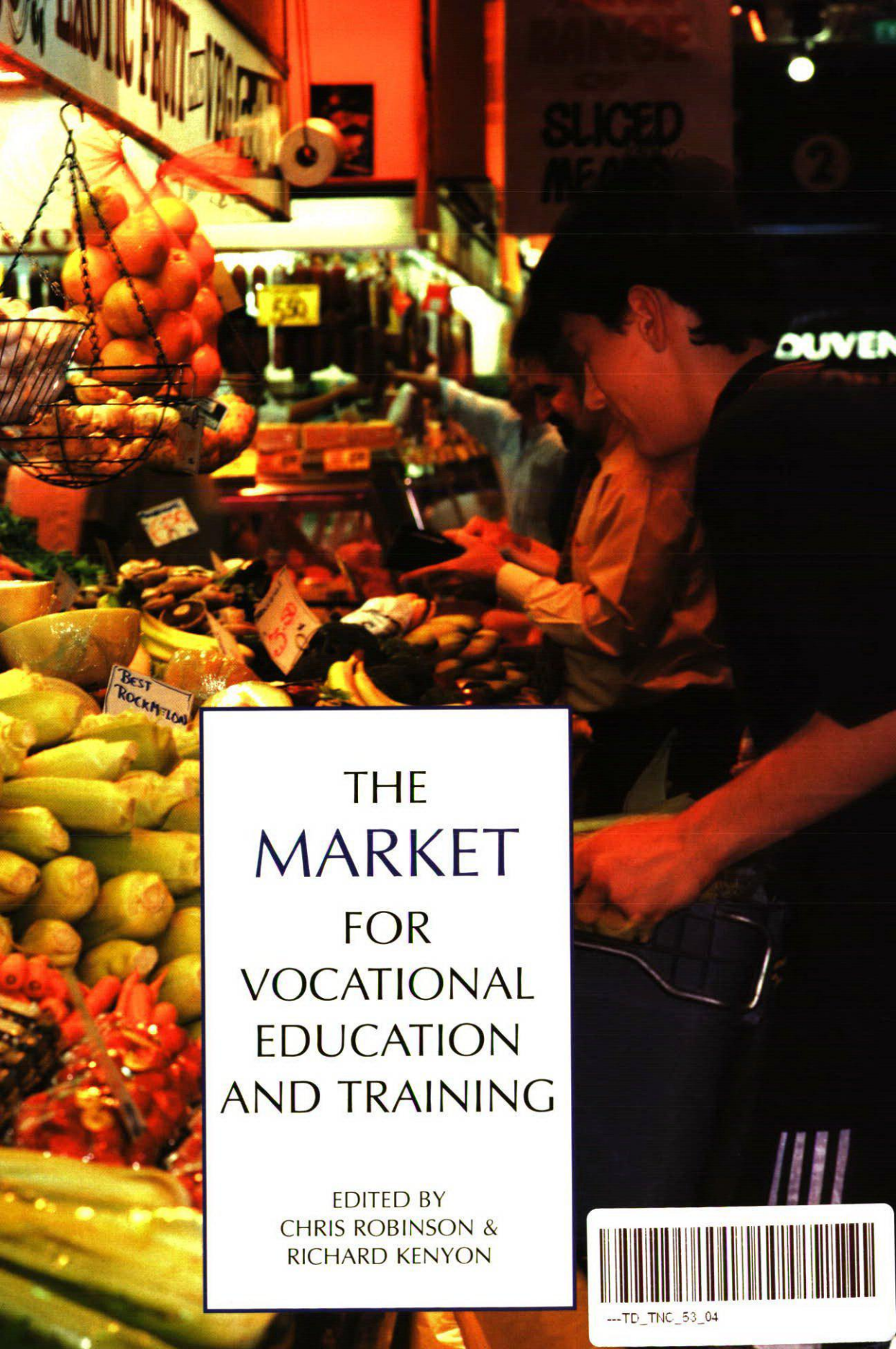


THE MARKET FOR VOCATIONAL EDUCATION AND TRAINING

EDITED BY
CHRIS ROBINSON &
RICHARD KENYON

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NCVER

The market for vocational education and training

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CHRIS ROBINSON
RICHARD KENYON

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Preface

THE MARKET FOR *vocational education and training* is the most comprehensive collection of papers yet compiled about vocational education and training markets in Australia. Some of the papers also draw on selected overseas experience with the emerging phenomenon of market mechanisms in vocational education and training.

Australia is at the crossroads in exploring the development of vocational education and training markets. A large number of issues associated with these developments are described and analysed in this volume. This includes consideration of the benefits and some of the pitfalls that might be associated with a rollout of market mechanisms in vocational education and training.

Over 40 papers by nearly 50 authors are clustered under three broad themes describing vocational education and training markets, these being papers about:

- the vocational education and training product and the providers
- client perspective : industry and enterprise
- client perspective : students and trainees

The papers in this volume were presented at a major national conference 'The Market for Vocational Education and Training : Who Pays and Who Profits?' that was held in Adelaide, Australia, 28–30 July 1997. The conference was organised by the National Centre for Vocational Education Research (NCVER).

NCVER acknowledges the sponsorship of the Australian National Training Authority (ANTA) of the conference. ANTA's sponsorship has made a significant contribution to the cost of this publication.

We commend this volume as a key information resource to all those who are interested in the impact of market developments in vocational education and training.

Readers who are interested in more information about training markets or other areas of vocational education and training research are referred to the NCVER's research database VOCED. Printed and diskette versions of VOCED can be obtained from NCVER (ph +61 8 8333 8400) or it can be accessed directly on the world wide web at the following address:

http://www.ncver.edu.au/voced.htm

Chris Robinson
Richard Kenyon
National Centre for Vocational Education Research Ltd

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The VET market

The Honourable Dr David Kemp
Minister for Schools, Vocational Education and Training

Reforms by the Commonwealth Government to vocational education and training, and how they contribute to developing an effective and responsive training market, are discussed. The government's vision for vocational education and training is outlined, and the benefits envisaged for industry clients and individuals undertaking training. The importance of a quality, national training system (built into all industries) in establishing Australian businesses, products and services as market leaders worldwide is affirmed. New Apprenticeships, the centrepiece of reforms, will help bring the concept of quality training—as embodied in the traditional apprenticeship—into both new and existing industries to meet the needs of employers and of young people. New Apprenticeships will deliver flexible, responsive and accessible training arrangements for businesses, and will open up opportunities for many young Australians, in high-growth industries as well as in the traditional trades. The reforms will provide more opportunities for industry and businesses to be directly involved in the training system, including through user choice arrangements. Industry and businesses will have increased quality and relevant employment-based training. The government strongly supports the further development of a diverse vocational education and training market with a mix of public and private providers. The training market, a central feature of policy, is discussed. It will operate within the new National Training Framework, to streamline training and recognition arrangements, while ensuring a national quality-assured system of vocational education and training. Schools are encouraged to take a more active role in vocational education and training and make stronger links with training sectors.

Introduction

THANK YOU FOR inviting me to be the keynote speaker at this conference on the 'Market for vocational education and training'.

We are all involved with a very exciting and dynamic phase of reforms to vocational education and training, and I am very pleased to have this opportunity to talk to you about these reforms, and how they are contributing to the development of an effective and responsive training market.

I would like to start by putting these reforms in context—by outlining the government's vision for vocational education and training, and the benefits we envisage for clients of the training system—both industry clients and the individuals undertaking training. Bearing in mind the theme of this conference, I would also like to outline in some detail our concept of a training market, which is a central feature of our policy on vocational education and training in Australia.

Vision

Vocational education has a crucial role in the government's vision to develop Australia as a society able to adapt flexibly and dynamically to the challenges of a highly competitive global economy. That vision recognises the importance of a quality, national training system (built into all industries) in establishing Australian businesses, products and services as market leaders worldwide.

Australia has a proud tradition of aspiring to be the best, and we must continue this tradition in our training system if we want to compete successfully in the global economy. Our training system should produce nothing short of world class skills.

There are two clear challenges in achieving this vision:

- First, training must service the needs of enterprises and improve their competitive advantage. We need a training culture in Australia where employers embrace the training system to develop a skilled workforce because they recognise that it will improve their bottom-line profitability. I do not have to tell this audience that education and training is a key to unlocking potential productivity growth. But for this to be an effective strategy, business needs to be confident that the skills provided by training and training providers can meet their needs.
- Secondly, training must serve the needs of those who are trained and recognise the needs of a free enterprise economy with a highly mobile labour force. To achieve this we need a national framework for the provision of training that leads to qualifications that are portable throughout Australia.

The reforms being introduced by the government will position the vocational education and training sector to respond to these challenges. They will deliver on our two key objectives, which are:

- to make training more flexible and responsive to employer needs
- to provide greater opportunities for young people to access these training opportunities

I mention these objectives because they are such fundamental principles of our reforms. This government is committed to developing an on-going partnership between the training system and industry, under industry leadership. This will enable business to be confident that training products and training providers can meet their needs.

We are also committed to addressing the current unacceptably high levels of youth unemployment, and to providing real job opportunities for young Australians based on quality, recognised training.

New Apprenticeships, which are the centrepiece of our reforms, will help achieve these objectives. They will bring the concept of quality training—as embodied in the traditional apprenticeship—into both new and existing industries, in a new and flexible way which will meet the needs of employers and of young people.

New Apprenticeships will deliver flexible, responsive and accessible training arrangements for businesses, and will open up opportunities for many young Australians, in high-growth industries as well as in the traditional trades.

The new national system has been developed in close consultation with industry to ensure that it will meet the training needs of business, particularly small business. It will be a far simpler system, operating within the new National Training Framework, which will streamline training and recognition arrangements, while ensuring that we have a national quality-assured system of vocational education and training. The reforms being introduced through New Apprenticeships will deliver better training arrangements for employers and individuals. However, to be completely effective, New Apprenticeships need to be introduced in a training system which must itself become more responsive and flexible.

The development of an effective and efficient training market will help ensure this happens. Indeed, the acceleration of market reforms will be one of the major influences for change in vocational training arrangements.

Training market

Currently, the training market in Australia is estimated to be worth over $7 billion, with governments contributing around $3 billion. Enterprises and individuals spend around $4 billion of their own funds on training each year.

Training is provided by some 84 Technical and Further Education (TAFE) institutes (many with several campuses) and 2500 registered private training providers around Australia. TAFE supplies 85 per cent of training, with the market share of private providers now 15 per cent. Over recent years, there has been a significant increase in the number of private providers and with this, a substantial increase in the amount of publicly-funded training delivered by private providers. This has enabled a diversification of the training market in Australia.

In recent years there has also been an encouraging increase in joint venture projects and sharing of resources among public and private providers. These joint ventures have taken many different forms, including joint training provision or sharing of resources, such as information, staff development, training materials, equipment and facilities.

Public and private funding

Private spending in the training market by enterprises and industry is primarily directed at firm and individual specific need. Public funding of vocational education

and training is directed at the public good, including general skill development and meeting skill needs of industry and business. The government has a range of responsibilities in this regard: economic responsibility to underpin the national pool of skills for industry and business; responsibility to provide funding to assist with young people's initial preparation for the workforce; and social responsibility to support community aspirations and meet the needs of disadvantaged people.

Governments have to ensure that their involvement in the market facilitates equitable allocation of public resources and at the same time encourages private investment in training. Particularly in a competitive environment we want to ensure that the public dollar does not replace the private dollar.

National Training Framework

One of the ways in which we are opening up the training market is through the National Training Framework. These new arrangements will remove unnecessary barriers to entry into the training market, including those which have limited providers' access such as cost and complexity.

Providers will only need to register in one State and pay a single registration fee in order to operate in all States and Territories. This will facilitate the entry of an even greater number of training providers into the training market, providing far greater choice for clients. It will also give existing providers greater opportunity to operate across State and Territory borders.

Importantly, there will also be significant benefits for individuals undertaking training. Under the new National Training Framework arrangements, New Apprenticeship qualifications will be recognised in all States and Territories. This will greatly expand career opportunities for young Australians who will have their skills recognised wherever they wish to work in Australia.

Increased competition

Increased competition in the training market is another objective being addressed through the reforms, particularly to enhance the responsiveness of the training system. Competition is seen as one of several mechanisms to drive improvements in the training system to increase flexibility, efficiency, quality and client choice.

In guiding the overall operation of the training system, governments need to manage and balance competition reforms against all the national priorities. An appropriate mix of public and private providers is needed to deliver outcomes that are balanced between enterprises, individuals and the community.

The Australian National Training Authority (ANTA) agreement has provided a solid foundation for pursuing market reform, including increased competition, within the vocational education and training sector.

In recent years, States and Territories have increased the proportion of funding allocated to competitive activities, resulting in increased private provision of

accredited training. An estimated $108m was used to purchase places through contestable funding mechanisms in 1996 by States and Territories. This figure is expected to increase substantially during 1997 and receive a major boost with the full introduction of user choice in 1998.

A revised ANTA agreement, which is now being discussed between the Commonwealth and States and Territories, will continue to provide the basis for further development of the training market, including through increased competition, to enhance responsiveness to clients' needs.

A new national strategy for vocational education and training is being developed by ANTA in collaboration with the Commonwealth, States, Territories and industry. The ANTA Ministerial Council will consider the draft strategy later in 1997. The strategy will incorporate new policy directions in the development of the training market and the implementation of user choice. As part of this process, Commonwealth, State and Territory ministers have identified the 'expansion of market mechanisms' as a key priority for the coming year.

As many of you know, ANTA has recently completed extensive national consultations on a discussion paper *Developing the training market of the future*. The aim of the consultations was to explore views on developing a more responsive Australian training market which delivers quality outcomes.

I know that the National Centre for Vocational Education Research (NCVER) contributed to this process, as I am sure have many of you here at the conference. The National Centre's submission to ANTA, which looks at research evidence relating to the development of a competitive training market, provides some useful insights on training market issues. Of particular interest is the need they identified for a stronger empirical base for development of training market policy.

Some preliminary advice from ANTA on the consultations is that there was strong agreement that current government purchasing mechanisms for vocational education and training, and the structure of the relationships between clients and providers, do not adequately reflect demand.

ANTA also found strong support for the need to strengthen conditions that promote investment in vocational education and training, including building direct links between clients and providers. There was also widespread support for the government's role in the training market in providing strategic support to industry and community skill development.

A system of strong TAFE institutes, operating alongside, and in co-operation with quality private provider networks, was widely supported as an essential feature of an effective training market.

Those consulted identified that there were major benefits from a well-developed training market, including:

- a more efficient use of government funds
- vocational education and training products and services that represent 'value for money' for enterprises and individuals

- a diverse national skill pool which benefits both Australian industry and the community

Commonwealth, State and Territory ministers of training will be considering a report from ANTA on the outcomes of the consultations in the next few months. Ministers will then take decisions on any further improvements that we need to make the training system more effective.

User choice

User choice is a key strategy already in place to develop the training market.

The introduction of user choice arrangements for the off-the-job training for apprentices and trainees will increase the responsiveness of the training system to the needs of its clients by encouraging a more direct relationship between individual providers and clients.

The user choice arrangements will enable clients to choose the provider of off-the-job training whom they believe can best meet their training needs and to negotiate with training providers over aspects of training provision such as content, mode of delivery, location and timing. Public funds will then flow to that training provider, which can be a TAFE or private provider.

States and Territories have agreed to the implementation of user choice from 1 January 1998.

Commonwealth, State and Territory Ministers considered a range of issues associated with user choice in May 1997. Ministers have agreed that third party access to publicly funded facilities is a desirable element of user choice and this will be pursued within the State and Territory approaches to implementing competition policy.

It is expected that these arrangements will allow providers to negotiate access to publicly-funded training infrastructure, including expensive and specialised facilities and equipment. This should open up new opportunities for clients and providers, particularly in rural regions.

Within the context of public training provision, another important issue for user choice is that of separation of roles of purchaser and provider of training. Public agencies have two rather different responsibilities:

- as purchasers of training from a range of providers, both public and private, in the interests of users
- as managers of the public assets in State and Territory TAFE systems

There is potential for conflict between their responsibilities in undertaking these two roles.

This issue has been under consideration in most States and Territories as part of the general development of competition policy. Most States have agreed in principle that the separation of roles between purchaser and provider is also desirable under user choice and that this issue will be pursued at the State and Territory level.

Both of these issues have significant implications for facilitating the opening up of the training market generally.

Access and equity

It is important that in developing a competitive and responsive training market we maintain the principle of a fair go for all and remain responsive to the diverse nature of our society. The vocational education and training system must continue to target the skill needs of disadvantaged clients and specific groups in the community if we want to build on our country's tradition of social fairness and provide opportunities for those in our society who are disadvantaged.

The revised ANTA agreement will continue to provide the basis for meeting the needs of specific client groups, as will the revised national strategy for vocational education and training.

Commonwealth, State and Territory ministers have agreed that a priority for 1998 will be provision of greater opportunities and improved outcomes for under-represented clients.

Efficient use of resources

Another key policy priority for the government in the vocational education and training market is to maximise the efficient use of public resources. The vocational education and training sector operates at a substantial cost to the public purse. A large public-sector budget deficit is an impediment to employment growth and it is important that continuing efforts are made to ensure that maximum value is achieved from public expenditure.

Maximising value from assets, whether they be educational, capital or human, in the system will allow a broad range of client needs to be met within financial constraints. I have already talked about third-party access to TAFE infrastructure.

The Commonwealth will be looking to derive future growth in public-sector funding of vocational education and training from increased efficiencies. As part of this process it is important to establish accurate costs for vocational education and training.

Achieving efficiency and maximising the use of resources can only be achieved if reliable information is available on the costs associated with the provision of training. Lack of knowledge of true costs hinders pricing of products and services and efficiency improvements.

These issues are particularly important for the effective introduction of user choice. Under the user choice arrangements, pricing of training programs by State and Territory Training Authorities will be based on clearly identified unit cost benchmarks. Commonwealth, State and Territory ministers have recently agreed to common costing principles for user choice which should assist in determining these costs.

Performance measures based upon robust data are also critical to driving performance improvements and achieving efficiencies in the system. To this end, ministers have established an industry-led Performance Review Committee to develop a comprehensive and long-term set of key performance measures for the vocational education and training sector. The committee will forward their recommendations to the ANTA Ministerial Council by the end of 1997.

I understand that this Committee agreed in December last year that the NCVER be contracted by ANTA to manage the preparation of the 1996 Benchmarking vocational education and training report. The report will provide details of performance information across the vocational education and training systems in Australia. The committee also agreed that the NCVER should act as the independent data adjustor to ensure comparability of data supplied by the States.

States and Territories have continued to refine delivery cost relativity data for the occupational groups and levels of training classifications used in State training profiles. The revised data will contribute to this work on benchmarking and key performance measures at the national level.

Encouraging a training culture

Most of the reforms I have talked about today are those that involve the supply side of the training market. These reforms are aimed at making the supply side more demand-driven and more responsive to its clients. The supply-side reforms must be matched by changes to the demand side. This involves industry and individual firms.

Industry needs to further develop its own training culture, recognising that training is good for business. The New Apprenticeship policies are based on this underlying premise.

If investment and participation in vocational education and training is to increase in this country, there is a need to increase the awareness of vocational education and training and perceptions of its value in industry.

In May 1997, Commonwealth, State and Territory ministers agreed to establish a national working party to develop a comprehensive strategy to promote the development of a training culture throughout Australia.

VET in schools

The last issue I wanted to cover, and one which I think is particularly relevant, is how we provide greater opportunities for young people to access the opportunities being offered through the new training arrangements.

It is of immense concern to this government that so many young people are leaving our schools and entering long periods of unemployment. In the past 15 years the pathway to employment for students who do not go on to university has gradually disintegrated. The unskilled positions which they traditionally entered no longer exist.

What makes this issue even more disturbing is that in some areas of Australia apprenticeship and traineeship vacancies are advertised and cannot be filled because there are not enough young people applying with the skills and attitudes being sought by employers.

I believe that schools need to take a more active role in two ways:

- ensuring all students are taught the basic skills they need to participate effectively in society, particularly literacy and numeracy skills
- providing greater assistance to the 60 per cent of students who do not go on to university or TAFE, and who face such great difficulties in entering the labour market. This will require far greater involvement by schools in vocational education and training, and stronger links between the schools and training sectors

There are a few schools across Australia which are leading the way in taking responsibility for the outcomes of all the students in their care. They are virtually guaranteeing a pathway to employment for 100 per cent of those students who choose not to enter university.

A major element of the approach being adopted in these schools is to provide quality vocational programs for their senior secondary students. Students are being given access to industry-recognised training that provides them with the work skills that are being sought by local employers. These vocational programs involve on-the-job training with local businesses, giving students valuable exposure to the workplace and helping them to develop their practical skills. The students can undertake these programs as part of their senior secondary certificate.

The Commonwealth Government announced a package of measures totalling more than $187m over the next four years to support the expansion of these types of programs across Australia. One of the new initiatives being supported through these measures is the establishment of part-time traineeships and apprenticeships in schools.

I find it very encouraging that a number of schools have already forged links with their local training providers and group training companies and will have students commencing part-time traineeships during 1997. Notably, students will be starting their traineeships in the next couple of weeks at senior secondary schools in Illawarra in NSW and Mackay in Queensland.

The traineeships will involve periods of paid work each week, combined with three or four days at school. Students will enter a contract of training with their employer for the period of the traineeship and will be employed under a workplace agreement.

I cannot emphasise enough how important these new vocational education and training initiatives in schools are for helping young people make the transition from school to employment.

There are also major benefits for employers who in future will be able to access a pool of potential employees at school leaver age with skills in areas such as customer/client relations and communication in the workplace.

Providing these opportunities for young people will, I think, have a big effect on the culture of Australian schools. These new programs will mean that during their time at school, young people will establish a link with an employer outside the school, which will lead on to industry-recognised and endorsed qualifications. Not only will the programs teach young people specific skills, but they will also help them become effective lifelong learners.

These new arrangements offer real hope for our young people to make a smooth transition from school to work—from adolescence to adulthood—and embark on a career underpinned by high quality and portable qualifications. I hope the vocational education and training sector will respond positively to these new initiatives and develop strong partnerships with schools, particularly at a local level.

Conclusion

In conclusion, I hope it is clear from the various initiatives I have outlined that this government is delivering on its commitment to develop a simplified, more responsive and flexible national training system.

The reforms will provide more opportunities for industry and businesses to be directly involved in the training system, including through the user choice arrangements. Industry and businesses will have increased quality and relevant employment-based training.

Providers will benefit by the reduced regulation and increased flexibility. These reforms will offer challenges and present many new opportunities for training providers to gain a real competitive edge in the training market.

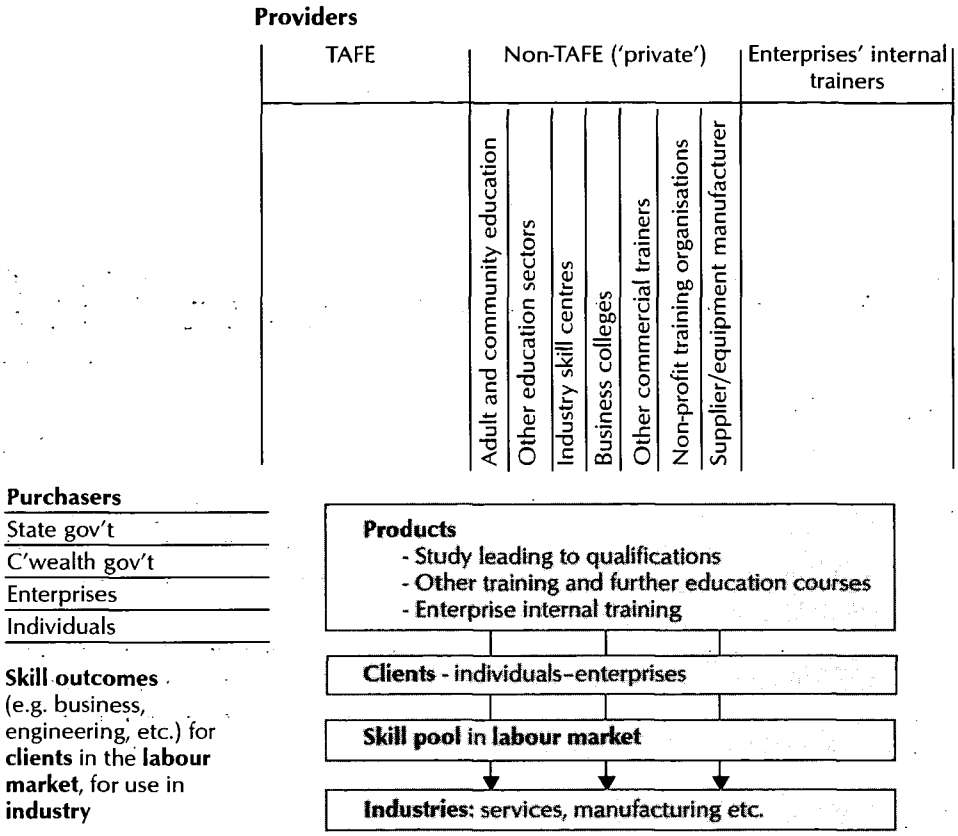
Individuals will be offered more choices through greater diversity in the supply of accredited training and nationally recognised and portable qualifications which are valued in the labour market. Individuals' employability will be greatly increased.

Lastly, these reforms will profit Australia. The competitive position of enterprises will be significantly enhanced by the development of skills and this will ultimately increase Australia's competitiveness in the international arena.

The Commonwealth Government strongly supports the further development of a diverse vocational education and training market with a mix of public and private providers delivering quality services funded by public and private investment. Government reforms to the operation of the market are making training a more attractive option for firms and public funding is being directed to develop the national skills pool and provide opportunities for young people.

I look forward to working closely with the States and Territories on the implementation of these reforms and the development of a true training culture in Australia.

Figure 1: Schematic diagram of the training market



Size of market

The total size of the Australian training market (see Table 1) was estimated in the OTFE Report to be between $6.5 billion and $8.6 billion in 1992; we adopted the former as the more conservative figure.

Providers

Providers are groups such as Technical and Further Education (TAFE) institutions, commercial or other non-TAFE training institutions, enterprise training arms etc. which supply training services to *clients* that are paid for by *purchasers*. TAFE is the largest provider sector at $3 billion of revenues, probably between one and two times the combined size of competing provider sectors other than enterprises ($1 billion) and equipment suppliers ($1.1 billion). (Others were estimated as follows: adult and community education (ACE) $0.3 billion; commercial colleges $0.1 billion; other commercial providers $0.5 billion; non-profit $0.5 billion; industry skill centres $0.2 billion.)

Market frameworks in VET

Vince FitzGerald
Executive Director, The Allen Consulting Group

The paper deals firstly with the concept, size and profile of the training market and its players; and with the competitive structure, conduct and performance of the market. The limited aim is to provide a broad outline of dimensions and patterns to contextualise policy discussion and to provide a concrete framework for analysis of the market.

The paper goes on to examine the introduction of market based reforms in both the wider public sector and overseas markets for vocational education and training (VET), as a basis for assessing the role of market processes in Australian vocational education and training. A qualitative analysis is offered of the role of government in the area, and a framework is outlined for determining the appropriate scope for market processes in VET.

Introduction

This paper is based on a consultancy study commissioned by the Office of Training and Further Education (OTFE) in Victoria in 1994.[1] The overall aim of the study was to provide an analysis of the nature, structure and role of the Australian 'training market' to assist effective strategic decision-making by relevant government agencies.

Concept and dimensions of the market

The training market, or more broadly the vocational education and training (VET) market, can be defined as that part of the education and training system which provides individuals with the skills and learning expressly required by enterprises and industry. Our concept of the training market—which provides the framework for much of the policy analysis and discussion in this report—distinguishes providers, purchasers, clients and outputs. It is illustrated schematically in Figure 1.

Purchasers

Purchasers are those who provide the funds for the training market and include State and Commonwealth governments, enterprises and individuals. Estimates indicate that State and Commonwealth funding accounts for just under half the training market income.

Enterprises are the next major source, providing over 40 per cent on a minimum estimate. This excludes about $2 billion of employee salary cost while undertaking training—inclusion of which in the market size estimates would raise the enterprise share to $4.4 billion or over half the size of the market so defined, of which $1.2 billion was sourced externally.

Table 1: Minimum estimate of major training purchaser segments (Year to December 1992)

Purchaser	Funding to TAFE ($m)	Non-TAFE funding ($m)	Total ($m)	Share (%)
State Government funding of TAFE	**1930**		**1930**	**30**
Commonwealth funding	**703**	**537**	**1240**	**19**
Funding of TAFE	*703*		*703*	*11*
Other Commonwealth funding (e.g. LMP)		*537*	*537*	*8*
Enterprises	**119**	**2681**	**2800**	**43**
TAFE commercial and other fee for service	*119*		*119*	*2*
Non TAFE external spending		*581*	*581*	*9*
Equipment suppliers and manufacturers		*1000*	*1000*	*15*
Cost of internal trainers		*1100*	*1100*	*17*
Individuals	**98**	**392**	**490**	**7**
Vocational fees and charges	*85*	*340*	*425*	*6*
Adult education	*13*	*52*	*65*	*1*
Other unattributed TAFE revenue (could include overseas students revenue, or income from enterprises or individuals)	**84**		**84**	**1**
TOTAL	**2934**	**3610**	**6544**	**100**

Note: Excludes employee salary costs attributable to the time undertaking internal training
Source: Allen Consulting Group estimates. The methodology is described in the OTFE Report.

Outputs and outcomes

The *products* or *outputs* of the training market—skills recognised in qualifications or gained in unrecognised enterprise or other courses—contribute to the common skill pool for Australian industry. Some 1.4 million clients were enrolled in 1993 for studies leading to educational qualifications. While the number of persons enrolled in courses leading to qualifications is significant, the number of persons who undertook other

training courses (which did not lead to formal qualifications) is even larger. In terms of *outcomes*, the skilled proportion of the population has been rising steadily in all categories except trade qualifications. For all post-school qualifications, the proportion in the over-18 population rose from 38.6 per cent to 43.2 per cent in the five years to 1993.

Competitive structure of the training market

In looking at the competitive structure of the training market in Australia, it is clear that the impact of government as major purchaser of training has been profound. Government both *directly funds* TAFE and purchases training on a now substantial scale through open tender, in what may be termed a *'funding market'* in which providers compete for funding for specific blocks of training. There is also an *open or 'fee-for-service' market* in which ultimate users buy directly from providers.

Impact of government: The 'funding market'

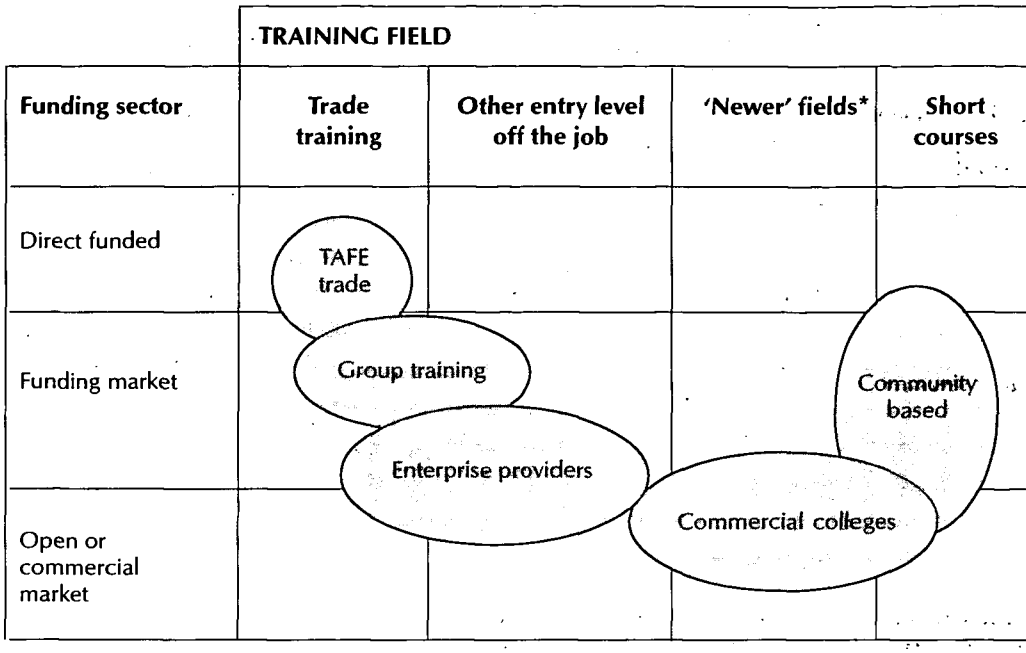
In the *funding market* domain where competition has existed for some time, namely for the training component of labour market programs, off-the-job entry level training (other than trade training) and migrant education, TAFE has definitely lost share to private providers, particularly community providers which have lower infrastructure costs.

'New' VET fields and the open (commercial or fee-for-service) market

From its original heartland of trade training, TAFE has broadened its training delivery, shifting the balance of provision towards 'new' fields such as business, information technology, office administration/secretarial and hospitality. It has also established virtually a second 'heartland' directly funded by government in literacy and numeracy. There is, however, high private provider concentration in these fields, as private providers were able, and quick, to capitalise on unmet demand as well as to jump low barriers to entry, due to low capital costs etc.

While competition in the open or fee-for-service market is quite marked in the areas of business, office administration/secretarial and information technology and hospitality, TAFE remains the dominant provider in terms of market share. While charging higher course fees, private providers have been successful in winning business by offering trainees a high probability of a job placement outcome. Figure 2 shows schematically where competitors to TAFE are typically positioned relative to TAFE *trade* courses; TAFE, of course, has a presence in *all* fields and funding sectors.

Figure 2: Illustrative provider positioning by funding sector and training field



* Business administration; office/secretarial; computing; hospitality etc.

Source: Allen Consulting Group analysis

TAFE positioning and commercial strategies

The commercial strategies (both domestic and international) of TAFE systems differ by State, with certain States (e.g. New South Wales) organising themselves at the system level while others (e.g. Victoria) are organised at the college level. The limited scope of this paper and unavailability of public data as to the outcome of the States' commercial strategies, however, hinders an analysis of the relative merits of the different State commercial strategies.

Although certain 'best practice' TAFE colleges have been highly successful in expanding their fee-for-service activities, because of the limited nature and extent of competition in the training market, only minimal pressure has so far been exerted on the TAFE system as a whole to improve its performance.

Conduct and performance of the training market

It is only the open or commercial (fee-for-service) market which acts as economists understand a market to operate in the fullest sense, although some market elements operate elsewhere. (See Figure 3.)

Figure 3: Overview of market sectors

	Provider/type of training	Purchaser	Comment–market conduct
Training funded directly to institutions	TAFE (all budget funded training places)	State Government	Planning, budgeting processes rather than market forces identify demand and determine 'purchase' (little direct input by ultimate user) However some States have adopted (or are adopting) purchaser/provider models with competitive elements
Funding market	TAFE Commercial providers Community providers Other private providers	DEETYA programs States/ANTA process	Open to price competition among tenderers Still little input from ultimate user Cross subsidisation?
Open market: Fee-for-service/ Commercial	TAFE (commercial training) Enterprises	Enterprises Individuals	Direct input from user (negotiate price, quality, quantity) Direct price signals
	Other private providers	Overseas purchasers	Issues: ❖ Access to necessary infrastructure to compete ❖ Potential for greater direct market contact with growth of enterprise providers (introduction of 'user choice')

Quasi-market processes in the directly funded sector

Although in the sector in which institutions are directly funded by government there are some competitive pressures, generally the planning and budgeting processes that operate produce what can be best regarded as heavily managed quasi-market pressures. Discussion about funding has focussed on recurrent funds, obscuring the impact on funded training provision of high infrastructure costs. A shortcoming of these funding processes is that there is little direct input from the end user of training despite the attempts, through peak body consultative processes and the like, to draw in industry input. Such input is inherently of 'wish list' character because those who provide it are typically not confronted with the real resource costs of the training or possible trade-offs.

Prerequisites for 'user choice'

Before genuine 'user choice' can be further extended, more meaningful product descriptors and outcomes measures need to be developed, with government or other intermediaries assisting with advice. Indeed such descriptors and measures are fundamental even where government continues to act as purchaser—in the 'funding market' and even in the directly funded sector. (See Figure 4.)

Figure 4: Advantages of clearly defined product specification, assessment and selection processes

- ❖ a specification which genuinely matches organisational needs

- ❖ tenderers competing on the same basis, without varying assumptions as to the task
- ❖ a reduced scope for tenderers to price contingencies for uncertainty or unclear risk
- ❖ a more efficient and accountable tender assessment process
- ❖ eager and co-operative tenderers keen to provide tenders for future projects
- ❖ maximum innovation in the tenders received

- ❖ reduced administration effort and conflict during the delivery phase

Source: *Doing more with less?*, Public Sector Research Centre, UNSW, 1993.

Barriers to operation of the market

Private and TAFE providers surveyed identified a number of market distortions or barriers to entry, including lack of access in some States to curriculum developed with public funds or conversely to privately developed curriculum; slow and bureaucratic accreditation and registration procedures; a tendency for accreditation authorities to use TAFE curriculum as a benchmark leading to a proliferation of TAFE 'product clones' rather than greater product diversity; and, lastly, poor articulation to higher education institutions.

Shortcomings in market responses

Persistent skills shortages in certain occupational areas suggest the need for some improvement in the training market's ability to identify and meet industry's skills needs. Equally, the social objective of equality of access has not been fully achieved, with continuing low participation rates by disadvantaged groups (particularly women in entry-level training and Aborigines and Torres Strait Islanders).

Most State training authorities neither clearly define nor explicitly cost community service obligations (CSOs) generally, relating to non-economic objectives. CSOs need to be made explicit and transparent in each State system's funding model.

Market-based reform in the wider public sector

Case study and other literature on experience with market-based reforms in the wider public sector, particularly in the publicly-funded health care sector, yield instructive

models. A number of issues emerge which appear very relevant to the process of extending the use of market-based reforms in the vocational education and training sector.

Separating purchaser and provider, aligning incentives with goals

Simply separating purchaser from provider and introducing competitive tendering may be capable of delivering significant efficiencies, but it does not necessarily assure the delivery of the best value for money—either for the ultimate consumer or for government, where it is the purchaser.

For market-based reform to be successful, it is critical to get the structures right, so that incentives presented to participants in the training market align closely with the ultimate goals to be achieved. Sub-optimal or even perverse results can emerge if this is not so.

Product descriptors, output and outcome measures

As already noted, a very important threshold issue for success in meeting the needs of ultimate users of training is to ensure that there are meaningful, outcome-oriented product descriptors and output measures around which purchasing and provision can occur. (We have recently carried out a study for the Australian National Training Authority's [ANTA's] Performance Review Committee proposing output and efficiency measures for VET.[2]) Equally important is the development of meaningful outcome measures and their wide dissemination to users.

Importance of information dissemination

Experience with market-based reform in other areas of the public sector suggests that there will be circumstances in which it is a legitimate role for government to purchase services such as training on behalf of the ultimate users, rather than allowing them to do so. But it needs to be questioned whether this area is as extensive as it has been regarded. With proper information, it should be possible to limit the intermediary role of government in many areas to an advisory one, with the ultimate users exercising choices themselves in relation to both meaningful product descriptions and outcome measures, and full costs.

The operation of training markets in selected overseas countries

This part of the study undertook a moderate extension of the work already done by us in the 1994 *Successful reform* report to ANTA.[3] The new research looked specifically at the operation of overseas training markets in the UK, the US, Sweden and New Zealand.

Range of mechanisms

Various mechanisms based on market principles are being used to achieve greater efficiencies—including competitive tendering, vouchers for individuals to purchase training, and profile funding based on averages and meeting certain performance criteria. In the UK, vouchers in the form of training credits are preferred by employers because they are seen as more responsive to their needs.

Wide–ranging performance criteria which address, among other goals, access and equity considerations, are a common feature of arm's-length contractual arrangements in the UK and New Zealand. Provision of extensive information to users of the vocational education and training system is also an essential accompaniment of the adoption of market-oriented mechanisms. This is a major emphasis in the UK reforms.

Regulatory frameworks

A regulatory framework which is widely accepted by all stakeholders is an essential element of market-based systems of resource allocation to ensure that consistent signals are sent to all participants in the system. An important aspect of generating widespread acceptance of the framework is confidence in the quality of the system's products. Recent criticism in the UK of the quality of training offered through the national vocational qualifications framework shows the need for government to guarantee the value of the new 'currency' of the training market represented by competency standards and assessment procedures.

Quality processes

The use of market mechanisms needs to be supported by well developed quality processes to ensure that efficiency is not gained at the expense of effectiveness against desired goals and values. New Zealand appears to have progressed most in establishing a strong parallel quality management system.

The private management of public monies also involves a continuing role for government to monitor expenditure and to maintain accountability to Parliament. The extent of continuing government intervention in the delegation of authority to non-government agencies appears to vary according to the political context in which reforms are operating. The UK experience suggests that the emphasis on short-term budgeting and regular surveillance is likely to significantly negate the benefits gained in more flexible resource allocation through market-based approaches to the purchase of training.

The role of government in the VET market

The public policy basis for the government role in VET encompasses both equity and economic foundations, together with wider social considerations.

Community service obligations

Equal opportunity in the Australian community depends importantly on equality of access to education and training—pointing to a major role for government in supporting entry level training, to the level of a first post-school qualification. Equity is also a basis for the responsibility which government accepts in respect of access to training by disadvantaged groups and the unemployed. In general, government should specify and fund explicitly (and centrally) all significant CSOs.

Benefits of common skill pool

There is an economic justification (an externality) for government support for skills training generally in Australian industry, to foster the development of the common skill pool on which all enterprises, particularly small and middle-sized enterprises, rely. Nevertheless, enterprises and individuals gain most from their own training and should both jointly meet much of the costs and exercise their own choices in meeting their training needs.

Government's essential role: Determine rules not outcomes

Government's main role is not in determining outcomes but in setting the framework and rules for the market to work: maintaining the 'social currency' of a public qualifications framework assisting the wide portability of skills; correcting market failures, particularly in the production and dissemination of market information; and ensuring consumer protection. The government's role as regulator in VET should reflect the broader Hilmer policy principles—i.e. have promotion of competition as a central aim. The social importance of VET has little bearing on this, since government can control standards of service quality and protect equity and other social concerns.

As a major provider, government needs to separate its purchaser role from its provider roles and review the structure and organisation of the publicly funded VET provider systems (mainly TAFE).

A 'federal' organisational model for VET systems

The 'federal' organisational model offers a positive approach to balancing competition and co-operation in such an environment, suggesting that systems be structured to combine local autonomy with the scale and other benefits of co-ordination and collaboration.

The prime principles of such a model are subsidiaries (hence a small central organisation), interdependence and pluralism, common communication and reporting systems, clear and sharp accountabilities and 'dual' affiliation of professionals with their own local institution and the wider organisation. One of the centre's roles is in promoting quality assurance systems and a quality culture. Government has key roles in managing change, most importantly in ensuring flexibility in employment arrangements at the level of the individual institution. Other roles include assisting in acquisition of market skills and in external marketing.

Setting the regulatory framework

Along with its various indicated roles in managing the adjustment process, the main role for government in establishing and operating an effective training market is to provide the regulatory framework which promotes private action to invest optimally in vocational education and training; which reinforces incentives so that training with positive externalities is undertaken; and which corrects market failures.

One of the most important roles of all is maintenance of the system of public qualifications and the supporting structures of accreditation and registration which will continue to make it creditable.

As well, of course, government has responsibilities to pursue equity, through support of entry level and remedial training, along with other important social values; and, on economic grounds, to support the development of the common skill pool.

The vocational education and training market adjoins the labour market. One of the major roles for government, therefore, is to ensure that arrangements in the labour market itself, particularly in wage setting, are conducive to optimal investment in skill formation.

Appropriate scope for market processes in the VET sector

The question of the appropriate scope for market processes—on both the demand side and the supply side—in the Australian vocational education and training sector breaks down into issues of feasibility; balance of social benefit and cost in relation to where boundaries are set; and implementation and transitional issues.

Prima facie, there is little question that it is feasible for market processes to operate widely in the VET sector, in the sense that there are large numbers of actual and potential competitors to public providers and, on the demand side, many enterprise and individual clients currently exercising market choices themselves. The question is not whether but how far market processes should operate in the VET sector.

'User choice': The preferred model

'User choice' arrangements should be preferred wherever they can effectively and appropriately operate—focussing on employer sponsored contractual training, which can act as 'leading edge' demand conveying actual enterprise needs directly to providers. However, it must be recognised that the complexities of extending market processes to the demand side exceed those of doing so on the supply side (through competitive tendering). Complexities include externalities, the need to protect a range of community values, measurement problems, difficulties in establishing neutral competition and structural issues (primarily in TAFE systems). Broadly these should be approached in a benefit/cost framework.

Information systems

Systems need to be put in place to allow individuals and enterprises generally to exercise informed choices. This means requiring all providers directly or indirectly publicly supported to record and publish (at the level of the institution and program) output–oriented performance measures. Government support for information dissemination, including support to non-government advisory intermediaries, is warranted to assist the market to work.

Measures to ensure competitive neutrality

Neutrality of competition among providers requires explicit specification and funding of CSOs, neutralisation of differences in liability to tax, ensuring appropriate access to publicly funded curriculum etc. Use of full accrual accounting and balance sheets by public providers would be highly desirable.

Infrastructure poses major issues, suggesting that government, while it may purchase some training on a 'spot' basis, needs to develop appropriately long and deep contracting cycles if contractors are to have incentives to invest in new overhead capital, importantly including human capital.

Transactions costs may be the major issue implying a continuing role for in-house public service provision (particularly for school leavers and others with no employer sponsor), but many market-like arrangements can still apply beneficially here.

Overall, there is substantial scope for further extension of effective market processes in the VET sector. Major net national benefits would flow from this.

Endnotes

1 Allen Consulting Group, *Establishing an effective Australian training market*, report to the Office of Training and Further Education, Victoria, December 1994 ('OTFE report'). Later figures are available for a number of the data items discussed here, but it was beyond the scope of this conference paper—focussing primarily on *frameworks* and using numerical data only for concrete context—to carry out a comprehensive updating.

2 Allen Consulting Group, *Output and efficiency measures for vocational education and training*, report to the Australian National Training Authority Performance Review Committee, May 1997.

3 Allen Consulting Group, *Successful reform: Competitive skills for Australians and Australian enterprises*, report to the Australian National Training Authority, 1994.

The New Zealand market approach

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Reforms to New Zealand's post-compulsory education and training system since the early 1990s have featured the use of a number of market mechanisms. This paper focusses on the industry training strategy introduced in 1992 to illustrate the use of such mechanisms. This strategy involves industry directly in the setting of training standards and the purchase of training with government funding directed to industry intermediaries. The purchaser/provider model used for industry training is compared with two other generic funding mechanisms found within the post-compulsory education and training sector. Further reforms to the sector are foreshadowed.

Introduction

SINCE THE EARLY 1990s, reforms of New Zealand's post-compulsory education and training (PCET) sector have sought to increase responsiveness to client needs, and give rise to greater efficiency, quality and effectiveness. At the same time, participation in PCET has increased at all levels as has overall government expenditure in the sector.

The government has retained an important role in the sector:

- it *funds* or *purchases* around $NZ 1.45 billion[1] of PCET services each year
- it has an *ownership* interest in 39 state-owned tertiary education institutions (TEIs)
- it has a *regulatory* role in establishing and maintaining the framework within which PCET services are provided and determining the roles and responsibilities of key players in the sector.

The use of market mechanisms has been an important feature of the reforms which is well illustrated in the industry training sector. Industry training is part of the PCET sector in which on- and off-job training occurs based on an employment relationship. Reforms since the passage of the *Industry Training Act* (1992) have, *inter alia*, sought to increase the quantity, quality and relevance of structured training undertaken by people in employment. A key feature of this strategy is the direct involvement of industry, particularly through setting standards and controlling the allocation of

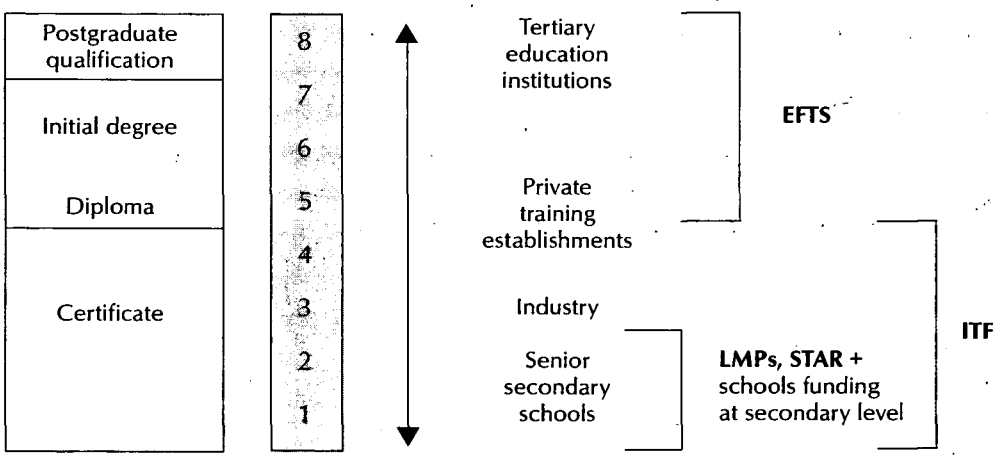
government funding to training providers. This paper explores the dimensions of these market mechanisms and the experience to date with the purchaser/provider model in the industry training sector.

VET in New Zealand

A distinguishing characteristic of the New Zealand post-compulsory education and training system has been the integration of general and vocational education as an explicit policy goal. There is an overarching National Qualifications Framework (NQF) comprising eight levels ranging from the senior secondary school through to post-graduate qualifications. Although there is a continuum along which post-compulsory education and training occurs, there is not an identifiable vocational education and training section of the framework.

Broadly defined vocational education and training does, however, occur in a variety of settings including the senior secondary school, workplaces, private training establishments, and tertiary training institutions including universities and polytechnics (see Figure 1). Within the PCET sector, industry training (known as part of the wider 'brand name' Skill New Zealand) is distinguished by the need to have a contract of training and a defined employment relationship.

Figure 1: The post-compulsory education and training system in New Zealand



EFTS = Equivalent full-time student funding
ITF = Industry training fund
LMP = Labour market program
STAR = Secondary tertiary alignment resource

Characteristics of the post-compulsory education and training market in New Zealand

A 1996 statistical survey[2] of education and training in New Zealand found:

- 40 per cent of NZ's working age population (15–64) participated in education or employment related training in the preceding 12 months
- 350 100 persons (or 26 per cent of all wage and salary earners and 15 per cent of the working age population aged 15–64 years) undertook some form of training provided by their employer (most of it 5 days or less)
- 286 500 persons in employment undertook training not provided by their employer
- 170 000 persons of working age (not including those at school) were working towards a recognised qualification

A 1994 survey by the New Zealand Employers Federation on structured training estimates that employers contributed about 3.5 per cent of their payroll to such training. If translated across all industries this indicates that private sector spending on training is in the order of $1 billion of the total wage and salary bill.

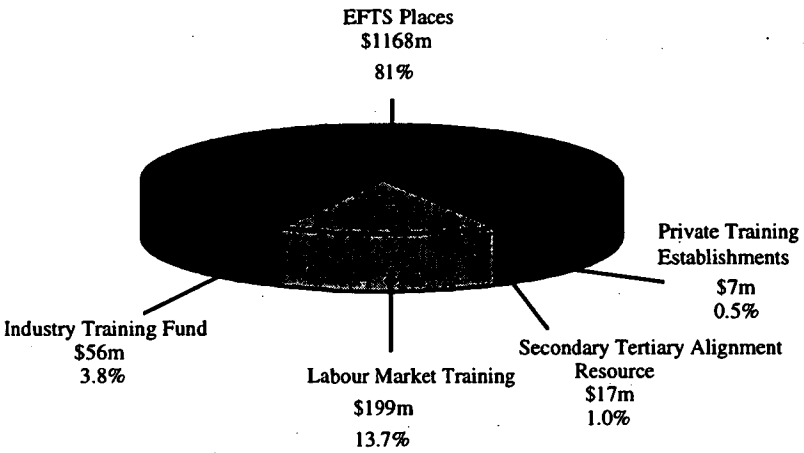
Currently there are:

- 212 000 full- and part-time students receiving tuition subsidies for tertiary studies through Equivalent Full Time Student (EFTS) allocations predominantly through:
  - seven universities
  - 25 polytechnics
  - four colleges of education (teacher training institutions)
  - three wanaga (Maori tertiary institutions)
- 28 800 trainees[3] (in some form of employment relationship) receive funding through the Industry training fund
- over 40 000 Training Opportunities Scheme participants (a labour market program for disadvantaged persons) which is provided predominantly by private training establishments
- more than 50 000 students over the age of 16 in 430 secondary schools

In addition to the State-owned tertiary education institutions and schools there are over 700 private training establishments and 11 government training establishments.

Total government funding for the post-compulsory education and training sector amounted to some NZ $1.45 billion in 1996. Just over one-third of total government education expenditure is spent on post-compulsory education and training if student loans and allowances are also included. A breakdown of post-compulsory education and training funding is shown in Figure 2.

Figure 2: 1996–97 government funding for post-compulsory education and training[4]



The New Zealand market approach to post-compulsory education and training

In the latter part of the 1980s increasing concerns about New Zealand's education and training system led to a number of reviews of the education system. These reviews led to a series of fundamental reforms of New Zealand's PCET sector including:

- the introduction of bulk funding of tertiary institutions
- extending government subsidies to students attending private training institutions
- introducing a student loans scheme
- increasing the targeting of student allowances
- allowing tertiary institutions the freedom to set tuition fees
- developing an overarching NQF

These reforms have led to an increasing focus on the needs of students and industry, with providers encouraged to become more efficient and responsive. The market for PCET services has become more diverse and competitive with innovation occurring at a number of levels, as providers often generate revenue from sources other than government subsidies. From the government's point of view there is increased transparency in terms of what it funds and greater accountability for those outputs.

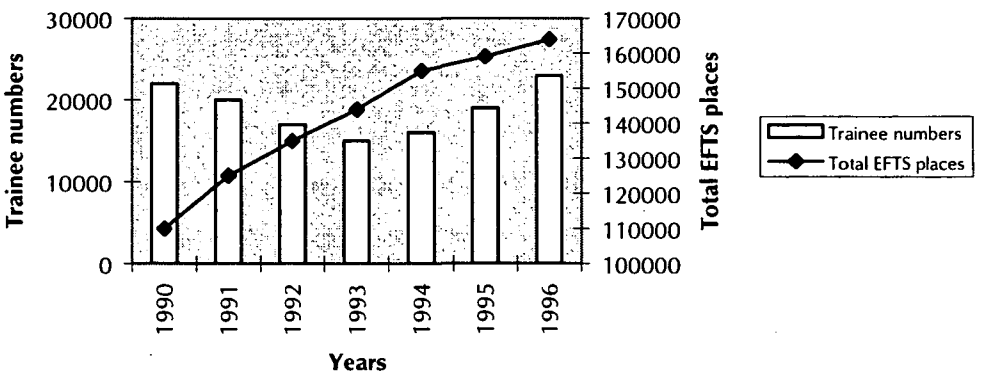
Government intervention remains a pervasive influence in the market for PCET services. A pure market approach would tend to emphasise contracting and private arrangements between those who demand PCET services (primarily students and industry) and those who supply them. However, given the on-going role of the government in the sector, including the commitment to continuing investment and the achievement of strategic goals such as participation, reforms have sought to more closely approximate the operation of a market. In particular, a number of market

providers, of which many have a strong Maori and Pacific Island people focus reflecting the greater than 50 per cent participation on the program by these groups. The program has an annual allocation of $186 million and provides courses to level 2 on the NQF.

Industry training outcomes

- Although there has not been a full evaluation of the Skill New Zealand strategy, a stocktake by government officials (ETSA et al. 1996) highlighted some key achievements to date: there were 27 500 industry trainees at December 1996 which represents an 85 per cent increase since June 1993 (as at March 1997 this figure was 28 800 and ITOs are forecasting further significant expansion to over 40 000 by the end of calendar 1997—see also Figure 3).
- Of the 52 ITOs, 31 had little or no formal structured training before the *Industry Training Act* was passed (such as sport, fitness and leisure, dairy).
- There has been a significant increase in the usage of registered industry standards and qualifications on the NQF.
- There has been a steady increase in the number of ITOs able to register workplace assessors.
- The number of providers delivering training on the NQF has risen from 45 in 1994 to over 750 towards the end of 1996.
- Of the 300 (approximately) qualifications on the NQF, half have components of core generic and/or communications standards.
- Maori people are 12 per cent of industry trainees and represent 8.6 per cent of the total workforce.

Figure 3: Growth in trainee numbers and EFTS places 1990–96



Institutions are required to account retrospectively for the actual number of EFTS places they provide and for the total amount of EFTS training. Under the *Education Act* (1989) TEIs have the autonomy to make their own management decisions as to how this bulk funding is spent and, within funding categories, can decide on the courses they wish to offer. A number of TEIs do not charge differential fees for courses and therefore undertake a significant element of cross subsidisation.

A small pool of EFTS funding ($7 million) is available for disbursement to private training establishments (PTEs) who cannot access the larger pool of EFTS places for TEIs. The actual EFTS subsidy for PTEs ranges from between 20 per cent to 80 per cent of what a state-owned tertiary education institution would receive for a similar course. Consequently PTEs tend to charge substantially higher fees than TEIs.

The purchaser/provider model

In contrast to the EFTS funding system, which is based on nominal historical costs of courses, the Industry Training Fund is a purchase system based on current prices. Following concerns with the original funding arrangements for industry training after the introduction of the *Industry Training Act* (1992), a single Industry Training Fund (ITF) was created and began operation in 1996. This fund includes resources which were previously directed to polytechnics through the EFTS funding system for off-job training. Payments are made to ITOs on a quarterly basis dependent on the ITO reaching the forecasted level of training activity.

The ITF is premised on ITOs estimating the full costs of industry training across both on- and off-job training areas and the government subsidising the cash costs. This requires a co-payment by industry as a test of whether the training is a worthwhile investment. These five areas and the ITF subsidy rates include:

- providing information and advice to trainees/employers (40 per cent subsidy)
- arranging on-job training (80 per cent subsidy)
- arranging the on-job assessment of trainees (50 per cent subsidy)
- purchasing and arranging off-job training (82 per cent subsidy)
- arranging the monitoring of training quality (70 per cent subsidy)

In 1997 benchmarks have been established to ensure that all industries and training arrangements are treated in an even-handed manner. The measure of volume used as part of the ITF funding mechanism is the Standard Training Measure (STM)[6]. Although STMs are intended to give a rough comparability with the EFTS measure (i.e. they relate to one full-time student year) it is important to note that the former is more of an output measure compared with the input-focussed (time-based) EFTS measure.

The direct purchasing model

The third type of funding mechanism is the direct purchase arrangements used by the Education and Training Support Agency for places on the Training Opportunities Programme. This purchase mechanism involves competitive tendering at the regional level for places on courses. Around 90 per cent of places are with private training

Currently there are 52 ITOs which range from industry specific ITOs (e.g. textiles), to occupationally based ITOs (e.g. engineering). Eight ITOs are responsible for 80 per cent of the training effort and appropriate 80 per cent of the industry training fund.

The second strand of the industry training strategy is the NQF which was established in 1990. To date the NQF is based on unit standards[5] (these are outcomes which students and employers need to meet in a particular area of skill and knowledge). ITOs are the national standard-setting bodies for their industries and therefore have the ultimate say in determining the outcomes of training in their areas. There have been over 300 qualifications registered with over 9000 component unit standards, most of which are industry related.

Funding industry training—the purchaser/ provider model

There are three generic models of government funding mechanism for the post-compulsory education and training sector:

- the equivalent full-time student (EFTS) funding system—this model bulk funds tertiary education institutions based largely on student demand for particular courses
  - there is also a small separate allocation to private training establishments
  - the purchaser/provider model—with this model the government funds industry training organisations which then specify the amount, nature and price of training they wish to purchase from providers
  - the Secondary Tertiary Alignment Resource allocated by the Ministry of Education also fits this broadly defined model as it enables schools to purchase tertiary courses (mostly from tertiary education institutions)
- the direct-purchasing model—this model is used by the Education and Training Support Agency (a Crown agency responsible for facilitating a number of training options) to contract on a contestable basis for the provision of places on the Training Opportunities Program (a labour market program targeted to persons with educational disadvantage).

EFTS funding model

By far the greatest proportion of government funding for post-compulsory education and training is distributed through the EFTS system, which was introduced in 1990. Each tertiary institution receives a small base grant and is also funded within a capped allocation according to the Ministry of Education's assessment of the number of students institutions estimate they will attract for the ensuing year (there are 11 broad course categories, with 23 program classifications). Changes in aggregate student demand therefore affect the number of EFTS places a TEI receives as will changes in demand for particular courses. As a bulk-funded allocation, EFTS funding includes contributions for TEI's capital, operating and research needs.

mechanisms have been used to create funding systems which place strong incentives on providers to meet the needs of students and industry. The key characteristics of New Zealand's approach to fostering a greater role for the market in the delivery of PCET services include:

- increased *contestability* between PCET providers accompanied by a higher degree of managerial autonomy for State-owned tertiary education institutions
- increased use of *price signals* as the basis for allocating resources—this varies between real prices used with the allocation of industry training funding to nominal prices for equivalent full-time student places in different courses
- *funder-provider split*—government funding is allocated through separate processes to providers; in the case of industry training this is done through industry intermediaries
- *demand-responsive funding*—funding systems are premised on consumer needs; in the case of industry training funding is based on outputs such as training to the required quantity and quality specified by industry bodies
- the requirement of a *co-payment* by students and industry towards meeting total costs
- the establishment of *new areas of market demand* by creating new learning pathways and permissive training arrangements

Industry training—the development of market mechanisms

The complete reform of industry training arrangements followed in the wake of general PCET reforms outlined above. There had been widespread concern with the quantity and quality of industry training. Other concerns included the lack of responsiveness of providers to industry needs, and rigidities in the traditional apprenticeship arrangements were increasingly out of step with the 1991 industrial relations reforms.

There are two key strands to the industry training strategy. The first strand is the *Industry Training Act (1992)* which was based on the premise of 'training designed by industry for industry'. The act established industry training organisations (ITOs), which defined industry as two or more enterprises that use similar inputs and methods of production to produce similar products or services.

ITOs are responsible for:

- setting national standards and developing qualifications for their industry for inclusion on the NQF
- developing the arrangements for the delivery of training (ITOs are not, however, providers of education and training services *per se*)
- arranging for the delivery of training on and off the job
- developing arrangements for the monitoring of training and the assessment of trainees

Many polytechnics, which are the traditional providers of off-job training, appear to have lessened their emphasis on the provision of trade training generally. Currently in the pipeline there are two applications from polytechnics to become universities (unlike colleges of TAFE, many polytechnics offer degrees). Furthermore, polytechnics claim that a significant percentage of trade training courses have either been abandoned or are at risk of discontinuance. This decline is often attributed to industry training funding arrangements. The loss of contracts with ITOs in some polytechnics is alleged to have impacts on the viability of total training provision in that particular trade, particularly for smaller polytechnics.

There is, however, mixed evidence on these issues. Industry training comprises as little as 5 per cent of polytechnics' total revenue and their ability to marginally cost EFTS funded courses for ITOs is an undoubted competitive advantage. It is also worth noting that some 60 per cent of the Industry Training Fund is used to purchase off-job training, of which over 90 per cent is provided by polytechnics. The actual amount of government funding for off-job training (as part of the Industry Training Fund) has increased from $15.4 million in 1995 to $32.8 million in 1997. The number of ITO funded EFTS places for the 1996 academic year received by polytechnics increased by 34 per cent since 1995.

It would therefore appear that while the total quantum of government funding for off-job training has increased, the unit cost has fallen in response to competitive pressures and the increasing number of trainees drawing on the ITF through ITOs. Private training providers are picking up some of the business traditionally held by polytechnics. There is, however, at this time no documented account of how the market for training provision for ITOs is developing across the country.

Future directions

The formation of a coalition government under New Zealand's first proportional representation election in late 1996 signalled two significant reviews which are likely to impact on industry training:

- a comprehensive review of tertiary education which will include funding and regulatory arrangements across the sector
- the development of an integrated employment service which is also intended to administer labour market programs with a training emphasis (currently this is the predominant responsibility of the Education and Training Support Agency)

Furthermore, the government has produced a Green Paper on the future of the NQF. While there has been strong industry support for the NQF there are a number of groups which have stood outside, including the universities and some secondary schools. The Green Paper proposes broadening the framework to accommodate a variety of qualifications and types of assessment, including those not based on unit standards. This would include 'provider qualifications' which are not developed with the specific endorsement of industry (for example, a diploma in engineering offered by a polytechnic).

The stocktake also outlined a number of concerns identified by particular groups:

- Some groups believe that there are too many ITOs.
- The allocation of the ITF does not take into account differences in costs of training by virtue of a flat rate STM which has caused concern from industries with higher-cost training (e.g. the automotive industry).
- Some polytechnics have expressed concern about the purchasing arrangements for off-job training used by ITOs, including the predominant use of one year contracts.

The industry training strategy has progressively transferred off-job resources from polytechnics into the hands of ITOs (although there has been only one year's experience with the revamped Industry Training Fund). It is clear that placing funding directly in the hands of industry has led to a number of significant changes in the way training is organised and purchased:

- ITOs have the choice of purchasing training through a range of providers, including private providers and on-job industry provision (at least one ITO has arranged for all training to be on-job) and they are now consciously 'shopping around'
- As trainee numbers have risen, the average total cost for off-job training has fallen 14.5 per cent from $12 203 in 1995 to $10 646 in 1996.

Interactions with other parts of the post-compulsory sector

The use of market mechanisms has significantly influenced behaviour throughout the PCET sector, particularly at the level of competition between providers. Competition between TEIs is evident throughout New Zealand. One Central North Island University (Massey) has successfully set up a campus in the greater Auckland area. Tertiary education institutions are now much more outward-looking, with one university (Lincoln) earning more revenue from consultancy services and foreign fee-paying students than it does from EFTS-derived revenue.

However, the vast bulk of government PCET funding is delivered directly to TEIs through the EFTS funding mechanism. As indicated in Figure 2, the industry training fund comprises only 4 per cent of the total government funding for the post-compulsory education and training sector. Although this fund appears to have had a significant impact on the way in which training is now arranged by industry and on the price at which it is delivered, its effects are somewhat mitigated across the PCET sector as a whole.

There is only partial integration of the different PCET funding arrangements across the sector. This has meant that choices for students may be skewed towards the use of state-owned TEIs because government subsidies tend to be lower for private training providers and industry training arrangements. Furthermore, concerns have been expressed that the EFTS mechanism has provided incentives to increase course length and emphasise quantity at the expense of quality.

Concluding remarks

New Zealand has reformed its PCET arrangements with the explicit objective of making the delivery systems more responsive to the needs of key clients, such as industry and students. There are a range of approaches that have been used to simulate more closely the workings of the market, particularly through the use of funding systems which respond to student and industry demand. In the case of industry training the approach to developing market mechanisms has revolved around industry being involved directly in:

- defining core industry groupings for the purpose of training strategies
- setting standards applicable to specific industries
- using government funding (on a co-payment basis) for purchase of training

Evidence assembled thus far indicates that the objective of industry ownership of the strategy has developed significantly since the introduction of the *Industry Training Act* (1992). The permissive arrangements under this act have meant that not all industries have responded to the new directions, although in aggregate industry training numbers have increased substantially from a low base in the early 1990s. However, ITOs are actively exercising their powers as purchasers with the result of increased contestability for provision of off-job training. These powers have not been welcomed by all parties, particularly some providers, however the effect has been to reconfigure the market for industry training. The future application of this model, both within the industry training sector and across the wider PCET area more generally, is an issue which can be expected to feature prominently in the forthcoming Review of Tertiary Education.

Endnotes

1 All prices are given in $NZ which currently translates to about $A0.9.
2 New Zealand's total population is about 3.6 million of which there are about 1.8 million people in the labour force.
3 Trainees is the generic term for both apprenticeships and traineeships.
4 Exclusive of student income support, student loans and adult education.
5 See discussion on future directions for the NQF arising from the government's recent Green Paper on a future qualifications policy for New Zealand.
6 An STM is defined as 120 credits (components making up unit standards) at levels 1 to 4 of the NQF.

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An economic primer to government's role in VET

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The role of government in vocational education and training (VET) is considered, looking at the appropriate level of public subsidy for VET, its role in determining course and subject content for VET in general and its role in financing students' involvement in VET. The aim is to offer some broad principles from mainstream economic theory that might be useful in the consideration of different ways of thinking about VET policy. The views expressed follow from the economics of education framework.

Introduction

WHAT FOLLOWS IS a primer on the role of government in vocational education and training (VET). Three broad questions are addressed:

- What is the appropriate level of public subsidy for VET?
- What is the role of government in determining course and subject content for VET in general?
- What is the correct role for government in terms of financing students' involvement in VET?

The analysis and conclusions reached for policy are neither prescriptive, nor are they definitive. The aim instead is to offer some broad principles from mainstream economic theory that might be useful in the consideration of different ways of thinking about VET policy. The views expressed follow from the economics of education framework, and are not influenced by potentially useful alternative (or complementary) perspectives such as those related to sociology, political science or psychology.

It also should be noted that the issues covered are only a subset of those surrounding the area of government involvement in VET, and thus the exercise is not comprehensive. Nevertheless, the topics considered are several of the most significant questions in this area and they warrant specific and special attention.

What is the appropriate level of public subsidy for VET?

Perhaps the most important issue for contemporary debate on the right level of government subsidy is the issue of private versus social benefits, because this has implications for what is the correct charge. The essential concern is: how much does society benefit from VET above and beyond the consequences for those educated? That is, how do we value the so-called 'externalities'?

The externalities from formal education have been argued traditionally to include, among other things:

- reduced criminal activity
- more informed public debate
- more sophisticated voting behaviour
- additions to economic growth as a result of more formally trained workers dealing productively with random shocks

None of the above has been quantified to the point that there is agreement on their worth. However, there is some consensus that at the margin the value of externalities is likely to be greater at the primary and secondary levels than it is for tertiary education. Even so, most commentators suggest that for at least the last three dot points the additional learning from tertiary education delivers societal benefits, but no commentator expresses confidence concerning their size.

Over the past few years an additional issue has emerged that might help in the assessment of educational externalities. This research goes beyond, and is a useful addition to, the conventional understanding of the potential benefits of tertiary education. It is known as 'new growth theory'.

New growth theory promotes to centre stage the potential significance of the accumulation of human capital as a determinant of economic growth. In particular, higher levels of education are seen to facilitate technological progress, which is the engine of growth.

One dimension to these relationships which has been well researched in the labour economics literature involves the nexus between formal education and on-the-job training, and the link between the latter and the adoption and adaptation of new methods of production. In this literature, higher levels of on-the-job training lead to the more efficient implementation of technological change which, as noted, is the most important factor for increasing productivity.

The essential point is that workers with high levels of firm specific skills understand how a given generic advancement in technology applies to their particular workplace, and will thus be able to implement it relatively effectively.[1] That is, it is well documented that a significant practical aspect of technical change at the firm level is the implementation of new production processes in the context of the idiosyncratic workings of a given work environment. The evidence points to a strong positive

connection between higher levels of formal education and investments in informal training at the firm level.[2]

A more direct point with respect to the value of education in terms of the externalities related to economic growth is that there is now compelling evidence that high levels of formal education by themselves are critical to the successful introduction of new capital equipment (Bartel & Lichtenburg 1987). That is, labour with high levels of education is in greater demand when the newest physical capital (machinery) is being introduced at workplaces, which implies that higher levels of post-compulsory education (PCE) enhance economic growth by facilitating the introduction of technical change embodied in new equipment.

Establishing that PCE matters for the process of technological change does not by itself mean that there are externalities. It also has to be the case that firms and their relatively highly educated employees have difficulty in protecting property rights from the implementation of new technology. If technological change flows easily from one workplace to the next, the benefits of tertiary education are not completely captured by the individual, which means that some part of the gain from tertiary education is an externality.

One way this might happen is through a highly imperfect patents system. A second is through the existence of practices such as reverse engineering (in which a firm takes apart the product of its competitors to determine how it has been made). Both imply that it is likely that the rewards from technological innovations flowing from tertiary education investments are not restricted to the more highly educated only. This promotes a case for government subsidies, given that the benefits accrue broadly to society.

However, there are (at least) two complications in trying to apply the above lessons in practical terms. One is that the benefits will differ between courses and disciplines (as well as between individuals). More 'vocational' study, for example, is sometimes argued to have fewer externalities than more 'educational' study. Further, judgements on this issue are likely to be very subjective, for example, some argue (without strong evidence) that increasing the supply of lawyers can encourage excessive litigation, with associated social costs.

The second complication, implied earlier, is that currently there are no empirical techniques or data which permit the evaluation of these externalities. Indeed, it is likely that such quantification can be made, and presumed values of externalities will be contentious.

In summary, externalities from PCE—with the case being strongest for those associated with technological change—mean that the costs should not be paid for entirely by students. But with that noted, there is as yet no compelling evidence on the appropriate size of the subsidy—only that it should exist—nor is it obvious how large the subsidy should be for different types of formal training. Given this, judgements as to the appropriate level of government subsidy on the basis of the presumed value of externalities will continue to be subjective.

It is possible to understand the implicit value governments have given to the externalities of Australian PCE, assuming (without any strong evidence) that the economics of education is the driving framework for policy. If that is true the implicit value of externalities will be given by the difference between teaching costs and the charges levied on students. Until recently, the Higher Education Contribution Scheme (HECS) and Technical and Further Education (TAFE) charges have been between about 20 and 40 percent of direct public sector costs for universities and VET institutions respectively, suggesting an implicit valuation of externalities of between 80 and 60 per cent of government outlays.[3]

The above observations have implications for what is the appropriate subsidy—and what by implication is the appropriate charge—for particular VET courses. In the absence of information concerning the externalities associated with specific courses, the most straightforward (albeit poorly informed) assumption is that they are identical between courses. Such an approach implies that the subsidy should be same for all VET students (per year), which would then suggest that ensuing charges should reflect course costs to some extent.

What is the role of government in determining course and subject content for VET in general?

This is a complicated matter, with there being two obvious issues. One is the questionable presumption that because governments might have advantages in terms of understanding the future job and skill needs of the economy, this promotes the case for governments prescribing what is taught. The second is the possible existence of distortions in the labour market that could be diminished through government intervention. These questions for policy are now dealt with in turn.

Prescription

It is likely that governments have some advantages over private citizens in understanding the possible future path of skill shortages. After all, the biggest collector and analyst of labour market and industrial production data are the government, and *a priori* it might seem reasonable to suggest that there are economies in using this information to influence the make-up of VET.

However, it is important to point out that having an information comparative advantage does not imply that the government should then compel VET institutions to provide particular courses. Rather it follows that the appropriate role of government would be to make the information widely available to consumers (students) and providers (VET institutions). This would help to ensure that informed decisions are then made by students in terms of applications, and by institutions in the composition and provision of places.

It is important to note that both consumers and producers of VET are likely to want to take significant steps towards being reasonably informed about the labour market situation, and to react accordingly in decisions concerning course choice and provision.

It is also the case that unforeseen exigencies will result in mistakes being made, but these are unlikely to be mistakes that would be corrected through government directive. Old style 'manpower planning', in which governments seek to predict job vacancies for different occupations in the future, have a poor track record, for three reasons now considered.

- The actual forecast of a skill shortage, say, in the market for fitters and turners, or chefs, is likely to be wrong because the announcement of the shortage will have the effect of encouraging more students to take up those trades. If, as a consequence of this response, there are a relatively high number of those graduates, the shortage could well turn out instead to be a glut. The forecast can turn out to be wrong simply because it influenced the labour supply of the group in question.
- Prescriptive policies based on perceived future labour market requirements cannot take account of changes in the demand side of the economy which may occur over the time it takes to produce graduates of PCE. Taking the fitter and turner example again, if in the early 1980s when the outlook for manufacturing employment in Australia was good, and a large number of prospective fitters and turners had been encouraged into VET, they would have found it difficult to find jobs on completion of training a few years later because of the large and unanticipated downturn in manufacturing employment. Mistakes made with respect to the exigencies of future labour markets cannot be avoided. If the errors of less than perfectly informed VET students and institutions are a fact of life, they might be exaggerated by less than perfectly informed government directives on the 'right' number of places. Again, the provision of the best possible contemporary information—with disclaimers as to likely future accuracy—seems to be the correct response.
- There is only a poor mapping between the courses undertaken and the subsequent occupation of VET graduates. Many students can use their skills in a large range of jobs, but this is only weakly reflected in the available occupational data. For example, students taking accounting units may find job openings in government, financial institutions, or a large range of private sector jobs that do not necessarily have the title 'Accountant'. In part the weak links between the course of study and eventual employment of graduates are a result of the fact that the VET experience for many students is not just one of acquiring very specific vocational skills. That is, one of the benefits of PCE is that it equips graduates with the skill of learning, a skill that can be transferred easily into a myriad different employment needs. Even so, and a point for VET policy compared to government involvement in higher education, is that the skills mapping between formal training and the eventual job is likely to be more precise the more education is directly linked with particular vocational tasks, as it is in VET.

The bottom line is that while drawing broad conclusions is unwise, direct prescription of VET courses is an appropriate role for government. Instead it is easy to argue the case for government expenditure being directed to the provision of extensive information for both consumers and producers of VET. This already happens to some extent.

A related point concerns the correct role for governments given judgements about the 'social value' of particular types of training. That is, if the government believes that without intervention there will be, for example, 'too few' nurses or 'too many'

mechanics, a mainstream economic perspective would lead the government to offer higher subsidies for nursing and lower subsidies for mechanics, which could take the form of scholarships. Judgements related to the relative social benefits of different occupations are in essence assessments of the value of externalities and arguably should be treated this way through course-specific subsidies.

As suggested earlier, there is no evidence that the externalities differ greatly by course. If this is so, the best way for a government to proceed is to offer a standardised subsidy related to course costs. This approach then implicitly assumes that the externalities are constant by VET course.[4]

There may of course be barriers which make it difficult for a government to get the price side correct, and in these circumstances prescription could improve social welfare. If this is to happen it would be desirable that the barriers are understood and made public, and that the costs associated with prescription, examined above, are made explicit. However, some of the possible barriers are related to monopoly power from different occupational groups, an issue now considered.

Distortions

A case for direct government intervention in VET course provision is unrelated to prescription. It concerns the possibility of there being so-called 'distortions' in the labour market related to course provision. These problems result from the power of special interest groups.

Imagine a particular organised skill group which influences tertiary institutions to limit the supply of graduates in its area. If supply is lower because of this activity the income of the protected group will be higher than it otherwise would be. This can reasonably be described as rent seeking behaviour, and is essentially an impediment to the operation of competitive forces; such distortions lower economic welfare.

Activities by skill associations or unions can also take forms not directly related to the supply of domestic graduates, but can have similar effects. For example, in the Australian context, some trade union and professional associations are very influential in terms of the recognition of immigrants' overseas qualifications and thus the ability to practise their trade. It is by now well known that these rules can effectively limit labour supply in a host of skilled areas, and concomitantly, that they might result in higher than otherwise incomes for the domestic groups.[5]

Examples of unions being involved in the setting and maintenance of standards for the recognition of overseas qualifications in Australia from the 1980s and before include plumbing, hairdressing and electrical mechanics.[6] This is not to say that the relevant unions applied unfair trade practices, but it is to note that the potential has been there, and the incentives for a group to restrict competition are clear.

The appropriate reaction of government in this area is not to be directly prescriptive about VET course make-up, because such a reaction will not by itself limit the activity of the special interest group. Instead appropriate government policy is to limit the power of professional associations and trade unions. Over the past decade or so this point has become increasingly acted upon by governments.

What is the appropriate role for government in terms of financing students' involvement in PCE?

Perhaps the most important economic issue in contemporary VET policy is the nature of public sector financing, with a basic issue being that currently TAFE institutions charge up-front fees. Further, there is no doubt that the level of those fees will increase over the next few years as public sector fiscal parsimony becomes increasingly important.

The essential point is that up-front fees are poor policy, for both economic and social reasons: one is that the talent is wasted on those able to benefit from TAFE but who cannot afford to enrol; the other is that excluding prospective students because of a lack of income further entrenches the already strong nexus between a young person's family background and their future professional success. These are critical matters for policy, and there is a better way.

That there should be a charge for TAFE attendance is easy to justify, given that there are economic and other benefits which accrue to the direct users of VET.[7] However, an extremely important issue concerns how such a charge should be levied. It is now argued that up-front fees are the wrong policy, and that the use of income-contingent charging mechanisms, such as HECS, are the correct approach.

Income-contingent repayment and the failure of capital markets

The first economic problem associated with charging up-front fees is that for those who cannot afford to pay there is only an ineffective capital market available from which to borrow. The concern of a bank lending for human capital investments is that, unlike many other purchases from a prospective debtor, there is no saleable collateral in the event of default such as would be the case for the housing capital market—and there is no slavery market in which to sell the human capital being developed.

The other problem for banks lending to students relates to collection costs in the event of default, an issue which assumes significant importance given the absence of collateral. In many overseas education financing systems governments address these problems by acting as a guarantor for student loans, and by paying the interest for the period before graduation. The problem inherent in this approach is that because the loans are government guaranteed, high default rates imply additional government subsidies which can be very high. In the US, for example, the associated costs of uncollected debt are particularly significant for those borrowing to finance vocational training.[8]

Further, loans are usually only made available to people from poor families, or those who can establish independence through satisfying a complex set of conditions related to age and/or work experience. This suggests that some prospective students

who need financial assistance because their families do not provide help will be unable to access the system.

That is, the financial barrier will not be completely removed through means testing because, when it is done on the basis of family income, such an approach presupposes that parents or partners are willing and able to share resources. If that assumption does not hold, the use of family income to determine support is a flawed criterion and means that some prospective students will be excluded even if their family income is relatively high. In essence, the idea of means-tested loan arrangements based on family income relies on the assumption of willingness to help within the family, and can thus fail because of it.

The central point about access is that the high cost of participating in VET (both through direct living costs and foregone income), combined with a lack of family and capital market sources of finance, potentially creates a significant barrier for many students which is necessarily exacerbated through the imposition of up-front fees. However, schemes such as HECS, and other feasible income-contingent repayment arrangements, considerably diminish these problems because they reduce the importance of the financial situation of the prospective student's family.

Income-contingent repayment and default protection

Given the financing problem recognised above for VET, some policy commentators might be tempted to suggest the traditional solution of a loans system made available through the private banks with a government guarantee. However, making repayments conditional on future income has a special advantage over other typical debt repayment schemes, a point now explored.

One advantage of an income-contingent repayment approach is that it avoids the basic problem of the usual type of loan offered by banks, known as a 'mortgage style' loan. This type of loan arrangement requires repayments to be made over a specified period of time, for example, the term of a mortgage. Usually no weight is given to the consequences of low income because debt obligations have to be met within a given period of time.

The essential difference between income-contingent and mortgage types of loans is that the income-contingent variety serves to protect prospective students from the costs of the exigencies associated with the returns to educational investments. What HECS, for example, offers is a form of 'default insurance', such that former students do not have to bear the costs of reneging on their debt as a result of periods of low future incomes. This is quite different to a mortgage-style loan, in which the costs of defaulting exists and may be very high in terms of being locked out of other capital markets (most notably for housing) through damage to a person's credit reputation.

Default protection from income-contingent repayment overcomes the fundamental problem for prospective borrowers inherent in other loan schemes. With income-contingent approaches there is unlikely to be any concern about prospective students being unable to repay a loan or making repayment under financial duress.[9]

It is important to emphasise that some aversion to borrowing for human capital investment is perfectly understandable. After all, the returns to such investments have a very high variance—many students enrolled in VET do not complete their courses, the unemployment rate remains high, and the income differences between VET graduates are significant and uncertain. The critical point is that when the repayment arrangements are sensitive to the personal income of the VET graduate the default issue related to borrowing essentially disappears.

Of interest for current Australian VET policy discussion in this context is that recent HECS repayment changes from the 1996–97 budget have lowered significantly the first income threshold for repayment. This means that if a HECS-type scheme is now introduced for VET students, it is likely that VET graduates would repay a relatively high proportion of their debt quite quickly.[10]

In summary, the HECS arrangements for Australian higher education offer a solution to the financial market problems inherent in charging for VET. In contrast, the up-front fee regimes in Australian VET are poor policy, for both economic and social reasons. Attention should be given to moving the VET charging mechanisms more towards income-contingent repayment, which means centralising the collection of charges through the Australian Tax Office.

States versus Commonwealth funding

The above discussion raises the issue of State versus Commonwealth control of TAFE financing. A commonly expressed argument is that a HECS-type is inappropriate for VET, because the system is administered and financed by the States, while the university sector is controlled by the Commonwealth. It is also sometimes suggested that the Commonwealth pay as you earn (PAYE) system should not be used to collect monies associated with State-based institutions.

The alleged State/Commonwealth constraint should not be the end of the matter. The proper policy approach in the presence of apparent constraints is to ask: 'What are the relative costs and benefits of maintaining the *status quo* compared to sorting out the political barriers to change?'. The economic and social advantages of moving Australian VET away from up-front fees and towards income-contingent charges remain very obvious.

It should also be noted that the case for making VET charging arrangements more consistent with HECS is becoming more urgent, for two reasons. The first is that TAFE charges are increasing, and are likely to continue to rise, exacerbating the basic access problem. The second is that credit transfers between the VET and higher education systems exist (and are growing), meaning that equivalent education units can be purchased at prices and through mechanisms which are very different. These tensions will continue to grow, implying that the existing arrangements are not sustainable.

Data issues

Those interested in research should always take opportunities to suggest different and better data collection. With respect to the economic issues raised above concerning VET there is one very clear point: the quality of academic and policy input will be inadequate and potentially misleading until there is a broadly-based longitudinal survey of Australian tertiary education participants. Currently those interested in these issues have, at best, only a cursory understanding of what is happening with respect to participants in, or prospective participants of, VET.

The basic case for panel data—following the same people over time—stresses two advantages that do not exist with other approaches. The first is that such surveys allow insight into the effect of changes in economic variables (such as the unemployment rate) on the participation and success of particular individuals.

The second, and related, reason for following the same people and their experiences is that many of the things that determine educational and labour market outcomes are inherently difficult to document, and include such things as communication skills and personality. The research and policy implication from this is that measuring the impact of government-financed programs such as VET on employment prospects, wages and the like, needs to hold constant those factors.

The great advantage of directly observing the labour market experience of the same people over a range of different education, training and employment circumstances is that the researcher is able to control for a myriad of individual factors simply because the same people are being tracked. The significant research point is that only panel data allow the effect of policy changes to be satisfactorily assessed.

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Endnotes

1 See Tan (1980) for seminal work in this area.
2 The indirect evidence for this proposition relates to the slope of earnings-experience profiles which are typically steeper for the more highly educated (e.g. see Miller 1980).
3 It should be noted that the highest component of costs associated with undertaking PCE are the forgone earnings of the individuals. For a typical VET student undertaking a full-time course for two years, the forgone income cost is currently around $40 000.
4 This point is explained with respect to higher education pricing policy in Chapman (1997).
5 For analysis and quantification of the issue, see Chapman and Iredale (1990).
6 For analysis see Castles et al. (1989).
7 The case for a charge for university attendance is the same and is presented in Chapman (1997).
8 Harrison (1995) shows that in the United States of America the default rate for Proprietary College (roughly the US equivalent of VET) student loans is of the order of 50 per cent.

9 Changes to HECS in the 1996-97 Budget make this somewhat less likely. For analysis of the implications of these changes, see Chapman and Salvage (1997).

10 The income threshold of repayment has been reduced from around $28 000 a year to about $2000 a year. The income profiles of TAFE graduates means that a very large number of them will more quickly repay an income-contingent charge.

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Radical surgery or palliative care? The future of TAFE

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Technical and Further Education (TAFE) needs to be given management autonomy to create its own future. What constitutes 'greater autonomy' is a matter for debate. Establishing TAFE institutes as State-owned corporations, as proxy public companies limited by shares, is the only strategy to provide the management autonomy needed to enable the survival of TAFE in the medium to long term. Corporatisation, directed to the legal structure of TAFE institutes as either companies or statutory bodies, would functionally and legally separate it from the public sector with the relevant minister or ministers assuming the role of shareholder. Some jurisdictions are well down this path already: in some, corporatisation could be achieved over a two-year period; in others it may take three to five years. Irrespective of how long it takes, this direction must be set and set soon. Corporatisation should be at the institute level and not at the jurisdictional level. However, even the radical surgery required with the corporatisation of TAFE institutes may not be sufficient to halt the slide of TAFE into palliative care and then into the museum of historical curiosity.

Introduction

If Technical and Further Education (TAFE)[1] is to have any sort of future other than the residual function of providing training that cannot or will not be provided by other providers, it needs to be given a level of management autonomy which will allow it to create its own future.

This is not a new idea and there have been many calls for greater autonomy for TAFE and, in some cases such as Victoria, these calls have been heard. However, just what constitutes 'greater autonomy' is a matter for considerable debate.

I have now come to the view that establishing TAFE institutes as State-owned corporations as proxy public companies limited by shares is the only strategy capable of providing the level of management autonomy necessary to enable the survival of TAFE in the medium to long term.

Corporatisation, directed to the legal structure of TAFE institutes as either companies or statutory bodies, would functionally and legally separate it from the public sector with the relevant minister or ministers assuming the role of shareholder.

Some jurisdictions are well down this path already, faltering at the final hurdles. In some jurisdictions corporatisation of TAFE could be achieved over a two-year period, while in others it may take three to five years, depending on the political context, the size of the TAFE system, the existing level of autonomy enjoyed by TAFE and the level of industrial disputation which could be conjured up. Irrespective of how long it takes, this direction must be set and set soon.

Arguments will be advanced that, should the corporatisation route be followed, it should be TAFE systems and not TAFE institutes which should be the corporate entities. These arguments are generally based on hypotheses about economies of scale. I take the other view that corporatisation should be at the institute level and not at the jurisdictional level.

However, even the radical surgery required by the corporatisation of TAFE institutes may not be sufficient to halt the slide of TAFE into palliative care and then into the museum of historical curiosity.

Arguments for corporatisation

I have been led to the belief in corporate autonomy for TAFE not by any siren-song about the minimalist state; not by uncritical faith in the wisdom and fairness of unrestrained markets; not by a fantasy that there will be, in my lifetime, a significant passing of financial responsibility for developing Australia's skills base back from the public sector to the private sector.

Rather, my arguments for corporatisation of TAFE are based on some quite practical arguments.

First, TAFE is unable to compete with private providers and universities when it is forced to bear the full weight of government department and political constraints.

Second, TAFE Australia is beset by an identity crisis and this has been the case for at least five or six years. As a sector it has been unable to mark out its own 'brand' of vocational education and training by its own unique combination of intellectual, human and physical resources. Corporatisation would give TAFE institutes a better than even chance of building a corporate identity.

Third, TAFE institutes cannot become the flexible and responsive organisations they are constantly exhorted to become within a 'McTAFE' model. The fundamental policy objectives of flexibility and responsiveness to multiple client needs requires diversity. This can only be achieved by each institute acting in response to the demand for its programs and services.

Real constraints or simply excuses

When TAFE institutes are exhorted to compete, they say that they are unable to do so because of the constraints placed on them by government or unions or both.

When they are asked to or want to introduce more flexible learning they say they are constrained by centralist policies on technological investment or industrial limitations on the definition of 'teaching'.

When their offerings need to be rationalised because of spiralling costs or changing demand, they say they are not permitted to do so because of political implications, especially in rural or marginal electorates or in politically powerful trade training fields.

When they want to restructure their workforce to permit a more flexible and responsive delivery of training, they say they are prevented from doing so by policies of governments anxious about upsetting the teacher vote or alienating educational unions as key stakeholders. Institutes claim they are consequently driven to the high-risk and short-term strategy of decreasing the proportion of full-time teaching staff and reducing administrative staff rather than introducing more flexible arrangements.

Some may argue that these scenarios, full of 'out-there' excuses, represent the failure of TAFE institutes themselves to adjust to the realities of the training market, a wish to preserve their traditional (if not structural) monopoly and set up a smoke-screen to obscure unsophisticated management.

So let's look at this a little more closely.

Levelling the playing field

TAFE, as a sector, is obviously in transition all around Australia.

In some jurisdictions, TAFE has been listed as a significant business activity under the National Competition Policy for the purpose of assessing the costs and benefits of introducing competitive neutrality. This is leading TAFE systems, in some jurisdictions, through the tortuous but essential path of a national competition policy public benefit test process, including assessment of the various reform options of full cost pricing, commercialisation or corporatisation.

While the National Competition Policy does not actually require or encourage privatisation of significant business activities, this is indeed a fourth option. However, I do not regard corporatisation as a prelude to privatisation but a goal in its own right for the purpose of management autonomy and transparency in government decision making about TAFE.

Other jurisdictions have noted that the Competition Principles agreement does not oblige governments to apply competition policy reform to the publicly owned vocational education and training (VET) sector generally or to TAFE specifically.

In all jurisdictions, governments have introduced a level of contestability into the publicly-funded training market to achieve better value for money, to diversify supply and create a more responsive and flexible system for VET.

Level playing fields between publicly-owned providers and private providers are seen as necessary to make markets truly contestable. More than this, there seems to be a general policy preference for purchasing training from private providers, especially

industry training organisations, where possible, in order to strengthen the provision of employment-based training and thus to achieve a better balance between it and institutional provision.

Competitive advantages

A good deal is made of the competitive advantages that TAFE currently has as a result of its status as a budget agency of government. These advantages are generally seen to include one or more of the following:

- Not all public funds for VET in Australia are yet contestable. Therefore, so the argument runs, TAFE enjoys some minimum level of guaranteed profile funding which provides it with insulation from market forces.
- Funding for TAFE is not usually subject to commercial debt or equity-raising conditions.
- TAFE is not subject to Corporations Law or parts of the *Income Tax Assessment Act*. Nor is it usually required to pay sales tax, stamp duty or land tax.
- In virtually all jurisdictions there is no requirement for TAFE to pay a return on taxpayer investment or a dividend (although so-called 'government productivity dividends' required in a number of jurisdictions could be considered relevant here).
- TAFE enjoys virtually exclusive use of the huge investment in physical infrastructure paid for by government, principally the Commonwealth Government. The total value of TAFE capital assets around Australia (excluding land) has been estimated to be in excess of $6 000m, with only isolated attempts to date to introduce third-party access rights. Notional capital usage charges have been introduced in some jurisdictions.

No doubt other advantages could be readily added to this list. And these are real and substantial competitive advantages, most particularly those that relate to investment in physical infrastructure in the form of rent-free buildings and extensive and generally sophisticated communications networks.

Competitive disadvantages

There are also many competitive disadvantages accruing to TAFE from its status as a budget-funded organisation which have been identified[2] and these include:

- Many TAFE institutes cannot retain revenue earned from commercial activities for responding to local demand or application to local priorities.
- Governments usually place requirements on TAFE to offer fees and charges at concessional rates to certain categories of student applicants, irrespective of actual numbers of those applicants in any one year.
- Student fees and charges for 'mainstream' courses are set by government at a level which usually bears no direct relationship to cost.
- TAFE is required to comply with the relevant public finance and audit acts, Freedom of Information legislation and other regulations and guidelines which, in many cases, are far more stringent than the *Corporations Act* or other legislation affecting the operations of private providers.

- Requirements by government that TAFE operate in rural and remote, high-cost locations for political or social reasons.
- Election and by-election commitments are made which commit TAFE systems and institutes to a particular course of action, irrespective of costs or consumer demand.
- Requirements by government to deliver training which involves uncosted cross-subsidisation from commercial activities to profile activities.
- Restrictions imposed by government to prevent head-to-head competition between TAFE and private training providers in some locations or industry or occupational fields.
- TAFE institutes have not been provided with the necessary financial and management information systems which would allow them to monitor their own performance and do not have the freedom to establish their own because of whole-of-government or departmental approaches.
- Award conditions currently applying to TAFE in most jurisdictions limit the flexibility to introduce productivity improvements through workplace reform and thus raise the costs of TAFE provision relative to many other providers.

No matter how scientific the measurement of the relative costs and benefits, in the final analysis, the introduction of competitive neutrality will depend on quantitative assessments combined with qualitative assessments of the political environment, of the influence of teacher unions, of the impact on rural and remote communities and of the effect on access and equity, which remains one of the key objectives of the VET system.

Blurring the sectoral interfaces

In recent years TAFE has been widely described as the place where you learn things that you do not learn in schools or universities.

TAFE institutes, unless freed to make their own way in the training market, will fall prey to the increasingly competitive (even predatory) actions of many universities struggling to survive in an increasingly deregulated higher-education market. While a handful of universities will concentrate on the upper end of the market for higher education, many, particularly smaller and regional universities, will look to provide more vocational education and training at the diploma and advanced diploma levels. Where industries and enterprises are faced with the choice of study at these levels at TAFE or universities, they are more likely to choose the university route. TAFE has not yet been able to differentiate clearly its offerings at these levels from that of universities.

All public universities in Australia are established as corporate entities under their own Acts of Parliament and with powers to manage their affairs in the best interests of the university.

I note that in early June of this year, the Australian Industrial Relations Commission ruled that universities are 'trading corporations' within the meaning of the Constitution because a substantial part of their activities involve trade in educational services. The ruling by the Vice-President of the Commission was in relation to

Wollongong University which earned 21.5 per cent of its total income from student fees, consultancy work and other services.[3] The implication of this ruling is that each university will be able to strike its own workplace agreement rather than be bound by a sector-wide award. The flexibility this will give to universities will make universities even more competitive.

At the other end of the spectrum, vocational education and training in schools is set to expand considerably, occupying a good deal of the ground TAFE now covers through Certificates I–II and perhaps even to Certificate III.

User choice in particular will, over time, slice out a significant share of study at Certificates III and IV for delivery in enterprises and through industry training organisations such as group training schemes.

If TAFE's hands are bound on the university front, its feet are bound on the schools front and it is rendered mute on the user choice front, there will be precious little that remains uniquely TAFE. The result is a residual sector.

Death by a thousand cuts

Over the past nine years since the start of national training reform, reforms to TAFE have been piecemeal, generally involving a selection from a reform repertoire which includes:

- moving in ways consistent with the concept of purchasing rather than funding training provided by TAFE
- introduction of contestability in the training market via competitive tendering, preferred supplier or user choice arrangements for some public VET funds, and annually increasing the proportion of public funds available through competitive processes
- structural or managerial separation of the roles of government as purchaser, as regulator, as asset manager and as provider (with TAFE as the main public provider)
- strengthened performance management arrangements governing TAFE systems and institutes

Now we are seeing attention turning from recurrent funds to capital investment in TAFE and how a degree of contestability might be introduced to break the practical monopoly that TAFE has had over public investment in physical infrastructure for vocational education and training.

Throughout this lengthy reform process, the role of TAFE within the VET system has rarely been defined by government, I believe because government does not really know what TAFE should actually look like at the end of the reform process.

There seems to be an underlying assumption that TAFE will, over time, move systematically through the three reform options under National Competition Policy. That is, it will move from a government agency with a so-called practical monopoly over publicly-funded vocational education and training, protected from outside

competition, to a full-cost pricing model. When that is bedded down, it is assumed that it will move to commercialisation and when that, in turn, is bedded down, it will move to corporatisation. I think that this process, which might mean another nine years of slow reform, will spell death by a thousand cuts. Better to be decisive and get to the end quickly and efficiently.

The other advantage of corporatisation is that it would free TAFE institutes from the ever-spiralling transaction costs associated with a reform program based on incremental annual shifts in profile, competitive tendering and user choice arrangements.

Certainty through corporatisation

Given the misuse of the word 'certainty' by some farming and mining interests in the debate about indigenous rights over pastoral leases, I am reluctant to use the word 'certainty' in any other policy context but I can think of no other which best describes what TAFE needs after nine years of turbulence. Certainty is essential and in my view the only credible path to certainty is the one which is clearly signposted to corporatisation.

Certainty is not a euphemism for complacency. I do not believe that a corporatised TAFE institute would have any reason to be relaxed and comfortable about its future in a global learning environment. There, no VET provider will find certainty as global media interests and educational services converge.

But certainty at least about the governance arrangements of a TAFE institute as a corporation would allow institutes to plan not just for next year's State Training Profile but for three, five, ten years out. It could plan for its local, regional, national and global market. It could also plan for the strategic alliances with private providers, universities, schools, enterprises, industries or communications technology companies, which will be necessary if it is to meet future market demand.

Financial transparency through corporatisation

Corporatisation would require TAFE institutes to clarify their objectives and focus their decision making. They would have the level of management autonomy and authority needed to pursue those objectives, they would be subject to minimum external controls and day-to-day interventions and would be subject to a strict accountability regime.

Corporatisation would assist government to drive TAFE institutes to achieve quality services and value-for-money outputs. Rigorous performance monitoring, including the establishment of performance targets and benchmarks, would complement clear training output specification.

Normal commercial, legal and accounting requirements would be introduced. Institutes would be required to pay State taxes and Commonwealth tax equivalents and dividends and long-term rates of return and dividends. Costing methodologies will need to be far more sophisticated than they are at the present time.

Physical infrastructure would be developed by institutes through their own revenue-generation capacity, supported by government loans or equity investment. Third-party access regimes for essential facilities would be required, and under-utilised assets could be disposed of.

Price oversight of those areas where TAFE institutes retain a natural monopoly would be necessary.

Independent prudential supervision could be introduced.

And, of course, corporatisation would produce competitive neutrality to support the development of training markets.

But, for me, one of the most fundamental and compelling arguments is that Parliaments would be held accountable for providing transparent funding and reporting on non-commercial community service obligations (CSOs) involving:

- various forms of income support (such as student concessions, limits on student fees and charges or other financial conditions attached to supply)
- retaining extensive TAFE provision in rural and remote locations (locational disadvantage) where a training market does not develop for justifiable social and economic development reasons
- ensuring equity, access and other social objectives are identified
- building new TAFE facilities to support employment or regional development
- fostering growth in industries which the State has identified as 'strategic'
- other social or economic objectives leading to the provision of a service which would not otherwise be supplied as a commercial decision of the corporatised TAFE institute

The question of community service obligations of TAFE has been a vexed one in debates about the future of TAFE and indeed of VET as a whole. TAFE institutes have a right to know which TAFE activities government wishes to pay for or subsidise as CSOs and those which it wishes to purchase in the competitive market. As I see it, corporatisation would force governments to make explicit their views about rural and remote provision, price control in fees and charges and in many other ways. Whether CSOs form, say, 70 per cent, 50 per cent or 10 per cent of total TAFE effort would provide a great deal of clarity about the part TAFE is expected by government to play within the training market.

However, arguments about the important CSO function of TAFE often overlook the fact that government has a range of options for the delivery of CSOs. TAFE institutes could be given an exclusive franchise. However, contestability for the delivery of some CSOs could be introduced or increased use could be made of a client voucher model. TAFE has no automatic right to be the sole deliverer of government CSO obligations, although internal procurement from TAFE where it has the capability, makes sense.

Value-adding TAFE institutes

While the efficiency gains from corporatisation of TAFE institutes might be hard to measure given the generally poor costing systems with which TAFE operates, there is probably enough evidence to suggest there are real efficiency gains.

But there is more to performance than simply meeting financial targets. The bigger issue for me is the ability of TAFE institutes to add value in the future.

The Australian Institute of Company Directors has noted that:

> *The value-adding outputs for a company against which performance can be measured can ... be summarised as:*
>
> - *growth in asset value*
> - *profitability*
> - *quality product and customer satisfaction*
> - *organisation effectiveness*
> - *learning and innovative organisation*
> - *good corporate citizenship*[4]

Two of these, 'organisation effectiveness' and 'learning and innovative organisation' have taken a real battering in TAFE over the past few years.

'Organisational performance' encompasses the ability to manage change, the ability to react quickly to customer needs and the ability to attract, retain and motivate staff.

'Learning and innovative organisation' encompasses the ability to innovate, the ability to operate in international markets and the ability to manage information.[5]

My view is that corporatisation will give TAFE institutes a fair chance, and a set of incentives, to pursue a value-adding future based not only on financial performance but also organisational effectiveness and performance as a learning and innovative organisation capable of responding to the uncertain global future of VET in Australia.

In conclusion

I won't attempt to summarise the central propositions of this paper. Rather, from these propositions flow two sets of questions.

First, why are governments around Australia so reluctant to cut TAFE loose from direct departmental control? Is it simply a matter of political timidity? Is it a lack of faith in the power of competitive markets? Would a corporatised TAFE sector discourage new market entrants? Are governments reluctant to be too open about their funding of CSOs? Would they actually prefer to have a level of obscurity in their funding of VET to allow for shifting political priorities?

Second, what could be learned from corporatisation of other government trading enterprises that would prove useful in the implementation of a corporatisation strategy

for TAFE institutes? How could we make the transition process swift, clean and without post-surgical trauma?

But these are questions for another conference.

Endnotes

1 In mid-1996 I worked with Des Fooks and Robin Ryan to produce a paper called 'Making TAFE competitive: A discussion paper' which was subsequently published by the Australian College of Education in 1997. This paper draws on a number of ideas developed and presented by Fooks, Ryan and Schofield. The responsibility for this paper is, however, my own.

2 See for example Coopers & Lybrand 1997, *TAFE Queensland: competitive neutrality public benefit assessment—base case assessment*, Final Draft Report, 23 April.

3 Davis, M 1997, 'IRC ruling okays non-union unis', *Australian Financial Review*, 23 June, p.7.

4 Stubington, G 1996, 'Board performance and process', paper to national conference The High Performance Board, Australian Institute of Company Directors, 13 June.

5 Stubington, G 1996, referring to 1990 survey conducted by Henley College, UK.

From the barrel of the public system?

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The public system of vocational education and training (VET) is government's main instrument of influence on the policies, plans and directions for the sector in Australia. It must not be presupposed, however, that this influence is all-powerful. True, it can make a significant difference in many areas of education and training effort. Some of its powers, however, are declining as, among other things, the system changes to more de-regulated processes. This paper explores some of the emerging issues for government in exerting influence through the Australian public VET system.

Introduction

THE PAST HALF-DECADE or so has seen major shifts both in the focus of vocational education and training (VET) in Australia and in the power base which underpins it. Many of these shifts have arisen as a result of the agenda that has driven the activities of the Australian National Training Authority (ANTA) but, by and large, these agenda themselves are reflective of the changing nature of government and how it does business throughout the western world.

In seeking to re-shape the nature of its business, its role and how it defines its resourcing responsibilities, government, at both the state and national level, has resorted to significant structural, administrative, financial and educational change in its public system of vocational education and training. Fundamentally important, of course, is the fact that the re-shaping of the system is not driven by any one single force but by many. In the VET sector, these include a range of ideologies, such as 'let the market decide', 'make the system more industry-driven', and 'user choice'; a range of economic motives, such as 'do more with fewer resources', 'economic rationalism' and 'focus on outcomes and not inputs'; and a range of educational paradigms, such as 'flexible delivery', 'centre instruction on the workplace and not the educational institution', and 'expanded pathways for vocational education and training'. Many of

these forces are not entirely compatible and without care their interaction can lead to confusion, frustration and inefficiency.

An immediate challenge to government's influence over vocational education and training, then, is its ability to clearly articulate a comprehensive integrated policy and planning framework that is both internally consistent and readily explicable to the sector's clients. That current policies sit side-by-side with older policies and their attendant structures, and the fact that some parts of the public system are more advanced in their transition to new systems than others, only serves to add confusion to an already difficult situation. While this constraint may not be a permanent one, the passage for many public systems can be long and tortuous and it may be a considerable period before measurable benefits actually emerge. Eventually, systems and jurisdictions, to varying levels of acceptability, will succeed in making the transition to a new public VET system.

Theoretically, of course, with some 50 per cent of the available national resources at its disposal, one would expect the publicly funded VET system to exert a considerable amount of power over the direction of the system, its planning and resourcing base, its processes for the formulation of policy and its educational agenda. Coupled with a variety of instruments, such as those relating to purchasing VET services—tendering, direct purchase, direct allocation of funding, targeting particular markets, etc.—and planning by way of profiles and strategic direction-setting, these sources of power have been utilised by government to shape the current system.

One thing seems certain, however: long experience has shown that the result in a federated system of government will almost always be a compromise. The resultant impact on the way the system changes will reflect the relative power of the contesting groups that form and influence government. One challenge for government, it would seem, is to be very clear about what it is that it is trying to achieve. It is only in doing this effectively that it can bring to bear the full power it is capable of exerting. It is to some of the significant powers exercised by government that this paper now turns.

Priming the shot

Should industry, the community, and government itself, be concerned about its power? Such a question raises many emotions ranging from those that are centred on protecting and strengthening the current system of government and its role as we know it, to those that see government as an ongoing obstacle to progress and development.

It is clear from the argument presented below that government's power over the VET system appears to be declining. The impact of such a decline and how the world might look and function with less government is of concern to all parties with a forward view, as few want to see the hard-won achievements of the past lost. Most, however, want change and improvement, and government's power to give effect to these and to provide the leadership necessary to take the system forward is a crucial factor in ongoing economic and social development.

While it is difficult to realistically contemplate a 'government-less' world, it must be recognised that its changing roles mean changing the powers it has available to perform those roles. Some powers may decline and others may blossom. In some circumstances, the impact will be an overall reduction in government power. In others, its power may increase. In all, however, it is assumed in the discussion below that the future will contain some form of government wielding some form of power, both within and beyond the VET sector.

There are many powers governments can employ to influence the VET system in Australia. The fact that they decline to employ some and partially employ others is a matter that will be raised later in this paper. Focussing on the development of the VET system, and in particular, the VET market in Australia, the following powers would seem to be pertinent to achieving government's goals, which are listed here.

Policy formulation

While individual enterprises can and do develop policy reflecting their own VET needs, government has available to it the power of making policy across the whole spectrum of VET activities. It would seem, then, that policy formulation would be a significant power that government might use.

In all too many cases, however, the final policy that emerges from the formulation process is the result of considerable compromise and its potential impact, therefore, is often diminished. In the current Australian VET situation, this is evidenced by the ongoing contest and debate about the impact on quality arising from the direct funding by government of training in industry.

Resourcing and planning

A fundamental barrier to implementing plans and strategies which require changes in direction is the need to resource them. This circumstance is especially difficult where there is no additional funding available for a new initiative. As an example, the cessation of future Commonwealth growth funds will place considerable stress on the VET system as it seeks to re-align resources with new policy and planning directions. Its success in the realignment process will determine the rapidity and strength with which it can exert power to either initiate or respond to new needs.

Regulatory

In a broader system of government that is moving speedily towards the deregulation of markets and the privatisation of public assets and services, the regulatory power of government is dwindling. In the VET sector, there has been a growth in the level of purchasing of VET services from the private sector, outsourcing, privatisation, the development of industry skill centres, and the encouragement of private provision of vocational education and training through a variety of resource inducements. Coupled with the growing level of autonomy and dependence on commercial income of public providers, these have meant that regulatory powers previously exercised by government have become progressively diluted. When these developments are

combined with the granting to enterprises of self-accrediting powers and the moves in some VET jurisdictions to local rather than system-wide industrial awards, it is difficult not to conclude that government's regulatory power over the VET system has diminished.

Indeed, with the rapid rate of de-regulation that is occurring throughout government, it might not be long before we see it tender out the operations of complete VET colleges and/or institutes.

Purchasing services

One area of possible growth in power that government may have over the VET system is through its purchasing role. By defining priorities through its planning function and then using its funds to provide an appropriate level of funding to affect new initiatives or meet newly emerging needs, government can exert influence not only over the types of needs addressed, but also their costs, the conditions of their delivery, and their timing and geographic location. In some circumstances, it can make purchase conditional on the contribution of particular clients of the system, thereby possibly increasing the resources flowing into the VET sector.

The purchasing power of government, however, is limited in a number of ways, such as the need to meet equity targets, which can impact on cost and how and where funds are expended; the ability and willingness of the client to pay, especially where courses might be high cost and the client chooses a keenly priced product from another educational sector, such as higher education; the culture of paying for education and training which was previously 'free' or heavily subsidised; the accuracy with which the purchaser can identify priority needs, and government's willingness to move resources to address such needs; and the overall amount of resources actually available for purchasing services. If the market is large and the resources available small, the impact of government will be less than where resources are greater, all other things being equal.

Public provider role

As State governments run the largest levels of VET provision in the system, the role the provider plays, no matter how well governments separate the purchaser and provider functions, will be one with which government has an ongoing interest. This is because government has economic and social policies to implement as well as an industrial base to support. Growing levels of autonomy among government providers, however, are eroding the power that government—at the central level at least—has over its providers.

It has also become 'fashionable' to criticise the public provider for its inflexibility and lack of responsiveness to client needs. While the sources of this criticism can be many, it is important to note that the public provider has very considerable market power in its range of programs and their location of delivery, its physical infrastructure and its administrative and educational systems and processes. While it would be too easy to say that this criticism reflects envy, it is a fair conclusion to draw

that there is still room for re-focussing of its infrastructure and systems on meeting clients' needs. Growing levels of financial and administrative autonomy will assist this process.

Other factors impacting on government's provider role and the power it exerts are the growth in the number and diversity of private sector competitors, the effect of deregulation and declining levels of protection to the public provider, the extent of economies of scale, and the growth in offering government funds on a competitive basis.

Taxes and subsidies

With the exception of the now defunct Training Guarantee Levy, governments in Australia have chosen not to utilise the taxation system to enhance the influence that their policies and plans might have over the VET system. This is in direct contrast to some other countries where the taxation system is used to encourage investment in training in a variety of ways. These include concessions for private investment in training infrastructure, research and development, and delivery of in-house training programs.

On the subsidy side of the coin, the Australian VET system remains highly subsidised, with the only differential in subsidy being to exempt some students from fees or administrative charges. Exemptions aside, Australian students in some programs are charged from as little as $4.50 a week for a full-time course, rising to around $14 a week for the most expensive.

Clearly, policies involving taxation and subsidies can be highly politically charged but they seem to be areas of dormancy when it comes to pursuing VET policy formulation and planning in Australia.

Other factors affecting our aim

It is critical to note that there is a range of factors existing outside the VET system which also influence its power considerably. These include:

- *All-of-government policies.* The range of these policies can be many but for the VET sector they might currently include competition policy, the setting of awards for unions with all-of-government coverage, budget policy, and economic development priorities, such as the pursuit of regional development.
- *International agreements.* Although it has not yet ratified it, the United Nations Educational, Scientific and Cultural Organization (UNESCO) Convention on Technical and Vocational Education could have an important impact on how the Australian VET sector undertakes its business. Examples of other international agreements include Asia Pacific Economic Cooperation (APEC) agreements and those influencing labour relations through the International Labour Organization (ILO).
- *Lack of a national industry policy.* This makes it difficult for industry and government planning to specifically target its investment and training decisions.

- *Divisions between levels of government*. In particular, the differences in policy, planning and resourcing objectives of the Commonwealth Government, when compared to those of the States and Territories, generate different approaches, priorities and allegiances with supporting groups.
- *Attitudes towards the public provider*. These can vary considerably across government, particularly at times when the focus is upon resource constraint and the generation of improvements in efficiency. They tend to range from the wholesale protection of the public provider to its full exposure to competitive pressures.

Clearly, there will be other factors that can be added to this list but the intent was not to make it exhaustive. Rather, it serves to illustrate that power within the public VET system is not only circumscribed by intra-VET issues but also by matters that transcend the VET sector.

Firing the shot

So what do we need if we are to make more effective use of the declining power in the government system? There are probably three major responses one can make.

Firstly, there needs to be a more effective use of those powers available if government is to continue to play as influential a role in the VET system as it has done in the past. This means not only better co-ordination of its policies and plans but also a more coherent and integrated approach to their application.

Underpinning this need is the essential requirement for an agreed national vision and strategy for the sector. Without this, the exercise of power by government can lack direction and become sporadic in nature, thereby losing the impact that comes from activity that is both clearly targeted and timely.

Secondly, government's dwindling powers in some areas may be compensated for by the utilisation of its powers in others. As an example, some consideration of the use of taxation powers to stimulate investment in vocational education and training in circumstances of declining public funding, would appear to be worthy of consideration.

Finally, the past five years have seen the growth in influence of industry on the decisions taken by government about the Australian VET sector. This has largely been a one-way process, with little guarantee or commitment from industry to maintaining the existing levels of funding of its training effort and the size of its overall investment in training.

A more effective alliance or compact between industry and government—one which commits both industry and government to ongoing resourcing, policy formulation and planning support for the Australian VET system—would provide a far wider spread of influence for both partners. This has the potential to bring together the two sectors in a way which has not been achievable in the past. It would also strengthen the Australian VET sector considerably, giving it a greater edge in the international market. In such circumstances, power lies in the integrated nature of the overall system, not just the public component of it.

Conclusion

Acknowledging that the public VET system in Australia is imbued with considerable power both within and beyond the VET market place, this paper has argued that many recent developments are depleting that power. It has also pointed out that there are constraints beyond the sector which influence how its power might be used.

While previous power in the sector may have emanated from the gun-barrels of regulation, planning and resourcing, policy formulation, purchasing and public provider strength, these are diminishing. Some elements of future power in the sector might be developed through the use of government's taxing and subsidy-granting abilities. In the longer term, however, the relationship between government and industry and their joint responsibility for the provision of services in the Australian VET sector may prove to be the most productive way forward. Only time will tell.

Private dynamics

Clive Graham
Chair, The Australian Council for Private Education and Training

The Australian Council for Private Education and Training (ACPET) feels that it is nothing short of a national disgrace that government has not allocated funds to research private sector education and training, given that education and training is Australia's second largest service export and that the private sector contributes significantly to that export as well as to the national provision. The lack of such data adds fuel to ACPET's contention that national education and training policy does not acknowledge the dynamics of private education and training provision. Although the National Centre for Vocational Education Research proposes to redress this situation somewhat, to date little meaningful research has been undertaken nationally. There is fragility in national education and training policy and provision resulting from the paucity of relevant research into the private education and training sector. Restrictions on private enterprise on education and training, both nationally and globally, are considered. Education and training policy should enshrine diversity. ACPET would like to see a national data base for the private provision of education and training in Australia, to inform education and training policy.

In *The Australian* newspaper (6 June 97), the Australian Vice-Chancellor's Committee (AVCC) spokesperson claimed that the Australian Council for Private Education and Training (ACPET) had been reluctant to supply information about the private sector. To the contrary, ACPET would be delighted to supply data about the private education and training sector if such data were available. Given that education and training constitutes Australia's second largest service export and that the private sector contributes significantly to that export as well as to the national provision, it is nothing short of a national disgrace that government has not seen fit to allocate funds to research private sector education and training. The lack of such data certainly adds fuel to our contention that national education and training policy does not acknowledge or account for the dynamics of private education and training provision. So while I am pleased that the National Centre for Vocational Education Research (NCVER) proposes to redress this situation somewhat, the fact remains that to date little meaningful research has been undertaken nationally to identify and assess the impact of the private education and training sector on the Australian economy. Thus, to

exhort the dynamics of private education and training is a difficult task in the absence of quantitative and qualitative research. Instead, I intend to demonstrate the fragility of national education and training policy and provision resulting from the paucity of relevant research into the private education and training sector.

In Australia, there are 84 Technical and Further Education (TAFE) institutes, 39 universities and more than 2500 registered private providers. However, whereas the public sector clearly delineates the provision of higher education, vocational education and training (VET), and secondary school education via discrete institutions, the private sector does not. The private education and training sector operates within niche markets which arise from gaps in the public sector provision. Anderson[1] states that rather than competing directly with public providers, the private providers respond to unmet demand and have expanded the training market in consequence,[2] which one would have thought was a good thing. So a neat comparison between public and private education and training dynamics is not feasible. For example, while some 49 registered private providers currently deliver 186 accredited higher education courses, the same institutions also deliver vocational education and training courses; at least 30 registered private providers deliver both VET and secondary education to post-secondary school age students; and we know of one private provider institution which delivers high school education, VET courses and higher education to Masters degree level. Thus, to restrict an assessment of the private provision to the VET sector ignores the dynamics of the interrelationship between higher, vocational and school education which, unlike the public sector, the private sector embraces as a holistic market.

Further, many registered private providers do not restrict their provision solely to accredited courses for to do so would not be commercially viable. Indeed, the provision of accredited courses at the VET level in particular is becoming increasingly a non-commercial proposition. Not only is it expensive for private providers to jump through the multiple government regulatory requirements, but the market reality is that many industrial enterprises do not seek accredited training. So, while public education institutions deliver the majority of accredited courses in Australia, the private sector trains the majority of Australians because more than 70 per cent of work-related education and training delivered in Australia is not accredited. This is interesting because while government purports industry endorsement of the system of accredited courses leading to a national credential, industry obviously prefers non-accredited, non-credentialled short courses relevant to commercial viability.

Australian Bureau of Statistics[3] data indicates more private provider clients are involved in non-accredited training than in accredited training. The Allen Consulting Group[4] found that there were more private providers offering non-accredited rather than accredited courses. Anderson[5] confirms that the unregulated private provider segment is larger than the regulated sector. Thus, in response to market demand, there is increased commercial opportunity in non-accredited rather than in accredited course provision, to which private providers are responding. Paradoxically, as the training agenda shifts from college provision to on-the-job provision, despite the intentions of government, ACPET is witnessing more demand for non-accredited

training than for accredited training. Thus, in June 1997, ACPET changed its membership requirement from the overriding proviso that a member be a registered and accredited private provider, to the overriding proviso that the member be involved with education and training but *not* be a government corporation, a government commission or a government department. Had we been more specific we would have excluded too many private organisations which derive income via the provision of some aspect of education and training, for within the private sector there is a wide diversity of organisational characteristic. Private education and training providers include charitable and community-based organisations which are not commercially structured and exist for a short time in response to immediate community and social needs; not-for-profit organisations with semi-commercial bases; workplace training divisions which do not operate commercially and exist for the skills formation of an enterprise; workplace-training divisions which do operate commercially as well as for internal skills development; and the commercial colleges which deliver education and training as a fee-for-service business.

There is further diversity within each of these categories because some private providers accept government funding while others do not; some operating only when a government subsidy or tender is forthcoming, some supplementing their commercial operations with government-funded tenders, and others enrolling only full-fee-paying students. Still others seek private funding via contracts for enterprise training solely or in combination with the above. And even if all these private providers are registered, that may or may not provide accredited training. Private providers display a greater diversity of size than public providers. Some private providers are one-person operations while others employ as many teachers and lecturers as the large public colleges. The quality outcomes of the private sector may vary from short-term employment for graduates of community and charitable courses to 100 per cent employment annually for graduates of some of the commercial full-fee-paying private colleges. Indeed, the reason many people pay the fees of some private colleges is that such colleges almost guarantee a job for their graduates. The dynamics of the private sector, then, are predicated on a diversity of provision which is not easily quantified, is not truly comparable with the public sector and is almost indefinable by organisational type or other criteria, for at any time a private provider may shift between any or all of the above categorisations in response to market advantage.

Unlike public education and training institutions which are designed to respond to government agenda, the private sector has not been so constrained. From the outset, let me state clearly that ACPET endorses public education and training. Clearly, a nation that does not provide education and training from the collective wealth of its citizenry will be ill-equipped to function in the future and will be divided by access and equity issues. The role of the private education and training sector as represented by ACPET relates to choice, market niche, cost effectiveness, innovation, speed of response, national employment and export provision. The diversity of the private sector is such that, to date, some private providers have structured their provision in response to government agenda in full or in part while others have sought and

developed private niche markets. Indeed, the fundamental stance of ACPET relates to choice: the freedom to provide and choose the education and training appropriate to individual and enterprise values.

The dynamics of the private provider sector are founded on the spirit of the free market. It is a fundamental premise of the free market that a private business operation may choose to respond within the law to a market in a unique manner and may choose to create a market which is not apparent to others in order to gain business advantage. To this end, the Australian Competition and Consumer Commission exists to ensure that restrictions of trade in the commercial sector do not apply and that a private enterprise is free to respond to a perceived or real market demand devoid of restrictions imposed by monopolistic enterprises and cartels. Indeed, private education and training providers have been encouraged by successive governments to trade freely in education and training and have invested millions of dollars in that provision via infrastructure, employment and curriculum for more than a century of Australia's recent history. Regardless of industry sector, private trading in a free market has provided product innovation and cost effectiveness in response to competition. Indeed, as has often been quoted, when Henry Ford had a monopoly in the automobile market, one could choose any colour of Model T Ford provided it was black. Such is the importance of free market competition that we are not so constrained.

It is the private sector as distinct from the public sector which is most able to risk in order to create new markets, because the public sector is invariably accountable to the conservatism of the electorate while the private sector is not. Thus, as a private operator, if you tell me I must cook with apples to gain a restaurant licence, I will immediately want to cook with pears, because there will be a niche market of those consumers who do not like or who tire of apples. The free market ensures that David Jones and Coles-Myer, for example, are not restricted to trade one style of clothing but are free to respond competitively to niched and new market opportunities and we, the consumers, are free to make our individual choices on the merits of the products they offer according to our individual value systems. Thus, it is disconcerting to private education and training providers that apparent restrictions of trade are emerging in our free market, for such restrictions impinge upon the competitive dynamics of the private sector.

It is difficult to interpret government policy relevant to the private provision of education and training because there is little reference to the private sector in contemporary and emerging national, State and Territory education and training policy. This may be an oversight and governments may have assumed that the competitive market is unaffected by emerging policies. However, the multiple government regulators are certainly not giving us that message. Indeed, so concerned are we about competition in Australian education and training that in June 1997 ACPET referred specific matters relevant to the structure and provision of education and training in Australia to the Australian Competition and Consumer Commission as well as to other bodies.

Private providers had assumed that the implementation of user choice and competitive tendering, the two strategies initiated by governments for increasing competition in education and training, were to enhance rather than replace the national agenda. That is, private providers would be free to choose whether or not they would accept government moneys to participate in user choice and/or the competitive tenders. If a private provider were to accept government moneys for such purposes, then quite obviously that private provider would be obligated to comply with the terms and conditions of the contract. These are apparently to include quality accreditation, mandatory training packages, specified reporting mechanisms and additional conditions which governments require to be effected. No one can argue with the practice that, within contract law, those in receipt of moneys are obligated to carry out the terms and conditions of the contract faithfully. However, it is assumed that one is free to accept or reject the contract in order to trade. Thus, if one does not wish to be constrained by a contract, within the concept of free market, one is free to trade in compliance with law and *not* receive the moneys reserved for those who choose to undertake specific contracts.

ACPET's concern with government agenda applies to those private education and training providers who do not accept government moneys for user choice, competitive tenders or any other government contract and whose commercial activity is restricted to full-fee-paying private students and enterprises. What appears to be emerging in policy is the abrogation of free trade for private providers who only enrol full-fee-paying students and the adoption of mandatory compliance with regulated training packages and a number of additional restrictions on trade in order to be eligible to award a national qualification. If such policy were to be implemented, Australia's education and training export provision will suffer, there will be a loss of jobs within the private provider sector and the diversity of vocational education and training provision will be restricted to a one-size-fits-all provision at the very time Australia needs to innovate in order to develop new markets and to compete globally. The inherent restriction of trade in emerging policy lies in the nexus between registration/accreditation on the one hand and Commonwealth Register of Institutions and Courses for Overseas Students (CRICOS) listing on the other hand, because without national registration and accreditation for the CRICOS listing it is not possible to export education and training.

Let me explain the concern for the dynamics of the private provider sector with an example which has been duplicated in various fields. It concerns a private fashion design college which submitted a unique curriculum for advanced diploma accreditation to the State regulatory accreditation authority which in turn called together a panel of experts comprising representatives of the clothing ITAB (industry training advisory body), the TAFE provider and a university to review the curriculum for accreditation. The clothing ITAB demanded increased machining and cutting competencies; the TAFE demanded the course be lengthened from two to three years (presumably to make it uncompetitive), and the university wanted to restructure the entire course so it would articulate into its design degree. ACPET was ultimately

called in to represent the provider. A compromise was reluctantly reached by all participants which favoured the original submission somewhat. In the two graduating classes since accreditation, nine students have won scholarships to Milan to study their Masters' degrees in fashion design. It was just announced that one of these students topped the Milan university Master's degree this year. At the same time, all graduates are building Australia's international reputation for fashion design.

This example is important for three reasons. First, what currently pervades is not necessarily what will endure (BHP Newcastle surely demonstrates that), and while machining and cutting might provide some jobs today, we must risk to innovate training that is not necessarily industry association endorsed in order to create new opportunities tomorrow. Indeed, had the ITAB demands been implemented, Australia might now have fewer rather than more job opportunities. Second, graduates of the course are not eligible for entry into a particular Australian university because the course did not conform to the limited academic vision of the university panel representative even though course graduates are sought by relevant prestigious international universities—which surely says something about the restrictive monopoly of Australian universities when it comes to applied education. And third, despite the best efforts of the TAFE to temper competition from the private sector, the innovation of the curriculum overrode conservatism so that graduates are internationally acclaimed and overseas students now seek this Australian college as an international enrolment preference, thereby increasing our national income.

What concerns ACPET is that the one-size-fits-all systems of registration and accreditation emerging with user choice and competitive tendering have the potential to be used to impede the dynamic of private provider innovation and so debase our export provision, for nowhere in government policy is the true nature of competition in the education and training market enshrined. Thus, many viable private providers who respond to niche national and international markets believe they will be unable to continue to operate commercially within twelve months. National policy concerning market niche is crucial to private provision but government messages at State, Territory and national levels are confused and often conflict. In consequence many more private providers aim to leave the VET registration/accreditation systems by developing higher-education courses which permit customisation. To the private education and training sector, it is odd indeed that a national Coalition government has not iterated the freedom to trade in education and training policy. It will be a national scandal if our export trade is reduced in consequence.

ACPET has never suggested that standards of compliance via registration and accreditation should not apply in order to deliver national qualifications. What private providers object to is the increasing incursion on our freedom to determine market opportunity in favour of government-funded regulatory authorities telling us what we may deliver. If you tell me I must cook apples then I shall want to cook pears because that is where I perceive a new market will emerge. In my company we deliver training in areas in which we also operate industrially. We could not accept the industry training packages as training for our commercial operations. Yet, in these

areas we are commercially viable and exporters. We also have difficulty delivering the Australian VET credential overseas because some industry-regulated training is predicated on the Australian industrial relations system which overseas nations do not want. In two cases, I have lost valuable overseas contracts which would have brought income to Australia because of the restrictions of the VET qualifications. In both cases, the contracts were picked up by Singapore. The private sector is rife with similar examples.

Let me identify some other restrictions which impinge upon private enterprise trade in education and training both nationally and globally. We are concerned about:

- training being underpinned solely by competency when globally, routine skill-based employment is giving way to contingency-based employment involving critical thinking which adds value to sustain enterprise. Indeed, private providers have been more strictly regulated to competency-based training than public providers[6] even though, in 1994, private enterprise workplace providers stated that the Australian Standards Framework added limited value to their enterprises[7]
- vocational qualifications being limited to the lower levels of credential resulting in the lack of a seamless articulation pathway from certificate to bachelor of vocational studies degree. The Allen Consulting Group noted the dearth of articulation arrangements (credit transfer) for private VET graduates into the universities.[8] ACPET contends that universities hold a monopoly over access to higher education which restricts our trade
- the unmarketable nomenclature of credentials (particularly certificates and advanced diplomas) which are not internationally recognised and which constrain our education export
- training regulatory agencies which deny private providers customisation to meet markets when universities are free to customise degrees. In 1994, the Allen Consulting Group noted that accreditation authorities tended to use TAFE curriculum as a benchmark, thereby limiting product diversity.[9] If we are constrained to use nationally endorsed competency standards to award a nationally recognised qualification, then diversity will probably disappear altogether because, as stated above, Anderson found that rather than competing directly with public providers, private providers respond to unmet demand and expand the training market in consequence[10]
- eight secondary school systems across Australia which do not evolve logically into vocational education and training because the various higher school certificates do not articulate easily into the Australian Qualifications Framework
- the lack of avenues of appeal against arbitrary and restrictive decisions of State and Territory regulatory processes. This is reinforced by the Allen Consulting Group, which recorded the hostile, cumbersome, time-consuming, costly, complex and continually changing procedures of the State and Territory regulatory authorities experienced by private providers.[11] Private providers have had to justify their courses to panels of university and TAFE personnel with whom they are in direct competition. It is not uncommon for niched market curriculum developed by the private provider to be copied by an accrediting panel member and distributed within a public institution. It is not uncommon for a delegated industry accrediting/registering authority to frustrate the private provider's accreditation/registration to

ensure that a rival organisation, with which the industry body has an affiliation, gains the market edge. Nor is it uncommon for a government department to frustrate the private provider's accreditation/registration as, for example, we recently witnessed in one State when a child care curriculum was approved for accreditation, enrolled and suddenly de-accredited following the intervention of a government department which resulted in a cost to the private provider in excess of $30 000 without compensation. There was and is no avenue for redress in such circumstances

- nine different government policy-making bodies which impede inter State/Territory private provision, including eight different State and Territory quality systems which are costing private providers millions of dollars which would be better spent delivering education and training. Indeed, private providers were told that the mandatory State and Territory registration/accreditation procedures were our quality controls.[12] We now perceive that the cost for that quality assurance is to be shifted from government to the private provider because the State and Territory regulatory agencies are simply not cost-effective despite the fact that we paid for their services. We also perceive that quality as is being implemented across Australia still focusses on regulatory inputs rather than education and training outcomes because no research on outcomes has taken place
- the retention of award provisions which provide for industry-wide regulated training thereby stifling educational innovation and competition and increasing training costs via an annual levy imposed on private providers by some ITABs
- current policy being focussed on entry-level training when a significant part of the sector's provision involves industry preference for short courses to increase productivity and for part-time education and training by persons in employment who, at their own expense, undertake studies to develop new skills to enhance career opportunities
- regulation which is unco-ordinated, spread across the Commonwealth portfolios of Schools and Vocational Education, Employment Education Training and Youth Affairs, and Immigration and Multicultural Affairs, and more than a dozen State and Territory portfolios. In particular, policy concerning the requirements for attendance of overseas students is deficient and notification of non-attendance of overseas students is rarely, if ever, followed up by immigration authorities—colleges having even been requested by authorities to stop sending such notifications
- public institutions which cross-subsidise private tuition and their 'competitive' tenders with publicly-funded infrastructure paid for at non-taxed prices and without the insurance requirements, tuition assurance and limited cash flow via the mandatory trust accounts of the private sector
- State and Territory ministers of education and training and their directors-general being responsible for designing, delivering and funding the public sector while in competition with the private sector they regulate

At this time in Australia's development, diversity and pride in diversity are emerging. Currently, we seek reconciliation between the indigenous and the non-indigenous peoples of Australia in order to forge a future based on complementary individual worth. We also seek increased recognition of the diversity of the many ethnic groups which constitute the Australian nation. I know I can assert a consensus

on these issues at an educational conference because to be an educator is to foster the worth of every individual. Indeed, ACPET goes further and asserts that the gathering forces which seek to deny the value of cultural and racial diversity in Australia should reconsider and embrace the future rather than the past, for without acceptance of individual, cultural and racial diversity, not only is humanity diminished but so too is our national economic potential. ACPET is concerned that the absence of an overt policy for diversity in education and training is being construed nationally and internationally as part of perceived return to cultural and racial homogeneity.

If the dynamics of the private sector are to be maintained, it is necessary for education and training policy and regulation to enshrine diversity. It is easy to become convinced that a single model will unite and clarify what are essentially diverse and problematic issues for control, but history demonstrates that nations which embrace singular policies end up destroying themselves and others. The private education and training sector is estimated to generate more than 12 000 jobs within Australia and to raise revenue in excess of $1 billion. To deny us fair competition will reduce both these figures. At a time when governments across the nation urge increased flexibility, innovation and market responsiveness to private enterprise, why is the education and training sector becoming so restrictive? Given that education and training comprises Australia's second highest service export, why does government policy not focus on the global potential as well as the national employment strategy? The private education and training sector is not opposed to the national training agenda—indeed, many private providers embrace it and will participate in it—but the dynamics of the private sector demands more than a one-size-fits-all regulatory provision.

At this NCVER conference it is fitting for me to conclude with reference again to the importance of quantitative and qualitative data. For some years, ACPET submitted to the national authorities applications for research grants to map the impact of the private education and training sector. What we received with each successive rejection was a list of potential reasons for rejection, one of which, we were told, we fell into but which one was never identified by the granting authorities. We assumed that the most likely reason for our rejections was that a similar study had already been approved. To date, however, no study on the scope and impact of the private education and training sector has been approved or undertaken. Australia will be worse off in consequence for our education and training provision, it seems, is to be constrained by a lack of innovation, market responsiveness and diversity which collectively comprise the dynamics of the private provider sector. ACPET did not submit a request for a research grant last year because the cost for almost certain rejection was uneconomic. The private sector has been made to feel alienated from, rather than embraced by, some of our national authorities, as research by the Allen Consulting Group confirms.[13]

We are rarely consulted on policy that concerns us and, in consequence, national policy is depleted rather than enhanced. Thus, as the private sector is herded nationally into the mandatory but different State and Territory quality systems which supposedly focus on outcomes rather than on inputs, it is important to recognise that nobody

knows what these outcomes are, for all research to date has focussed on the inputs rather than the outcomes of education and training. There is insufficient data to allow comparison of public and private provision at the point of delivery as both the Allen Consulting Group[14] and Anderson[15] have stated. ACPET endorses quality systems provided they *add value* to the private provider in real terms, do not create on-costs related to paper compliance, and focus on market outcomes rather than on compliance with government regulatory inputs. The Prime Minister has stated that his government has concerns that quality certification may not be in the best interests of small to medium-sized enterprises. Even though small to medium-sized enterprises constitute the majority of the private education and training sector, emerging education and training policy ignores the Prime Minister's stated philosophy for his government. Even worse, what appears to be the intent of this quality certification is the conformity of the private and public providers to a one-size-fits-all provision. If you believe in choice, diversity and innovation in Australian society, please support ACPET's quest for a national database concerning the private provision of education and training in Australia in order to underpin *informed* national education and training policy with the option for private dynamic.

Endnotes

1 See Anderson, D 1993, *Blurring the boundaries*, NCVER, Adelaide, and Allen Consulting Group, 1994, *Establishing an effective training market*, OTFE, Victoria.
2 Anderson, D 1993, *Blurring the boundaries*, NCVER, Adelaide.
3 Australian Bureau of Statistics 1994, *Commercial Training Providers Australia*, ABS Catalogue No. 6352.
4 Allen Consulting Group 1994, *Establishing an effective training market*, OTFE, Victoria.
5 Anderson, D 1995, 'Private training provision in Australia: An overview of recent research', in eds F Ferrier and C Selby Smith, *Economics of education and training*, AGPS, Canberra.
6 Charles Sturt University 1995, *The availability of competency-based training in TAFE and non-TAFE settings in 1994*, AGPS, Canberra.
7 Allen Consulting Group 1994, *Successful reform: Competitive skills for Australians and Australian enterprises*, ANTA, Brisbane.
8 Allen Consulting Group 1994, *Establishing an effective training market*, OTFE, Victoria.
9 ibid.
10 Anderson, D 1993, *Blurring the boundaries*, NCVER, Adelaide.
11 Allen Consulting Group 1994, *Successful reform: Competitive skills for Australians and Australian enterprises*, ANTA, Brisbane.
12 ibid.
13 ibid.
14 Allen Consulting Group 1994, *Establishing an effective training market*, OTFE, Victoria.
15 Anderson D 1994, 'Private training providers in Australia: Charting the terrain'. Paper presented at 'Training research in university and TAFE' conference, NCVER/James Cook, Townsville.

The role and impact of flexible delivery of VET

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It is crucial to have a clear view of how vocational education and training (VET) reform and developments relate to 'the big picture'; how changes in VET connect to the mega-trends driving Australia into the world of the 21st century. Flexible delivery in VET considers two contexts connected to the mega-trends: the more familiar context of VET reform and development and life-long learning in a learning society. Less has been achieved than had been hoped and expected in 1992 in VET reform and flexible delivery, on the whole with some significant exceptions, remains in a marginal position with regard to mainstream VET provision. Why is this so, despite the compelling educational and economic case for flexible delivery? Some of the reasons are explored. Flexible delivery can be significant in the emerging context of transition to a learning society in which life-long learning for all is essential. Balancing and reconciling the two contexts can provide a useful step down this pathway towards a learning society.

Introduction

In an era dominated by globalisation, the revolution in information and communication technologies, and radical changes in work and in international relations, it is vital that we have a clear sense of how vocational education and training (VET) reform and developments relate to 'the big picture': that we understand how changes in VET connect to the mega-trends that are driving Australia into the world of the 21st century.

I would like to approach flexible delivery in VET in this way so as to consider two contexts that connect to the mega-trends that are making the world of the third millennium. The first context is the more familiar context of VET reform and development that we will be discussing at this conference. The second context, which in the long term is likely to prove to be the more significant, is reflected in the following observations.

> *Life-long learning will be essential for everyone as we move into the 21st century and has to be made accessible to all.*
>
> Communiqué of Organisation for Economic Co-operation and Development (OECD) education ministers, January 1996[1]

OECD societies are moving rapidly towards becoming learning societies. Learning, the very stuff of education, is pivotal to their economic prosperity.

Jean-Claude Paye, secretary-general of the OECD[2]

The learning organisation will be the standard philosophy for many Australian enterprises and a major way they cope with change and turbulence.

Karpin Task Force Report, Vision for Year 2010[3]

The Report takes a long step in the direction of lifelong education and of opportunities for re-entry to education. Kim E Beazley, MHR, Minister for Education, 1974[4]

My second context is encapsulated by the statements given above.

I will assert that we should also regard flexible delivery as a pathway towards life-long learning and a learning society. In order to promote this role it will be necessary to re-assert and revitalise the educational, social and moral mission of the VET sector in ways that do not detract from the economic mission of the sector. This will require a holistic view of the role of the sector that encompasses all these domains of social activity so that the sector gains vitality and a sense of purpose from the interaction of these components.

Flexible delivery and VET reform

Let me first take up the more familiar context of flexible delivery as an instrument of VET reform.

Flexible delivery has been actively promoted throughout the 1990s as a strategy for making VET providers more responsive to the needs of clients.

This orientation to the needs of clients is reflected in the definition adopted by the Flexible Delivery Working Party in its 1992 National Framework for Implementation in Technical and Further Education (TAFE) where flexible delivery is defined in the following terms:

Flexible delivery is an approach to vocational education and training which allows for the adoption of a range of learning strategies in a variety of learning environments to cater for differences in learning styles, learning interests and needs, and variations in learning opportunities.[5]

The more detailed definition given in the Appendix to the Framework elaborates on this definition in terms of such components as:

- flexibility in terms of entry, program components, needs of learning and points of exit
- learner control and choice regarding the content, sequence, time, place and method of learning

One of the interesting things about this definition is that a very similar definition could be given for open learning, illustrating the close link of flexible delivery in its intellectual foundations and origins to the open learning movement.

Four years later the Australian National Training Authority (ANTA) National Flexible Delivery Taskforce in its final report defined flexible delivery in similar but not identical terms:

> *Flexible delivery is an approach rather than a system or technique, it is based on the skill needs and delivery requirements of clients, not the interests of trainers or providers; it gives clients as much control as possible over what and when and where they learn; it commonly uses the delivery methods of distance education and the facilities of technology; it changes the role of the trainer from a source of knowledge to a manager of learning and a facilitator.*[6]

The ANTA Task Force acknowledges that this definition drew on that of the Flexible Delivery Working Party and also on a monograph on open learning written by my colleague Professor Richard Johnson and published by the National Board for Employment, Education and Training (NBEET) in 1990.[7]

In the light of this intimate association of flexible delivery with open learning, I would like to turn now to what has been achieved since 1992 in making the VET system more client-focussed and flexible in providing open learning opportunities and in adapting to difference in 'learning styles, learning interests and needs'.

The impact of flexible delivery on VET

My assessment is that less has been achieved than had been hoped and expected in 1992 and that flexible delivery on the whole, with some significant exceptions, remains in a marginal position with regard to mainstream VET provision. Why is this so, despite the compelling educational and economic case for flexible delivery?

But let me turn to the achievements first.

Facilitating access

I have been impressed in my work on flexible delivery over the past five years by the many innovative projects that have been mounted to facilitate access to education and training by a range of disadvantaged groups.

These projects involve:

People in remote locations: There are many examples of the imaginative use of distance education methods to provide VET to people in remote locations. Delivery strategies have included satellite delivery, video-conferencing, and various multimedia combinations. Some examples are:

- the provision of training to staff in Australian resort islands off the Queensland coast using satellite delivery
- the use of satellite delivery to bring training to local government staff across Queensland, often in remote locations
- linking small winegrowers across Victoria to Dookie Campus of the University of Melbourne using a multimedia/mentor strategy to promote on-job training for trainees

Aboriginal communities: In this area there have also been creative developments that have taken full account of cultural influences on learning. Some examples of these

developments are as follows:

- the Tanami Network in the Northern Territory, which developed video-conferencing to enable Aboriginal communities in the Tanami desert to have dialogue with each other
- the Hospitality Industry Aboriginal Recruitment and Training Program in Western Australia, which was developed as a flexible two-way learning experience

People with disabilities: A study that Professor Richard Johnson and I undertook for the Department of Employment, Education and Training (DEET) in 1994 across all sectors of education involved an evaluation of the potential of flexible delivery and open learning to facilitate access to training by people with disabilities.[8] We observed imaginative developments in each education sector and concluded that the potential was high. However, it is less clear how widely models that have been successfully tested are being applied.

Use of modern learning technologies

A range of modern learning technologies have been applied to VET provision and there is currently considerable interest in the potential of the Internet. Various multimedia combinations have been applied to considerable effect. However, there appears to be a considerable gap between best practice and the generality of use of modern learning technologies. A survey of Victorian institutions undertaken by Spark and Associates showed a widespread use of conventional technologies such as audio and video, but often not to their full potential.[9] A further study by Mitchell and Bluer (1977) in Victoria concluded that there was not a strong emphasis on learning as the chief criteria for using technology.[10]

So it appears that we have some distance to go before the full potential of modern learning technologies is realised across VET systems.

Gaps and barriers

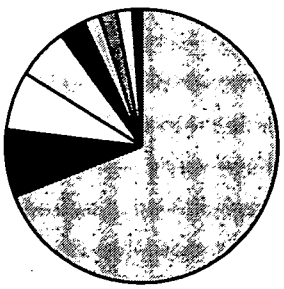
The 1996 report of the ANTA Task Force on Flexible Delivery identified a number of barriers which have impeded the more widespread adoption of flexible delivery methods. These include:

- inappropriate government resource allocation models and processes which provide little incentive to change
- limited access to reliable information for clients
- limited access to quality learning support
- difficulties in customising training to meet specific needs of clients

The cumulative effect of these barriers has meant that on-campus provision of VET has changed far less than had been assumed in 1992, with institutional provision of VET less flexible than is necessary in meeting client needs.

Let me cite some statistics. Statistics on delivery method are not yet available for all States so I have set out the situation in two States in 1994 and 1995 to illustrate what I think is still the general situation.

Figure 1: Training time by delivery system



1995		1994
69%	Traditional classroom	78%
8%	Other self-paced	7%
7%	Advanced technology/ interactive classroom	3%
6%	Traditional CBT	4%
3%	Interactive/ multimedia CBT	3%
2%	Televised distance learning	2%
2%	EPSS	1%
2%	Internet/Network-based distance learning	0.4%
1%	Other alternative delivery systems	0.5%

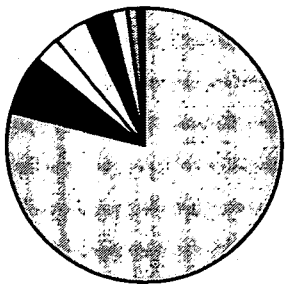
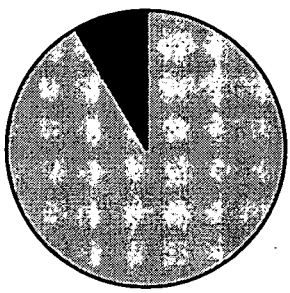


Figure 2: Per cent alternative delivery time of all training delivery time



1995		1994
75%	Classroom lecture or traditional CBT	81%
25%	Alternative delivery	19%

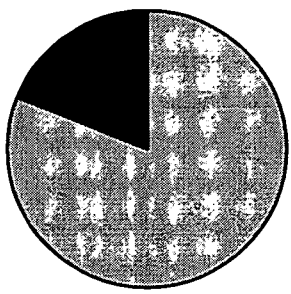


Figure 3: Per cent of training organisations using alternative delivery systems

	1995	1994
Other self-paced delivery	78%	65%
Advanced technology classroom	48%	40%
Interactive/multimedia CBT	75%	53%
Televised distance learning	55%	45%
EPSS	40%	33%
Internet/network-based distance learning	30%	10%
Other alternative delivery	10%	10%

Source: American Society for Training and Development (1996)[11]

These statistics show:

- classroom delivery of training declined from 78 per cent of the total in 1994 to 69 per cent in 1995
- a range of alternative delivery methods increased their share:
  - traditional competency-based training (CBT), various self-paced methods, advanced technology/interactive classroom

Table 1: Modular enrolments by delivery strategy, Victoria 1994, 1995

	1994 %	1995 %
Scheduled local classroom teaching	90.94	87.13
Remote class—scheduled, teachers directed	3.67	1.44
Self-paced—scheduled	1.85	7.07
Self-paced—unscheduled	0.91	0.63
External—correspondence	1.81	2.14
Workplace—experiential learning	0.02	1.06
Mixed media delivery	-	-
Other	0.80	0.52

Table 2: Modular enrolments by delivery strategy, Queensland 1994, 1995

	1994 %	1995 %
Scheduled local classroom teaching	93.36	73.26
Remote class—scheduled, teachers directed	0.53	2.04
Self-paced—scheduled	0.35	2.76
Self-paced—unscheduled	0.53	0.82
External—correspondence	0.12	4.84
Workplace—experiential learning	0.08	0.15
Mixed media delivery	-	-
Other	5.03	16.12

The main points of interest in these statistics are:

- the continued dominance of traditional classroom teaching
- some indications of a trend towards self-paced learning
- the very low incidence of workplace delivery
- the low incidence of mixed-mode delivery although this may be higher in other States such as New South Wales

Provision in industry

What is happening in industry? The Australian situation is not well documented, but there are some interesting American statistics from the Benchmarking Forum of the American Society for Training and Development. The forum is a consortium of 30 companies which share information on their training effort. It includes many of the best known American corporations such as Ford, General Motors, Boeing, Xerox, IBM, AT&T and Texas Instruments.

Data from the Benchmarking Forum shows shifts in delivery methods between 1994 and 1995 as set out in Figures 1, 2 and 3.

There is little doubt that this trend will continue with a range of alternative delivery methods becoming more significant in industry. It is probable that this trend will be most evident in larger firms initially.

Changes evident between 1994 and 1995 that are likely to point the way to the future are:

- the increase in the use of advanced technology/interactive classrooms
- the increase in Internet/network-based distance learning

It is also probable that we will see, at least initially in the larger firms aspiring to international best practice, much more use of high-performance work systems in which ongoing training in the workplace is an integral aspect of the system. Concepts such as integrated performance support systems will be much more common 10 years from now than is presently the case.[12]

What does all this mean for training providers and for the flexible delivery of VET?

Flexible delivery and life-long learning

In attempting to answer this question I would like to turn to the second context that I identified at the start of my paper: the necessary trend towards life-long learning and Australia becoming a learning society.

The imperatives for life-long learning are now recognised around the world. The 1996 Communiqué of OECD education ministers, the report of the United Nations Educational, Scientific and Cultural Organization (UNESCO) Commission on Education for the 21st century, the European Commission's Year of Life-long Learning are a few of the many manifestations.

In a world of globalisation, dynamic technological change, re-engineering and radical changes in workplaces, and new competitive pressures the traditional front-end model of education and training is increasingly irrelevant. So what are the implications for VET and for flexible delivery of VET?

Neglect of learning aspects

In reviewing the research literature on flexible delivery I was struck by the general neglect of learning aspects of training provision in the research undertaken on flexible delivery. While there are some honourable exceptions,[13] there appears to have been a fairly general neglect in research of key aspects of the concept of flexible delivery as defined in 1992 by the Flexible Delivery Working Party:

> *Flexible delivery is an approach ... a range of learning strategies in a variety of learning environments to cater for* differences in learning styles, learning interests and needs, *and variations in learning opportunities.*[14]

There has been some research on learning styles, but not much and aspects such as cultural influences on 'learning styles, learning interests and needs' have been neglected.

In an increasingly diverse multicultural society where larger numbers of international students are entering VET institutions in Australia, and where more VET is being delivered in other countries, this is a surprising and damaging neglect.

One pathway towards a learning society then is to take learning aspects of VET delivery strategies much more seriously. This will require such developments as:

- ❖ adapting delivery strategies to identified differences in learning styles, learning interests, and needs e.g. international students, Aboriginal students, various ethnic communities, and older students
- ❖ considering the learning outcomes of alternative learning technologies
- ❖ broadening and deepening our understanding of the kinds of learning that are relevant to effective work performance

Figure 4: Assumptions and process elements of the pedagogical and andragogical models of learning

Assumptions about ...	Pedagogical	Andragogical
Concept of the learner	Dependent personality	Increasingly self-directing
Role of the learner's experience	To be built on, rather than used as a resource	A rich resource for learning by self and others
Readiness to learn	Uniform by age level and curriculum	Develops from life tasks and problems
Orientation to learning	Subject-centred	Task or problem-centred
Motivation	By external rewards and punishment	By internal incentives and curiosity
Climate	Tense, low trust Formal, cold, aloof Authority-oriented Competitive, judgemental	Relaxed, trusting Mutually respectful Informal, warm Collaborative, supportive
Planning	Primarily by teacher	Mutually by learners and facilitator
Diagnosis of needs	Primarily by teacher	By mutual assessment
Learning activities	Transmittal techniques Assigned readings	Inquiry projects Independent study Experiential techniques
Evaluation	By teacher Norm-referenced (on a curve) With grades	By learner—collected evidence validated by peers, facilitators and experts Criterion-referenced

Source: Knowles 1995, pp. 89-90[15]

A useful discipline in such a development would be to evaluate our delivery strategies against the andragogical model of adult learning development by Malcolm Knowles. Much of our teaching practice in VET is still influenced by traditional pedagogical assumptions derived from the schooling of children and youth whereas

the needs of adult learners provide a more relevant and appropriate framework for VET provision for adults.

Broadening our concept of learning and of VET

The third of the necessary learning developments involves a broadening of our concept of the kinds of learning that are relevant to effective work performance in the emerging 'new economy'.

The UNESCO Commission on Education for the 21st Century identified in its report four pillars as the foundations of education.[16] These are:

- learning to know
- learning to do
- learning to understand others and live together
- learning to be

It is fair to say that in VET we have focussed on the first two of these pillars (learning to know, learning to do) and neglected the other two. However, all four kinds of learning are relevant to the human skills and capabilities required in work by the emerging conditions of the 21st century.

Globalisation and the growing internationalisation of education and training requires that we understand cultural differences and their impact on economic activity. We still have some distance to go in this area.

Learning to be involves the rounded development of the individual in all dimensions: intellectual, imagination, emotional, aesthetic and moral. There is growing interest around the world in such aspects as:

- the influence of emotional intelligence on performance in various contexts[17]
- the place of intuition in management performance
- the role of trust in the performance of enterprises[18]
  - how do we move from low skill/low trust enterprises to high skill/high trust enterprises?
- how we bring the whole person to work and create jobs that add to human fulfilment?

New theories of multiple intelligences have significant implications for the way we regard the educational mission of the VET sector and hence how we deliver vocational eduction and training.

Broadening our concept of the kinds of human capabilities and learning required for effective work performance in an environment marked by growing competitive pressures and pressures for continuous improvement is a necessary step.

The necessary convergence of education and training still has some distance to go despite useful steps such as the inclusion by key competencies in VET. However, the exclusion of essential competencies such as cultural understanding and creativity means that we must continue to address this frontier in order to achieve a necessary

broadening of our concept of learning, to underpin VET activity in the conditions of the 21st century and to develop a concept of VET that addresses the needs and aspirations of the human spirit as well as the requirements of training markets.

Strategies for life-long learning

OECD education ministers in their 1996 meeting endorsed four strategies for extending life-long learning. These were:

- strengthening the foundations for learning throughout life e.g. learning to learn skills
- promoting coherent links between learning and work by extending pathways and bridges
- rethinking the roles and responsibilities for all parties
- creating incentives for individuals, employers, and education providers to invest in life-long learning

Each of these strategies is relevant to the work of VET institutions and systems. In order to focus on 'the big picture' and to gain a clear sense of where we are heading, it is necessary to relate flexible delivery to these pathways towards life-long learning and a learning society. If we do this we will produce VET that is richer, more relevant to the individual, and more socially useful.

Reconciling the two contexts

While there have been, and continue to be, tensions between these two contexts for flexible delivery in VET, do they present alternative visions for VET? I believe not. Rather, the task is to balance and reconcile these two visions of VET so that we produce a richer and more valuable mix—for individuals, industry, VET staff, and society—through creative interaction between these concepts of VET. I would like to suggest that synergies are possible in a number of ways.

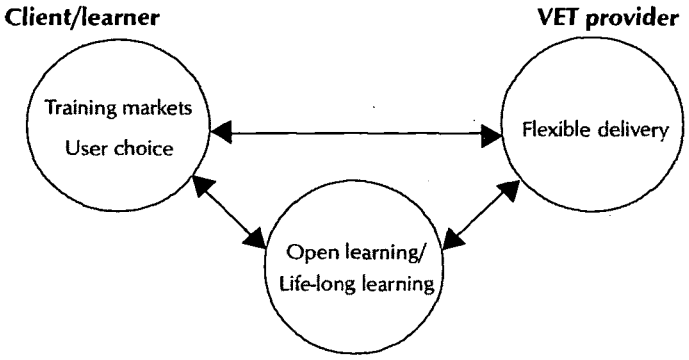
My pathway to the future involves:

- re-asserting and revitalising the educational, social, and moral mission of the VET sector
- assisting institutions, staff, and industry to gain a holistic view of the work of the sector that integrates economic, educational, and social roles
- recognising flexible delivery as a strategy for both training reform and life-long learning
- facilitating partnership development as a means to give effect to this vision
- developing VET institutions as learning organisations

If we do this, we can see how flexible delivery strategies serve both training reform and life-long learning.

Some of these relationships are suggested in the following figure:

Figure 5: Learning society



Flexible delivery and partnership

One of the keys towards making flexible delivery an integral feature of VET provision in Australia is to promote partnership development at all levels in the VET system. This requires such forms as industry/provider, learner/teacher, community/ partnerships, so that delivery becomes a matter for decision in partnership contexts.

Partnership is also a central feature of a learning society so that moves we take to make partnership real in VET are taking us down the pathway towards life-long learning and a learning society.

While partnership forms have grown in VET, stimulated by such developments as the Australian Vocational Training System (AVTS) experience, we still need to give more attention to the dynamics of partnership. This means adapting a life-cycle view of partnership and understanding how partnerships arise, develop, decline and die, and understanding the role of trust in bonding partnerships.

A vision for future directions

I would like to conclude by summing up the tenor of my observations on flexible delivery in several broader contexts by setting down eight points that contain my vision of where flexible delivery fits into future directions for VET in a learning society where life-long learning for all is imperative.

1 We will develop a holistic vision for VET that integrates the economic, educational, social, and moral missions of the sector in Australian society.

2 Flexible delivery will be seen as an instrument for both training reform and for life-long learning.

3 This approach will lead to a re-assertion and re-vitalisation of the educational, social, and moral missions of the VET sector in harmony with its economic mission.

4 Partnership development at all levels will orientate VET provision to these dual, complementary missions.

5 VET institutions themselves will be actively developed as learning organisations.

6 Staff development will be aligned to these roles and missions.

7 Modern learning technologies will be extensively used to create learning opportunities in a wide range of contexts.

8 Flexible delivery strategies will be actively used for the internationalisation of VET and for developing economic, social, and cultural linkages with other countries.

Is this vision overly idealistic and utopian? I think not. Rather, this is a necessary matter of achieving more comprehensive and holistic approaches to the provision of VET that harmonise the complementary educational, economic, social and moral missions of the sector.

Flexible delivery can be a significant instrument for such development in the emerging context of transition to a learning society in which life-long learning for all is essential. Balancing and reconciling the two contexts for flexible delivery that I have discussed can provide a useful step down this pathway towards a learning society.

Endnotes

1 *Lifelong learning for all*, report of the meeting of the OECD Education Committee at Ministerial level, 16–17 January 1996, OECD Paris, p.21.

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9 Spark, R et al. 1996, *Connectivity, convergence and vocational training: New communication technologies in VET*, Office of Training and Further Education, Melbourne.

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11 ASTD 1996, 'Results from the 1996 Benchmarking Forum', American Society for Training and Development, Va, USA.

12 See, for example, the assessment made by Winslow and Bramer (Anderson Consulting) 1994, in *FutureWork: Putting knowledge to work in the knowledge economy*, Maxwell Macmillan International, New York.

13 Misko, J 1994, *Learning styles*, National Centre for Vocational Education Research, Adelaide.

14 *Flexible delivery: A national framework for implementation*, op cit, p.5.

15 Knowles, M 1995, *Designs for adult learning: Practical resources, exercises, and course outlines from the father of adult learning*, American Society for Training and Development, Va, USA.

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ACE and adding value to the training market

Amanda Moore
Assistant Director of Adult and Community Education Services, New South Wales

This paper analyses the role that adult and community education (ACE) plays in vocational education and training (VET), and particularly concentrates on the contribution of ACE in the marketplace. It is revealed that the ACE sector contributes $50 million to the New South Wales economy, with 18 per cent of all ACE providers in Australia now being registered. ACE is very diverse and offers a wide range of services.

Although the traditional view of ACE courses is that they are undertaken for personal enrichment, research shows that a significant proportion of participants are vocationally motivated. The sector has some important features—it is genuinely committed to adult education, is market driven, focussed on quality, linked to local communities, favoured by women and places great important on equity. Finally, the author calls for greater acceptance of ACE by industry and government to promote an efficient, locally responsive VET system.

IT IS A pleasure to be able to talk to you today about adult and community education (ACE), particularly about the role that adult and community education plays in vocational education and training (VET) and the contribution that ACE makes, and has the opportunity to make, to the VET open market place.

While many of my remarks are referred to activity in New South Wales, the overall thrust relates to adult and community education from a national perspective.

The title of this conference is particularly pertinent to ACE—who pays? And who profits? While the overall contribution of the ACE sector to the NSW economy has been valued at around $50 million, governments are contributing through direct activity funding as well as recurrent funds less than 50 per cent of this. The remainder is contributed by the community and small business as users of ACE.

Let us consider the context of ACE and the market place. First and most importantly, in NSW ACE organisations are owned and managed by the communities they serve. While receiving some government support, the majority of services are provided on a fee-paying basis. Their independence enables these organisations significant flexibility. At the same time, their autonomy demands market place savvy to survive and prosper.

An important aspect of ACE is that providers in NSW form a Statewide network reaching into the remotest parts of the State. Australia wide, while the nature of funding and bureaucratic arrangements may differ, that feature of ACE—outreaching to the remotest communities—remains common.

In NSW in 1996, there were 125 000 enrolments in vocational courses delivered by ACE. A significant proportion—42 per cent—of these enrolments were from regional areas. Of these total enrolments, 30 000 were enrolments in Australian National Training Authority (ANTA)-funded accredited training.

The main contribution made by ACE providers to the national VET system is in the area of general education and training, language and literacy and other access and preparatory programs. A significant contribution is also being made in non-industry-specific occupational training in areas such as computing, business and clerical.

Table 1: Enrolments in vocational courses delivered by ACE

ANTA industry category	Enrolments
Utilities	50
Automotive	158
Finance, Banking, Insurance	332
Engineering and Mining	386
Tourism and Hospitality	468
Sales and Personal Service	495
Building and Construction	760
Text, Cloth, Footwear and Furniture	1298
Science, Technology and other	1606
Primary Industry	2158
Food Processing	2162
Communications	2169
Arts, Entertainment, Sport and Recreation	8327
Business and Clerical	13 271
Community Service, Health and Education	13 553
Computing	35 815
General Education and Training	41 694

As Kaye Schofield and Robyn Dryen have noted in their report on the role of ACE in implementing a national VET system—*Think local and compete: An analysis of the role of adult and community education in the implementation of a national system of vocational education and training*—ACE providers have not played a major role in delivering industry-specific training although individual providers have. Where providers have responded, it has been in non-capital intensive areas such as community services, health and education and tourism and hospitality. Schofield and Dryen also comment that there is scope for further involvement by ACE in meeting the training needs of primary industry and small business.

There has been a huge increase in NSW in the numbers of ACE providers delivering accredited VET. In fact, around 80 per cent of providers funded by the NSW Board of Adult and Community Education are now delivering accredited VET. They

are accessing ANTA funds allocated to the States as well as competing in the market place for contracted training. Nationally, around 180 or approximately 18 per cent of all ACE providers are registered providers.

What is not widely recognised or understood is the diversity of ACE. ACE providers are offering an increasing range of services within the market placeVin response to local needs and opportunities. The range of services offered by ACE providers includes:

- contracted training
- traineeships
- industry-specific training
- enterprise training contracts
- small business training
- assessor training
- recognition of prior learning
- accredited language and literacy
- case management

How does ACE add value to the VET system? What distinguishes ACE providers and ACE provision within the market place?

- training market value
- genuine commitment to education of adults
  - learner-centred
  - teaching and learning environment
- market-driven
  - responsive
  - flexible
  - short skills-based training
- focussed on quality
  - quality management systems
  - staff training and employment
  - registered providers
- linked to local communities
  - local level management
  - systemic arrangements
  - local networks
- favoured by women
  - high percentage of women enrolled in vocational courses
- equity
  - focus on access for groups traditionally under-represented in education and training
  - credit transfer

- ✦ articulation
- ✦ language and literacy

What is the future for ACE as a participant in the VET market place? ACE providers will continue to create the future by seeking market advantage through their increasing responsiveness to change and versatility, while at the same time remaining complementary to the main publicly-funded VET providerVTAFE. As part of seeking to maintain market advantage, ACE providers will be required constantly to improve their training product and effectively market to local business, ITABs, government and the community.

There needs to be greater industry recognition and wider acceptance of the role of ACE in non-occupational specific training, and integrating language and literacy skills into vocational training. Greater recognition by government of the value of ACE through allocating a greater share of VET resources to ACE will promote an efficient, locally responsive VET system, meeting the needs of industry and the community for relevant, flexible and accessible training opportunities. ACE provides:

- ❖ locality value
- ❖ community value
- ❖ organisational orientation value

Schofield and Dryen have identified a few areas in which ACE adds value to the VET system. Through participating in the training market, ACE contributes to increasing the quantity of VET, the diversification of the supply and methods of delivery, the reduction in cost and the servicing of under-represented or under-serviced groups. ACE adds 'locality' value through its sensitivity to small scale and localised demand deriving from local circumstances. ACE facilitates a focus on local and regional labour markets and the consequent demand for VET within these markets.

Because ACE is, in general, community owned and managed, there is immediate and direct accountability to the community and the capacity for an effective integration of VET activity into the activities of the community in general, thereby adding 'community' value into the VET system.

Finally, the commitment of providers, teachers and tutors to the principles of adult learning and to lifelong learning creates a learning environment within ACE which maintains the student and the hub of the education and training process. This adds what Schofield and Dryen call 'organisational orientation' value. ACE providers have been supported in their achievements in NSW by the Board of Adult and Community Education which developed a strategic approach to funding support. As well as providing ANTA funds to support program delivery, the Board funded the development of accredited curriculum and obtained other accredited curriculum on licence for ACE sector use; the costs of provider registration and the preparation of documentation required for initial registration; the development of professional development programs; the delivery of professional development; and additional funds for equipment and resources.

One significant aspect of ACE provision that is not widely known is that through their entry into the VET market place, ACE providers have become important and successful suppliers of training to small business.

The facts speak for themselves:

- 75 000 people employed by or self-employed in small business enrolled in a NSW ACE course in 1996
- 12 554 vocational modules and short courses were delivered by NSW ACE providers in 1996
- ACE's small business customers state they are very satisfied with ACE products and services

Not all training delivered to small business in 1996 was accredited but, then, neither does it need to be. When you examine the motivation of individuals undertaking ACE courses, some myths are immediately exploded. The common view is that people attend ACE courses for personal enrichment reasons. However, research undertaken by the Board in conjunction with the University of Technology Sydney has not shown this to be the case for a significant proportion of enrolments. A significant proportion of ACE participants are motivated by a vocational purpose. This has again been confirmed by the AGB McNair ACE Client Survey conducted in 1996. This survey showed that 42 per cent of all clients found the outcomes of their course relevant to their current job. The survey also showed very high levels of customer satisfaction in relation to the motivations of participants and outcomes of courses, as they relate to work-related needs.

Table 2: ACE Client Survey 1996—Key VET findings

MOTIVATION—Course provides new skills and knowledge for work

	All clients (%)	*Small business clients* (%)
Extremely important/important	61	67
Extremely satisfied/satisfied	67	72
Main reason	25	32

OUTCOME—Course relevant to:

	All clients (%)	*Small business clients* (%)
Current job	42	48
Career plans	56	56
Extremely satisfied/satisfied	94	95

Source: AGB McNair 1996

The overall level of satisfaction with teaching standards was very high, showing that ACE providers and tutors are highly skilled in meeting the learning needs of ACE participants.

Table 3: ACE customer satisfaction

	Extremely satisfied (%)	*Satisfied* (%)	*Dissatisfied* (%)	*Not stated* (%)
Overall	60	34	1	5
Teacher	75	20	1	4
Personal expectations	49	44	3	4

Source: AGB McNair 1996

As part of the sector's commitment to quality, the ACE Quality Strategy was launched in 1996 including quality standards developed specifically for the ACE sector. The ACE sector in NSW will have actively begun the quality journey when the State VET Quality Framework is put into place. What is ACE doing that has resulted in such significantly positive outcomes for individuals, clients and businesses? What is ACE getting right?

VET in 1996

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Some of the key features of the vocational education and training (VET) sector and its performance in 1996 are looked at, drawing on the report *Benchmarking VET: The performance of the vocational education and training sector in 1996*. In looking at the performance of VET some key themes and aspects in relation to the market for training are considered. Defining and marketing the products of VET and, in doing so, the benefits they deliver, will play a large part in the future success of the sector.

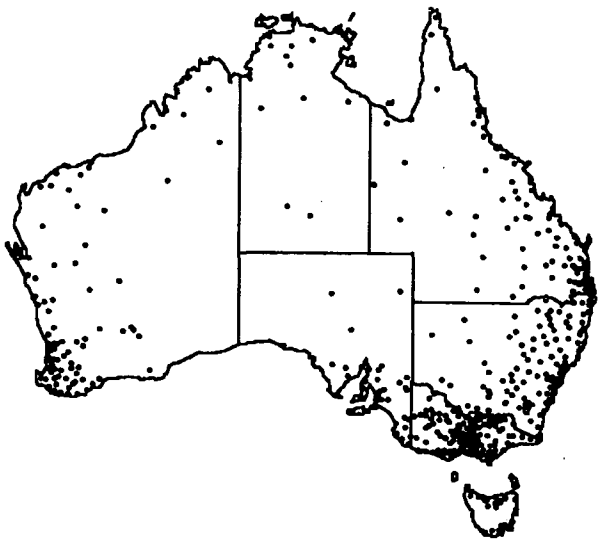
Introduction

TODAY I WOULD like to touch on some of the key features of the vocational education and training (VET) sector and its performance in 1996. This paper draws primarily on the processes and information used in putting together the report *Benchmarking VET: The performance of the vocational education and training sector in 1996*. In looking at the performance of the sector I will also comment on some key themes and aspects of VET in relation to the market for training.

The dimensions of VET in 1996

Vocational education and training in Australia in 1996 is bigger than ever before. The VET sector is diverse comprising a range of providers both public and private and catering for a wide range of clients including businesses large and small, and people from diverse backgrounds. It is provided from Broome to Baulkham Hills and from Darwin to Devonport, from community centres, in enterprises and in Technical and Further Education (TAFE) colleges and institutes across the country.

Figure 1: Vocational education and training provider locations in Australia



In 1996:

- there were more than 1.3 million clients in vocational education and training, an increase of 4 per cent over 1995
- hours of delivery in VET increased by 5 per cent to 285 million hours
- around 37 per cent of clients were undertaking trade and skilled courses, with a further 12 per cent undertaking para-professional and professional programs
- a little over 62 per cent of clients spent less than 200 hours in programs of training, with only 12 per cent spending more than 500 hours suggesting that clients are participating in training for skills gained rather than qualifications attained
- Aboriginal and Torres Strait Islanders' participation was at around 2.4 per cent, an increase from 2.1 per cent in 1995
- participation of people from non-English speaking background was around at least 13.8 per cent, compared with around 12.7 per cent in 1995
- there were almost 1000 training providers in receipt of public funds at over 2000 locations, of whom around half were other than TAFE providers
- governments, including Commonwealth, State and Territory governments, spent $3535 million on vocational education and training in 1996, an increase of over 7 per cent over the previous twelve months[1]

So we know vocational education and training has a wide coverage and that a lot of people go there and what governments spend on it, give or take. And this is in many ways an impressive picture. In recent years though, the sector has also turned its attention to other aspects of performance in vocational education and training with a view to being able to measure performance in relation to not only activity and inputs but also outputs and efficiency.

Performance in VET in 1996 and how we measure it

Performance in VET in 1996 is measured against six key performance measures supplemented by a further two measures on cost outputs as shown below. This is the second year in which the sector has reported against these measures. In 1997 the Performance Review Committee of the Australian National Training Authority (ANTA) are developing a set of longer-term measures for the sector.

Figure 2: Key performance measures in 1996

- Participation rates
- Graduate destinations
- Employer satisfaction
- Module load completion rate
- Government recurrent expenditure per public annual hours curriculum
- Total module load completion per $ government recurrent expenditure
- Government recurrent expenditure per public module load completion
- Actual and planned student load

The current measures are premised on the need to measure inputs, activity, outputs and efficiency within the sector. The data from which the measures are derived come from:

- the national provider collection based on the AVETMIS (Australian Vocational Education and Training Management Information Statistical) Standard
- the TAFE Graduate Destination Survey
- the Employer Satisfaction Survey
- data collected through ANTA to support its reporting requirements
- additional background data was also drawn from the Australian Bureau of Statistics

Understanding the performance of the VET sector, and the capacity to adequately measure its progress, relies on the development of sound measures and the availability of quality data. In 1997, both of these aspects are under review. In particular the question of quality and comparability of data has arisen, not for the first time.

Two years ago, Australian ministers responsible for training expressed concern that data required for use in the Annual National Report (ANR) for vocational education and training was not satisfactory for the purposes of interstate comparisons. Subsequently, the Boston Consulting Group (BCG) was commissioned by ANTA to

look at these issues of quality and comparability of data and found variations in reporting activity data of up to 20 per cent. That is activity, what we deliver, could be understated or overstated by 20 per cent. Financial data was not reviewed.

For 1996, the second year of measuring and reporting on the performance of the VET sector, minor variations remain. However, the level of adjustment required is only in the order of less than 5 per cent in reporting of both activity and finance data. This represents a considerable advance within the VET sector in the quality and comparability of data across jurisdictions, particularly data related to the calculation of unit costs within the current parameters of that calculation.

What the sector is grappling with now is the development of a set of core measures which can tell stakeholders, including governments and the wider community, what it is that VET delivers in terms of skilling the workforce and improving the labour market and career prospects of individuals. A particularly significant measure will be how we capture skill as an output of the sector. As noted below, the current formulations we have remain inadequate.

Benchmarking VET: 1996

The key instrument through which we report on the performance of VET is through the report *Benchmarking VET*. This is a collaborative process between the States, Territories, ANTA and the Department of Employment, Education, Training and Youth Affairs (DEETYA). This year the report is being produced by the National Centre for Vocational Education Research (NCVER) for the first time. Under this process, where there are interstate differences in data collection and collation, adjustments are made to the performance measures in the ANR. This process was used in preparing the report *Benchmarking VET: 1995* and will be used again for reporting on performance in 1996.[2]

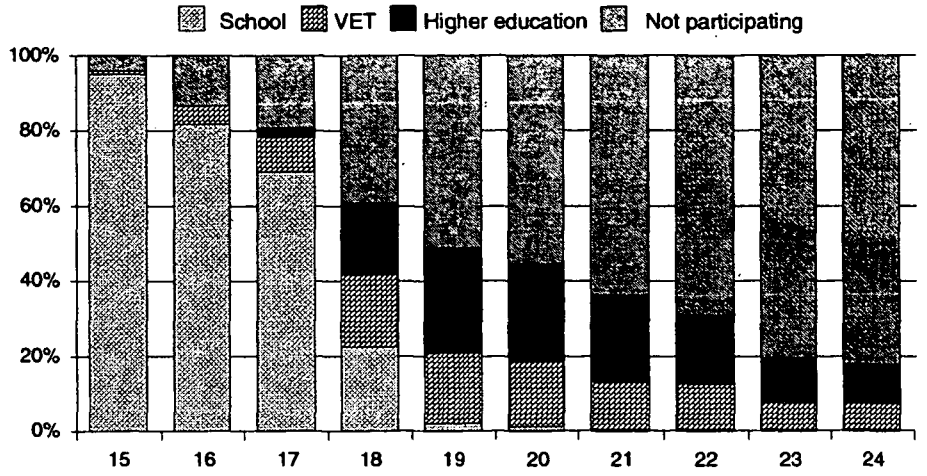
The need for adjustment may diminish with time. However, it will be important to retain the independence of the reporting process and mechanism as well as the co-operative process which has contributed to the quality and effectiveness of the report so far.

The report outlines information on the key performance measures of the system against the context of delivery of VET in terms of the market for VET and the economic and labour market pressures on demand for training. I would like now to turn to some significant aspects of the environment for VET which impact on its development, delivery and performance.

The context of VET

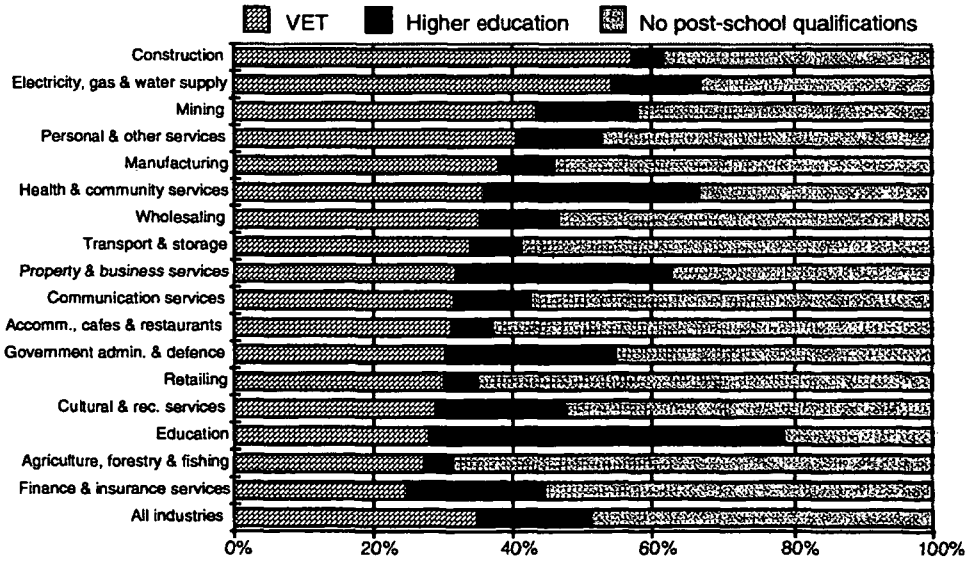
In looking at what is happening in vocational education and training it is important first to look at where pressure on training demand and supply is coming from.

Figure 3: Participation in education and training of 15–24 year olds



Participation rates in VET are highest at around 25 per cent of 18 and 19 year olds[3]. The rate of participation diminishes with age for both VET and higher education, although more young people are currently participating in higher education than VET. It is worth noting in this context that reported unmet demand for VET stands at around 9 per cent compared to 2 per cent for higher education. This suggests that there is currently greater capacity for growth in VET than in higher education, particularly at the youth end of the population.

Figure 4: Qualifications profile of the Australian workforce aged 15 to 64



In capturing the potential clientele for VET, we also need to look at the labour market in terms of the existing stock of qualifications (or skills) in the workforce, which also shows considerable capacity for growth in VET. New entrants to the workforce and the labour market (part of which is made up of young people coming out of entry-level training) make up only a very small percentage of the workforce in any given year. Thus, new entrants alone cannot make a substantial contribution to the level of skill in the labour force at any point in time.

If we turn now to a cursory examination of existing skill levels, using qualifications as a very rough proxy for skills attained, the demand for training of the existing workforce is brought into even sharper focus.

Around 50 per cent of the workforce has no post-school qualifications; compared to around 33 per cent in France and 16 per cent in Germany.[4] The pattern of qualification attainment varies across industries and between occupational levels, of course. In Australia in 1996, a third of the workforce held a VET qualification.[5] Industries with the highest level of VET qualifications are construction and electricity, gas and water, with over half their workforce holding a VET qualification. Newer growth industries do not have particularly high levels of VET qualifications and demand is to some extent untested. Nevertheless, there would appear to be considerable untapped skills requirements which could be filled through VET provision. I would like to turn from the labour market to the market for VET.

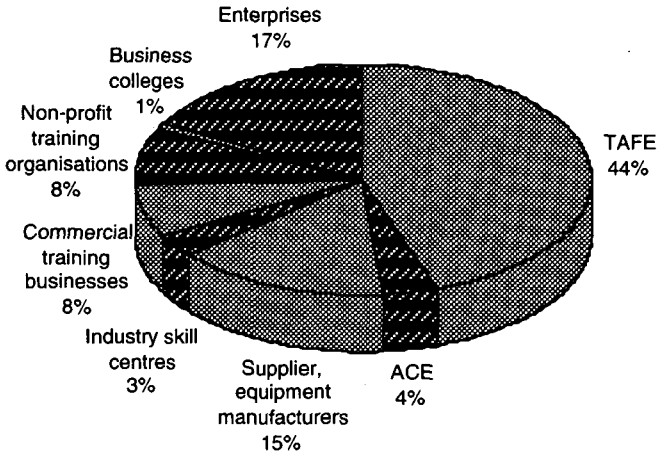
The market for VET

We are accustomed to the idea of a market for vocational education and training provision and services as governments across Australia are moving increasingly to a purchaser-provider model of training rather than traditional funding models. Indeed, we speak confidently about market mechanisms without perhaps looking closely enough at what makes up the market, or if there is a single market.

Markets in VET are made up of people who want training, a range of training services and products and those who offer the service or product. It is important, though, to recognise that there are a number of dimensions to the market for vocational education and training. In other words, there is a high degree of market segmentation. There are a range of services, products and providers; the market can also be viewed as a wholesale and retail market where students represent the retail consumer and enterprises are more likely to enter into wholesale arrangements.

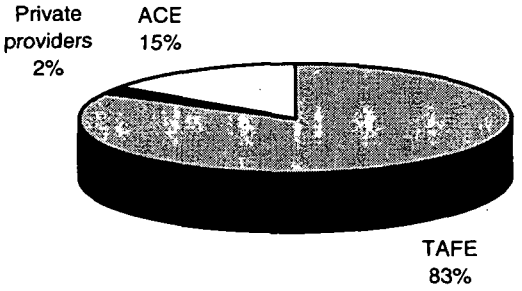
The Allen Consulting Group, in an earlier report to ANTA, provided an estimate of distribution of expenditure in VET from all sources across the full market, that is, everyone who is in the business of providing some kind of training service or product. There is no doubt in this wider market that a degree of segmentation exists which determines the choice of provider as well as of the service.

Figure 5: Who delivers VET? Distribution of vocational education and training expenditure



Most of our information in VET is about the retail market; individuals seeking training through a range of courses, programs and modules on offer from providers, rather than the wholesale market where business particularly might look for a package of products and services.

Figure 6: VET clients by providers in receipt of public funds



What we capture through the national database looks only at providers in receipt of government funds. This shows a very different picture and one where providers other than TAFE make up a fairly small proportion of overall effort. The shift in choice depends not only on shifting funds but also on the level of diversification of product and service which any provider is going to pursue.

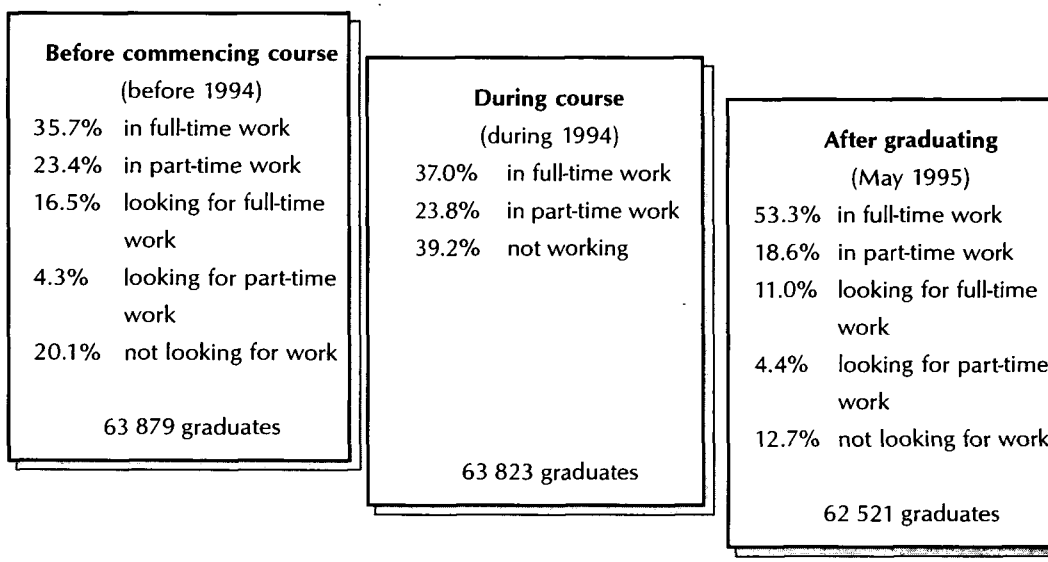
Outputs and outcomes

In VET, outputs and outcomes are probably the least developed measures of performance, or at least the most contested. This is in part because a focus on outputs and outcomes is relatively new across government service delivery. It is also in part because the sector has difficulty in defining clearly what its outputs are in the first

instance. This gives rise to difficulties subsequently in tracking the impact of outputs, or the outcomes.

Nevertheless, progress has been made in this area, not only conceptually but also in expanding the means by which we collect information. Student satisfaction and destination surveys are increasingly a feature of many providers' suite of management and market information. In 1995 the first national TAFE Graduate Destination Survey was conducted. I would like to look briefly at some of the key findings.

Figure 7: Graduate work patterns before, during and after study



The survey tells us that over 20 per cent of VET graduates are employed in a full-time job for the first time following graduation with over 50 per cent in full-time employment altogether. It also gives us useful information on the relationship between work and training for graduates, with around 37 per cent in full-time work before and during study. These strong links between work and study for students in TAFE, particularly those who enrol with a view to gaining a qualification, tell us that traditional output measures may need to be reviewed when applied to the VET sector.

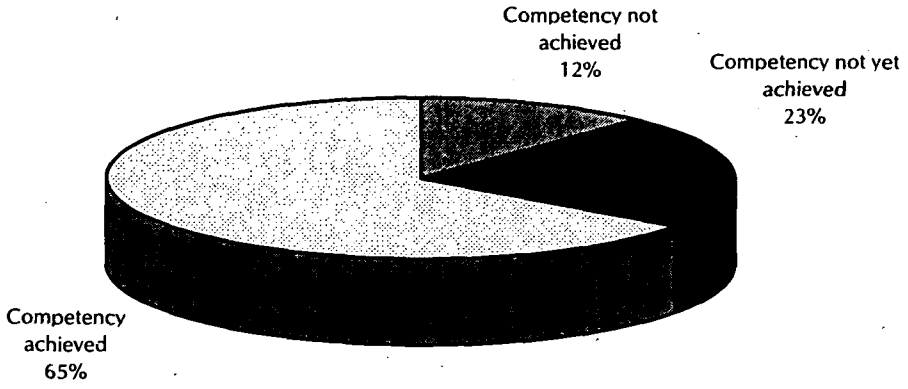
What is it that the sector delivers over and above jobs? Is it about improved career prospects; greater job mobility; updating skills? The gap in our information is partly a result of looking to graduates as an output of the sector, rather than a wider pool of participants. And this is something that we are looking to enhance in our current survey program with the introduction of a student outcomes survey.

As I noted earlier, outputs causes us even more difficulty. By and large, the notion that a qualification or an award are the key outputs of the sector in the way in which they are in higher education or secondary schooling, has not stood up to scrutiny. And a cursory look at the data for any year over the past 10 will give you the reason why—not many people get them. In the absence of any new ways of measuring skill (and

these are currently being developed) we have come up with a measure of output, based on module load.

This measure is based on calculation derived from module outcomes, in other words whether this was a fail or a pass or a completion and something else, such as withdrawal.

Figure 8: Competency attainment levels in vocational education and training



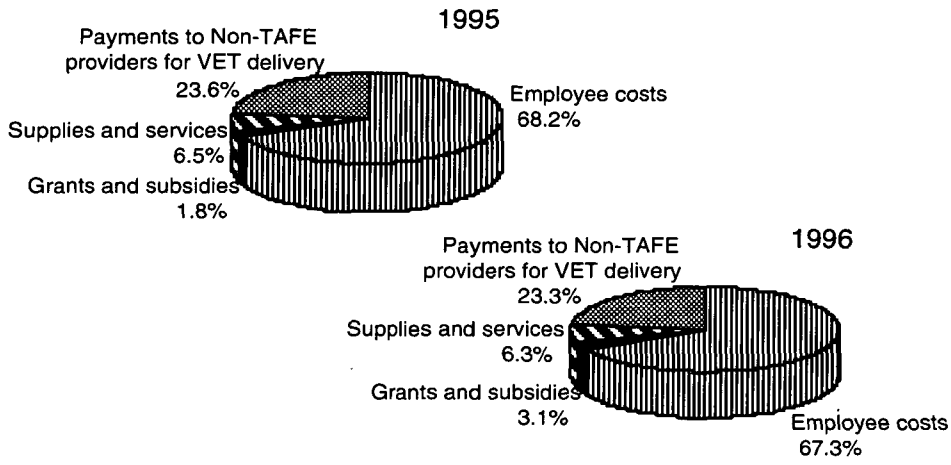
Probably the easiest way of looking at these is to group them using terminology around 'competency' as they are below. This tells us that over 60 per cent of module hours delivered a successful result or competency achieved, a further 22 per cent delivered an incomplete result and only 11 per cent resulted in failure.

Efficiency: What drives costs in VET?

Costs or unit costs in VET have also been an area which we have tackled relatively recently. Unit costs in the context of benchmarking VET are derived at the State and Territory level and, understandably, differences emerge between jurisdictions.

Geographic dispersion, industry mix and population characteristics are generally understood to give rise to differences in delivery arrangements and, consequently, costs. However, there has been less discussion in VET on policy differences. This goes to such issues as encouragement of commercial activity within public providers where government funds may subsidise commercial activity or where commercial activity may, in part, subsidise government-funded activity. A third approach is where governments cost the provision of infrastructure in funds allocated to providers, both public and private. The viability of markets for VET in particular geographic regions becomes an issue in this context. Government policy and strategic responses can, therefore, also have an impact on cost.

Figure 9: Analysis of total 1995 and 1996 payments



Benchmarking VET in 1995 noted that the biggest cost drivers in VET were:

- ❖ teacher salaries
- ❖ class size
- ❖ teacher–student ratios

Turning to the financial data reported for the sector in 1996, we see that indeed, nationally, teacher salaries account for more than 67 per cent of expenditure.[6] This, combined with other factors already noted above, goes some way to explaining cost differences. In other words, the level of salaries paid will have a bigger impact on total expenditure than a number of other variables in cost. In its traditional modes of delivery, VET is a labour-intensive industry and these analyses are hardly surprising.

Where to in 1998 and beyond?

Looking at the performance of the VET sector in 1996 raises two questions:

- ❖ What does it tell us about improvements over past practice and performance?
- ❖ What does it tell us about where the sector is heading?

This paper has concentrated on an analysis of the former. Not withstanding this, our capacity to predict future directions in terms of what vocational education and training is needed and where, not in any mechanistic way, is equally important.

We need a more market approach not only to our provision of training and training services, an area which has seen great change in recent years, but also in our approach to data collection and performance measurement.

We have a large bank of information in vocational education and training which is used in a comprehensive way once a year. This information is a valuable, if under-utilised, commodity. Its value in pushing the market for training is untried. In a future where clients, both business and individuals, are increasingly encouraged to exercise

choice, the need to know more about the market for training and the capacity to promote service is going to be more important.

Vocational education and training information can do much to assist in this process. Improved quality of data has been a priority for the sector over the past three to four years; improved dissemination and use of data should be a key strategic direction for the sector over the next five years.

So, where are we heading in VET?

- from institutions to enterprises
- from inputs to outputs of VET
- from qualifications to skills
- from courses to modules
- from classroom to flexible delivery
- from provider to customer choice

Defining and marketing the products of VET and, in doing so, the benefits they deliver, will play a large part in the future success of the sector.

Endnotes

1 *Australian Vocational Education and Training Statistics 1996*, NCVER
2 *Benchmarking VET: The performance of the vocational education and training sector in 1996*, ANTA 1997.
3 *Participation in education and training*, Australia, September 1996, Australian Bureau of Statistics (ABS).
4 *Education at a glance*, OECD Indicators, 1996.
5 *Transition from education to work Australia*, May 1996, ABS.
6 *Australian VET statistics 1996: Financial data*, NCVER.

The VET product and the development of the training market

Chris Robinson
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The vocational education and training (VET) product is considered against the template of conventional micro-economic theory on competitive markets. The fundamental assumptions for a competitive market—homogenous products supplied by large numbers of competitive producers with unimpeded entry of buyers and sellers to the market and perfect market information among buyers and sellers—are examined in the Australian VET context. Training markets in Australia are a far cry from this. However, it is not established that achieving these theoretical preconditions for competitive markets is necessary or even desirable in developing a more responsive and competitive VET sector in Australia.

Wherever the VET sector ends up on the spectrum between 'full competition' and 'public allocation', a VET sector fully responsive to all its customers' needs is vital to meeting Australia's diverse range of skill needs and will depend on high quality VET products whose features are well understood by all consumers of VET.

The products and services of VET need to be 'demystified'. There is still confusion about what is available and too many levels of VET qualifications. The number of certificate levels should be reduced and apprenticeships and traineeships simplified into a single nomenclature and product.

Consumers of VET want high-quality products tailored to their particular needs. New VET products need to provide a better balance between general and specific skills, of high-quality, rather than a narrow range of 'homogenous' products and sufficiently diverse to meet Australia's longer-term skill needs.

Competition policies based only on market shares achieved by different types of providers overly emphasise the supply side of the market and are based on a false presumption that there should be many providers competing to provide a limited range of homogenous training products to promote consumer choice. Consumer needs and choice might best be served by focussing on the quality and diversity of VET products to meet customer needs. A range of public and private providers should develop a wide range of high quality customised products to meet the diverse needs of all VET consumers.

Introduction

THERE HAS BEEN a lot of debate in Australia in recent years about the benefits and costs of a market approach to vocational education and training (VET) and about whether we should have a training market.

However, competition is already well established in the VET sector. There are some 84 institutes of Technical and Further Education (TAFE) and around 2500 other registered training providers—business and industry providers, community-based training providers and commercial training providers. Even universities and schools are getting into the act (Robinson 1997).

The development of a market approach in VET has been deliberately pursued by national, State and Territory VET authorities as part of wider microeconomic reform policy in Australia to pursue competition in the provision and delivery of public utilities and services across a range of areas (such as electricity, water, health, telecommunications and employment and welfare services) that were traditionally provided by public monopolies.

It is a bit too late to be asking the question 'Should we have a training market?'. Market forces are already well established in some parts of the VET sector in Australia.

The real question now is, how far should market models for vocational education and training be pushed to ensure that VET is provided in a flexible and responsive way to better meet the disparate needs of all 'customers' of VET. This needs to be considered without losing sight of the need for diversity and quality in VET. We also need to meet the long-term skill formation needs of Australia—and not just focus on the immediate demands arising in the market.

Against this backdrop the Australian National Training Authority (ANTA) has undertaken a consultation on behalf of Australian ministers responsible for VET on *Developing the training market of the future* (Australian National Training Authority 1996a).

In the National Centre for Vocational Education Research's (NCVER's) own research conducted for this exercise we found that:

> *research into training markets in Australia has been more about 'personal ideological positions on competition and market reform in the VET sector than objective analysis of relevant trends and developments'. There is currently insufficient empirical evidence to either support or refute claims that increased competition will produce the benefits being claimed by proponents or the severe drawbacks being speculated upon by opponents of the training markets.* (NCVER 1997a, p. i)

Characteristics of the market for VET are explored in this paper against the template conventional economic theory about competitive markets. The implications for VET products are highlighted.

Market characteristics

Theoretical considerations

Conventional economic theories provide a guide to the product definition required for markets to function effectively (i.e. for markets to be in equilibrium in terms of demand and supply).

Market theory is essentially simple. The price paid and quantity of a product (i.e. a commodity or a service) exchanged in a market is determined by the total of all exchange activities undertaken by buyers (consumers) and sellers (producers) in that market.

According to economic theory (for example, see Russell & Wilkinson 1979, p. 218) the key assumptions required to ensure equilibrium in a (perfectly) competitive market (which means the market has a single product price for all transactions between consumers and producers) are:

- *identical commodities*—all producers sell commodities that are identical with respect to physical characteristics and time of availability
- *large numbers of buyers and sellers* are in the market, with free exchange, entry and exit, meaning that there is no cost involved in exchanging commodities and there is free entry and exit of buyers and sellers to and from the market
- *perfect information*—producers and consumers possess perfect information concerning price, physical characteristics and the availability of commodities

Without entering into a debate about the validity of perfect market conditions in the real world, where products are not homogeneous, a number of different markets are said to exist. In cases where there are limited numbers of buyers and sellers or barriers to entry and exit, monopolies arise and competition is limited, leading to prices that are not in equilibrium (i.e. usually higher prices for consumers). Perfect information is a requirement of a perfectly competitive market in the purest forms of competitive economic theory. However, economists generally stress the need for adequate information about products. Imperfect information impedes the effective operation of markets and is a common cause of market failure.

This all serves to highlight clear product definition and full information about products are central planks to the effective operation of competitive markets.

Implications for VET in Australia

There have been a number of studies in recent years which have examined the issue of whether or not these preconditions are being met.

For instance, a significant analysis of VET markets in Australia was conducted by the Allen Consulting Group for ANTA in 1994. The ACG report (Allen Consulting Group 1994, pp. 40–41) identified five areas of poor performance in Australian training markets.

- On the demand side the initial issue is to encourage demand by enterprises and student individuals who feel that the return on their investment in training is worthwhile.
- On the supply side there is limited knowledge about the supply of training and how well it matches demand.
- The market is not accessible to all, especially small businesses.
- Governments are sending mixed signals in setting the rules under which the market will operate.
- Information to consumers about training products and how to distinguish them in terms of price, quality and service is poor.
- The implications of this are that clear definition of VET products and greater consumer awareness and product knowledge amongst enterprises and individuals is fundamental to the effective operation of VET markets.

Yet as the Allen Consulting Group observed:

> *focussing almost single mindedly on promoting competition amongst providers has certainly had the effect of driving the price of public provision down. Whether this is accompanied by maintenance or improvement in quality and how important price is relative to quality in influencing demand is untested.* (Allen Consulting Group 1994, p. 41)

Other recent Australian research confirms that the preconditions prescribed by economic theory for achieving competitive markets are not being met in the Australian VET context. Anderson (1996), Burke et al. (1994), Fisher (1993), FitzGerald (1994), Fooks et al. (1997), Foyster (1997), Lundberg (1994), Ryan (1995), Selby Smith (1995), Sloan (1994), Sweet (1994), Taylor (1996), Western Australian Department of Education and Training (1995) and Wiltshire (1997) are just a few of the studies that have examined and questioned the degree to which some or all of the key preconditions for competitive training markets are being met in the VET context. Recent Australian research on this issue has been reviewed in Anderson (1997), where he finds that:

> *the precise nature of products in the training market lacks adequate definition ... This is compounded by a lack of common product descriptors to reflect the distinctive characteristics of products in a consistent manner.* (Anderson 1997, p. 8)

The lack of definition of VET products is really the significant issue, rather than whether or not theoretical competitive market preconditions are being met. It is impossible to envisage how improvements in the responsiveness of VET in meeting customer needs could be achieved without adequate definition and articulation of the VET products available. 'Goodness of fit' of the VET sector to competitive market models is really a secondary issue.

Any push to further develop training markets in Australia must be accompanied by a great deal more emphasis on definition and quality of products, and product awareness among the consumers of VET. This is a critical issue, even if Australia were to reject market approaches to determining resource utilisation in the VET sector. High-quality products that are well understood by enterprises and individuals seeking training, and that are responsive to changing needs, are critical to Australia's future—irrespective of whether or not VET is organised according to market principles.

The VET product

Looking at conventional economic theory establishes the central importance of products in markets. It is important to now consider what the VET sector actually delivers, and what its products currently are.

What does the VET sector deliver?

In terms of what it delivers, the VET sector is normally described in terms of activity measures of training provision. For instance, the NCVER has recently reported that for 1996 over 1.35 million people undertook VET programs with a total of 1.78 million course enrolments in vocational programs. This was made up of 8.48 million enrolments in modules (subjects or discrete elements in vocational programs) and a total delivery of over 285 million hours of training in VET programs (NCVER 1997b). Most of this delivery is provided by TAFE.

To address the over-reliance on activity measures of the VET sector ANTA, in conjunction with State and Territory training authorities, produced a national report in 1996 which, for the first time, brought together available measures of VET outcomes and outputs (Australian National Training Authority 1996b).

This work demonstrates that while there is now a reasonably comprehensive amount of information about VET outcomes (such as the employment outcomes and further study outcomes of VET graduates and about the outcomes in terms of the satisfaction of employers and students with the VET programs available), there is still very little information about the actual products of VET. These outcomes are documented in Dawe (1993), Australian Bureau of Statistics (1995) and AGB McNair (1996).

What are the products of VET?

Conceptually, the core products of the VET sector can be viewed in the following ways:

- the *qualifications* attained by people successfully completing VET programs that are valued by employers and widely recognised as currency in the labour market
- the *skills and competencies gained by individuals* to improve their economic and labour market prospects and/or to improve their skills to enable them to do their current jobs better
- the *skills and competencies required by business* to improve the bottom line of business enterprises in terms of productivity, profitability, etc. and to contribute to Australia's overall economic competitiveness

A deliberate distinction is being made here between the core products of VET (i.e. skills and qualifications) and outcomes from VET such as gaining new employment, obtaining new skills to gain promotions or new jobs or gaining new skills to increase job security in existing employment.

The myriad qualifications and nomenclature that exist had their roots in an enormous number of different trade and technical qualifications that historically existed in each State and Territory.

Impetus for a more consolidated national approach to qualifications followed the increasing Commonwealth role in TAFE which developed as a result of implementing recommendations of the Kangan Report (Kangan 1974). This culminated in 1984 with the adoption of consistent national nomenclature for VET qualifications and the establishment of a national register of TAFE courses. States and Territories retained responsibility for assessment and accreditation of courses. The national qualification system adopted was that awards for courses would be based on course stream classifications as shown in Table 1.

Table 1: Awards for TAFE courses—adopted in 1984

Course stream	Type of award
3600	Diploma
3500/3400	Associate diploma
3300	Advanced certificate
3200	Certificate
3100/200	Statement of attainment
1000	Statement of attainment
4000	Endorsement of awards

Source: Goozee 1995

Further developments towards a national system ensued over the period from the late 1980s through to the mid-1990s, many of these based on trying to address industry calls for greater consistency and transferability in training recognition arrangements across State and Territory borders.

Major developments in this period included:

- the introduction of competency-based training
- the introduction of national targets for the participation of young people in education and training
- the establishment of a national framework for the recognition of training
- a move from TAFE to VET with the introduction of more non-TAFE training providers
- a push to develop a training market for the delivery of VET
- the establishment of an integrated entry level training system

These trends are described in Goozee (1995). These developments set the context for a new, more comprehensive system of national education and training qualifications—the Australian Qualifications Framework (AQF)—which was introduced on 1 January 1995.

The AQF was designed to provide consistent recognition of the outcomes achieved from education and training across all sectors, including the integration of learning in the workplace with the incorporation of structured training into the system (apprenticeships and traineeships being Certificate I to IV qualifications under the AQF). The AQF was also designed to provide 'a clear and rational structure in which an increasingly deregulated training market can maintain credibility within the overall education and training system' (Australian Qualifications Framework Advisory Board

1996). This means a structure for ordering the 'qualifications' products of the training market. The AQF qualifications system is outlined in Table 2.

Table 2: Australian Qualifications Framework (AQF) Qualifications—Established in 1995

Schools sector	VET sector	Higher education sector
	Doctoral Degree	
		Masters Degree
		Graduate Diploma
		Graduate Certificate
		Bachelor Degree
	Advanced Diploma (ASF6)	Advanced Diploma
	Diploma (ASF5)	Diploma
	Certificate IV (ASF4)	
	Certificate III (ASF3)	
Senior Secondary Certificate of Education	Certificate II (ASF2)	
	Certificate I (ASF1)	

Source: Australian Qualifications Framework Advisory Board 1996

The AQF framework for qualifications is being implemented over a five-year period ending 31 December 1999. It can be seen in Table 3 that a greater proportion of course enrolments leading to qualifications are still in programs leading to awards under the old system (30.9 per cent of total course enrolments in 1996). Although, by 1996 over one-quarter of course enrolments in VET were in programs leading to qualifications awarded under the AQF.

The important point about the information in Table 3, with respect to VET products, is that only a little over half of all course enrolments in 1996 were in programs leading to a qualification. However, a further 16.5 per cent of course enrolments were in programs leading to statements of attainment (issued to those partially completing a qualification and indicating the units of competency achieved under nationally endorsed competency standards) or certificates of competency or proficiency, etc.

The remaining enrolments (26.8 per cent in 1996) were in non-award courses and courses not leading to a formally recognised qualification (or not leading to the issue of a statement of attainment, etc.).

There is some evidence to suggest that VET customers are finding this complex array of qualifications and products confusing and difficult to understand.

Table 3: VET course enrolments by qualifications 1996 (a)

Qualifications category	Number of enrolments ('000)	Proportion of enrolments (per cent)
Full qualifications still under old system		
Diploma	7.6	0.4
Associate Diploma	107.6	6.0
Advanced Certificate—post trade	9.7	0.6
Advanced Certificate—other	68.2	3.8
Certificate—trade	85.2	4.8
Certificate—n.e.c.	273.4	15.3
Sub-total in old system	551.7	30.9
Full qualifications under AQF framework		
Advanced Diploma	28.4	1.6
Diploma	73.2	4.1
Certificate IV	69.0	3.9
Certificate III	130.7	7.3
Certificate II	99.0	5.5
Certificate I	54.8	3.1
Senior Secondary	6.2	0.3
Sub-total AQF	461.3	25.8
Sub-qualification level statements of attainment, etc.		
Statements of Attainment	269.6	15.1
Certificates of Competency	20.0	1.1
Certificates of Proficiency	1.8	0.1
Endorsements to Certificates	3.3	0.2
Sub-total statements, etc.	294.7	16.5
Non-award/other	478.6	26.8
Total course enrolments	**1786.3**	**100.0**

(a) Qualifications awarded or being sought
Source: NCVER 1997(c), p.30

On the employers' side, the National Employer Satisfaction Survey (AGB McNair 1996) found that:

- 84 per cent of employers of VET graduates thought that VET qualifications should be based on what the person can actually do, rather than on how many years of training they have completed
- 81 per cent reported that it is difficult to tell what a person can actually do from their VET qualifications
- 78 per cent reported that VET qualifications do not really tell you what job skills a person has

Taylor (1996), in his *Review of the Australian National Training Authority Agreement*, concluded that:

> *industry was critical of the complexity of the system ... The Review concluded that practical reforms and further streamlining are needed.* (Taylor 1996, p. 12)

The Business Council of Australia in their submission to the ANTA Review concluded that:

> *There is a high level of confusion over the definitions of, and differences between programs and funding, for example apprenticeships and traineeships.* (Taylor 1996, p. 51)

Comprehensive information on VET student/trainee perceptions of VET qualifications is harder to find. However, a recent survey of parents of Year 10 to 12 students found that nearly two-thirds of such parents thought that TAFE qualifications are good quality qualifications for young people to gain (Department of Vocational Education and Training 1997, p.17).

It is not surprising that customers of VET are finding this system and its plethora of products and classifications confusing. Even though the adoption of the Australian Qualifications Framework has provided a consistent framework for the articulation of different VET products, it is not an adequate basis alone for marketing those products to VET customers.

Moreover, references to Table 4 demonstrate that there are not clear and intrinsically understandable differences between the qualification levels (for example between Certificates I to IV). There are probably still too many levels in the AQF. Moves by the university sector to introduce another level—associate degrees—to 'compete' with advanced diploma level qualifications would certainly not help to further clarify and simplify this situation.

Table 4: Description of VET qualifications under the AQF(a)

Certificate I	Certificate II	Certificate III	Certificate IV	Diploma	Advanced Diploma
Do the Learning Outcomes enable an individual with this qualification to:	Do the Learning Outcomes enable an individual with this qualification to:	Do the Learning Outcomes enable an individual with this qualification to:	Do the Learning Outcomes enable an individual with this qualification to:	Do the Learning Outcomes enable an individual with this qualification to:	Do the Learning Outcomes enable an individual with this qualification to:
demonstrate knowledge by recall in a narrow range of areas	demonstrate basic *operational* knowledge in a *moderate range* of areas	demonstrate some *relevant theoretical knowledge*	demonstrate understanding of a *broad knowledge base incorporating some theoretical concepts*	demonstrate understanding of a *broad knowledge base incorporating theoretical concepts, with substantial depth in some areas*	demonstrate understanding of *specialised knowledge* with depth in some areas
demonstrate basic practical skills such as the use of relevant tools	apply a *defined range of skills*	apply a range of *well developed skills*			
	apply known solutions to a limited range of predictable problems	apply known solutions to a *variety of predictable problems*	apply solutions to a *defined range of unpredictable problems*	*analyse and plan* approaches to *technical problems or management requirements*	*analyse, diagnose, design and execute judgements* across a broad range of technical or management functions
perform a sequence of routine tasks given clear direction	perform a range of tasks where *choice between a limited range of options* is required	perform processes that required a *range of well-developed skills where some discretion and judgement is required*	*identify and apply skill and knowledge areas to a wide variety of contexts with depth in some areas*	*transfer and apply theoretical concepts and/or technical or creative skills to a range of situations*	demonstrate a command of *wide ranging, highly specialised technical, creative or conceptual skills*
receive and pass on messages/information	*assess and record* information from varied sources	interpret available information, using *discretion and judgement*	*identify, analyse and evaluate information from a variety of sources*	evaluate information using it to *forecast for planning or research* purposes	generate ideas through the *analysis of information* and *concepts at an abstract level*
	take limited responsibility for own outputs in work and learning	take *responsibility for own outputs* in work and learning	take responsibility for own outputs in *relation to specified quality standards*	take responsibility for own outputs in relation to *broad quantity and quality parameters*	demonstrate *accountability* for *personal outputs within broad parameters*
		take *limited responsibility* for the *output of others*	take limited *responsibility* for the *quantity and quality* of the *output of others*	take limited responsibility for the *achievement of group outcomes*	demonstrate *accountability* for group outcomes within broad parameters

(a) Italicised words emphasise distinguishing features of the learning outcomes between levels. Source: Australian Qualifications Framework Advisory Board 1995

The VET product and other market conditions

The other key conditions for a competitive market are concerned with:

- the nature of the relationship between buyers and sellers in the market
- the extent to which (perfect) information is available to all, existing or potential, producers and consumers

Each of these issues is considered below.

Buyers and sellers of VET products

Conventional theory points to the need for free entry and exit of buyers and sellers to a market, with no transaction costs. Theory also stresses the need for large numbers of buyers and sellers in a market for there to be (perfect) competition in that market.

However when considering the VET sector a more critical set of issues might really be who are the buyers and sellers of VET products and what implications do their needs have for the nature of VET products?

There are a number of different customers of VET (i.e. buyers in the training market). The key customers are:

- *enterprises and industry* who want cost-effective training products that are relevant to their particular business needs
- *individuals* who are looking at VET products that will give them the skills needed to secure employment, improve their prospects in the labour market, help them to do their jobs better or help them pursue other worthwhile activities

I have argued before that we should not lose sight of the other interests that need to be served by VET as well. These are:

- the *national interest* which is focussed on ensuring Australia has the right overall skill base to improve our international competitiveness and meet the long-term economic and social needs of our nation
- *regional interests* where the skills needed for regional development and structural adjustment in particular regions need to be met
- *community interests* where the particular skill needs of different groups within the community such as indigenous people, people with English language skill needs, etc. need to be provided for

There are broad macroeconomic dimensions to Australia's skills formation needs, in addition to the microeconomic economic dimensions of a training market.

> *It is not enough to simply meet the immediate needs of individuals or enterprises alone.*
> (Robinson 1997, p. 2)

This issue has been identified by other researchers. For instance, Anderson (1997) has found that:

> *Research suggests that markets based solely on the training decisions of private individuals and enterprises in isolation can lead to an under-investment in key industry and occupation sectors. Such instances of market failure can in turn produce collective economic problems*

such as the recurrence of general skills shortages and increased levels of unemployment with undesirable economic and social consequences. (Anderson 1997, p. 10)

Turning to the *enterprise customers* of VET, information about the training practices of Australia's enterprises shows that almost one-third of Australian employers report having provided formal training to their employees in the previous year. Over 90 per cent of these employers used external training providers to meet all or part of their training needs. In terms of the type of external training provider used, almost half of the employers used TAFE, almost 40 per cent used private training providers and almost 30 per cent used industry associations. Other providers such as professional associations, manufacturers/suppliers, universities, etc. were used less frequently by employers. Larger employers used both TAFE and private providers more heavily than other employers (Australian Bureau of Statistics 1994).

We also know some things about what those employers who have employed a VET graduate in the past two years think of the 'VET product'. The results of the National Employer Satisfaction Survey (AGB McNair 1996) show that:

- 75 per cent of employers felt that the skills acquired from VET are relevant to their current needs
- 66 per cent of employers felt that the skills acquired from VET are relevant to their future needs
- 72 per cent thought training resulted in productivity gains for their enterprises
- levels of employer dissatisfaction on these indicators range between 11 and 19 per cent

In terms of VET product availability and accessibility:

- only 49 per cent of employers were satisfied with the flexibility of course times and timetables
- only 51 per cent were satisfied with the incorporation of on-the-job training in VET programs, even though over two-thirds of employers believe that on-the-job skills are more useful than skills obtained through formal education
- only 55 per cent were satisfied with the flexibility of course content although 74 per cent were happy about the locations of course delivery
- only 40 per cent of employers thought their needs were sufficiently taken into account in the design of VET products

If we consider the views of enterprises who actually use the VET sector to provide training for their enterprises (rather than some of the assertions made about what industry thinks of VET or TAFE), then two clear pictures emerge:

- First, there is a relatively *high level of satisfaction* among business users of VET that the skills acquired are relevant to enterprise needs.
- Second, about half of the employers who used VET are looking for *greater flexibility in the design and delivery of VET products*, and in increasing the on-the-job training context of VET programs. Moreover some 60 per cent of employers are looking for their needs to be taken more into account in the design of VET products.

These sorts of findings—with between two-thirds and three-quarters of enterprises being satisfied with external training provided by TAFE of other external training providers—have been replicated in other studies of employers who use VET such as the Allen Consulting Group (1994) study of competitive skills for Australian enterprises.

Turning to the *individual customers* of VET, the student or trainee profile of the 1.35 million people who enrolled in VET programs in 1996 (NCVER 1996b, 1996c) is that:

- just under half (47.5 per cent) are female
- some 60 per cent are aged 25 years or more, with only just over 20 per cent being in the 15–19 year old group
- one third live in rural or remote areas outside capital cities or major metropolitan areas
- almost 2 per cent are indigenous Australians
- just over 3 per cent of students or trainees reported having a disability
- some 16 per cent of students or trainees were born outside Australia, with some 10 per cent speaking a language other than English at home

Of the individuals who reported their labour force status at the time of enrolling in vocational programs, some two-thirds were employed, some 20 per cent were unemployed and around 15 per cent entered VET from outside the labour force. (NCVER 1996b, p.22).

Looking at what individuals who use VET think about the training providers, the 1994 survey of TAFE graduates throughout Australia (Australian Bureau of Statistics 1995) found that over 80 per cent of graduates reported that they had achieved the main reason for doing their course. Over 80 per cent of graduates cited employment-related reasons, such as to get a job or start a business, to get a better job or promotion, to get new skills for their job etc., as the main reason for undertaking the TAFE course. Some 13 per cent cited interest or personal development and 6 per cent cited going on to other courses of study as the main reasons for VET participation. Some 73 per cent of graduates employed felt their course was highly relevant/relevant to their job, indicating a reasonably high level of satisfaction with VET products.

However, VET students (i.e. graduates) have expressed some concerns about the nature of VET products. Dawe (1993, p. 23) reported from the *1993 National Client Follow-up Survey of Vocational Education Graduates* that:

- only 39 per cent of graduates thought the availability of options and choices of subjects or modules was good or very good
- some 15 per cent thought such course options or subject choices were poor or very poor and a further 16 per cent rated them as not relevant (Dawe 1993, p.23)

There is no evidence to suggest that there are any serious market distortions arising from any limits in the overall number of buyers in the training market, although the proposition that there are no barriers to entry and exit to and from the market may require further testing in relation to the market access of small business and some particular groups of Australians. Certainly the evidence is overwhelming that there are

very large numbers of individual Australians—over 10 per cent of the working age population—who avail themselves of a vocational program in any given year.

The evidence reviewed here suggests that there are very diverse needs among different consumers of VET. They are looking for greater diversity in VET product development and delivery that is tailored to their specific needs. Enterprises and individuals do not appear to be looking for more product standardisation.

This proposition is very strongly supported by emerging US research into consumer satisfaction across a wider range of products and services across major industries. This research (Fornell & Johnson 1993; Fornell et al. 1996; Johnson & Fornell 1991; Johnson et al. 1995) makes two key conclusions based on extensive empirical work on customer satisfaction. They are that:

- *customisation* of products is far more important than standardisation or homogeneity in determining customer satisfaction
- customer satisfaction is more driven by *quality* than price

Taking these findings into account in the future development of VET products is critically important.

Turning to the *suppliers* (i.e. sellers) in the training market, the NCVER (1997b, 1997c) has found that there were over 1000 providers of publicly funded vocational programs in the training market during 1996. They included:

- just over 100 public training institutes, most being institutes of TAFE
- over 500 community-based training providers, many being adult community education providers
- almost 400 other private training providers (including commercial private training providers, industry providers, etc.)

These are only the suppliers of publicly funded VET programs. There are well over 2500 registered training providers in Australia (Australian National Training Authority 1996a, p.3) delivering private and/or publicly funded vocational education and training. In addition there are an unknown number of unregistered training providers. The Australian Bureau of Statistics (1996) estimated the number of commercial training providers in Australia to be around 3200, with only 6 per cent of these delivering government accredited training courses.

The market precondition that there needs to be a large number of suppliers in the market would appear to be met, at least superficially.

However, there is considerable doubt about the issue of freedom in entry and exit to the market.

The Australian Council for Private Education and Training (and others in the private training provider industry), have argued that public providers have a monopoly and that training market arrangements are heavily in favour of continuing public provider (TAFE) dominance of the VET sector. This was certainly the finding of Anderson (1994) when he examined competitive arrangements between TAFE and commercial training providers. Anderson (1994) found that private providers tend to specialise in the provision of short courses in niche markets rather than in competing

with TAFE colleges for publicly accredited programs. However, this is now beginning to change.

On the other hand, Fooks et al. (1997) have argued that if VET is to be governed more by market forces, then TAFE institutions need to have the same degree of independence as other training providers in order to be able to compete effectively and without hindrance in the training market. This would mean ensuring that TAFE institutes are able to operate as autonomous institutions, and making complementary changes to national planning and funding arrangements. Peoples (1996) has also put forward strong arguments about the impact of these developments on TAFE.

The debate continues. New arrangements being promoted by ANTA and implemented by States and Territories concerning streamlining regulatory requirements with respect to the registration of training organisations should help to address some of these concerns. Nevertheless, the issue raised by the Allen Consulting Group (1994) about the need for governments to clarify the rules under which the training market will operate remains a valid concern today. It is one that requires further attention.

Information about VET products

Talking about whether or not the competitive market precondition of perfect information exists is a rather nebulous exercise. What constitutes perfect information has never been clearly defined in practical terms by economists. Most economists today refer to adequate information rather than perfect information.

For our purposes the issue really is the question 'is the level of information available to buyers and sellers in VET markets sufficient for them to make rational decisions about their participation in vocational education and training?'

The evidence reviewed in this paper thus far certainly suggests that consumers of VET do not yet have sufficient or adequate information about the range of products and services available, and about how to gain access to them.

The bulk of Australian research examining the market context in the VET sector points to insufficient (or imperfect) information about training products and services.

The Allen Consulting Group (1994) found:

> *information about training products and how to distinguish them in terms of price, quality and service is poor.* (Allen Consulting Group 1994, p. 41)

Wiltshire (1997) argued that:

> *The so-called training market area is not, at present, a pure market ... There is not perfect knowledge in the market because there is not a complete sharing of information throughout.* (Wiltshire 1997, p. 3)

Anderson (1997) in reviewing recent Australian research on market reform and competition in the training sector, concluded that:

> *research shows that the quantity and quality of information on training supply and demand is presently insufficient.* (Anderson 1997, p.8)

Barker, Donovan and Hatton (1996) examined the VET marketing strategies in different States and Territories. They pointed to the need to develop marketing strategies based on a segmentation of the market into the different groups of clients and the development of specific marketing strategies aimed at providing better information about VET to each client group in VET markets.

When considering the issue of information about VET products, it is useful to consider what the customers of VET themselves think about the availability and adequacy of information.

In terms of *employer* knowledge of VET, the *National Employer Satisfaction Survey* found that among employers of recent VET graduates (AGB McNair 1996, pp. 28–35):

- less than half (44 per cent) had heard of the Australian Vocational Training System (AVTS) and only 15 per cent of these employers said they had good or very good knowledge of the AVTS
- only 14 per cent had heard of the AQF and only one-quarter of these employers thought they had good or very good information about the AQF
- only 44 per cent had heard of competency-based training (CBT) and only one-third of these employers thought their knowledge about CBT was good or very good
- only 27 per cent of employers were aware of recent VET reforms, with only 25 per cent of these employers indicating they had good or very good information about these reforms

Large enterprises had much better information than small- or medium-sized enterprises. For instance, amongst employers of recent VET graduates with enterprises with more than 100 staff (AGB McNair 1996, pp. 28-35):

- 75 per cent had heard of AVTS
- 69 per cent were aware of the AQF
- 90 per cent were familiar with CBT
- 77 per cent were aware of recent VET reforms

AGB McNair (1996) also found that the main sources of information about vocational education and training for employers of recent VET graduates were industry associations (39 per cent of employers) and TAFE (31 per cent). Government authorities (12 per cent), the media (8 per cent) or word of mouth (2 per cent) are only minor sources of information about VET for employers.

In terms of *individual students or trainees*, Dawe (1993, p. 26) reported from the *1993 National Client Follow-up Survey of Vocational Education Graduates* that:

- some 36 per cent thought they had good or very good information about career options or jobs
- around 54 per cent thought they had good or very good information about assessment procedures in their vocational program
- some 44 per cent thought they had good or very good access to information and support services to assist in selecting courses, subjects or modules

A recent study of parents of Years 10 to 12 school students by the Tasmanian Department of Vocational Education and Training (1997, p. 12) found that a surprising number of parents (nearly 83 per cent) could recall seeing or hearing TAFE advertising in the past two years. However, relatively few parents thought they had a lot of knowledge about TAFE (8 per cent), apprenticeships (8 per cent), traineeships (6 per cent), private training providers (less than 2 per cent) or even about universities (14 per cent).

In terms of the sources of information about post-school education and training, the most frequently used sources of information by parents were (Department of Vocational Education and Training 1997, pp. 9–10):

- friends/relatives (56.8 per cent)
- brochures/handbooks (55.8 per cent)
- newspaper features (47.1 per cent)
- teachers (39.4 per cent)
- other parents (37.7 per cent)
- career counsellors at school (30.3 per cent)

These data provide only a very general proxy for measuring the adequacy of information about VET products. However, they do clearly indicate that VET information could certainly not be said to be adequate at this stage.

Enterprises, individual VET students and the parents of young people have all indicated they have relatively poor information about VET, its products and about vocational education and training options, even though the evidence reviewed in this paper shows that there are relatively high levels of satisfaction with VET products once they are used.

VET products of the future

In this paper so far I have been focussing on current VET products and on some historical developments leading to where we are today. It is even more important to do some 'crystal ball gazing' if we are to come to terms with the sort of vocational education and training products we are going to require in the future.

Reich (1989) in a fascinating piece called *Dick and Jane meet in the next economy* examined the transformation of advanced economies that is taking place from the *old economy* to a *new economy*. He argued that the 'old economy' was characterised by high-volume, standardised production with large numbers of identical items being produced over long production runs. A few people at the top made all the decisions with management being backed up by professional experts such as bankers, accountants and engineers. Everyone else was expected to follow orders set by management according to the requirements of stable and reliable production systems. These methods of production required rigid work rules and job classifications. In this 'old economy' most education and training is geared to implementation of instructions and specialised training in job tasks.

Reich argued that this 'old economy' in the older industrialised economies is rapidly becoming (or already has become) obsolete. He argued:

> *As the production of commodities shifts to other parties, America's competitive advantage correspondingly must shift toward work the value of which is based more on quality, flexibility, precision and specialisation.* (Reich 1989, p.98)

Reich went on to say that the 'new economy' poses a dichotomy for older industrialised economies—cut wages to match those of emerging industrial economies elsewhere or compete on the basis of how quickly and well they can transform ideas into better goods and services. He argued:

> *both paths can improve competitiveness in the short run, but only the second can maintain and improve living standards over time.* (Reich 1989, p.99)

In the 'new economy', labour's value is increased. A workforce capable of rapid learning and innovation is critical. Continuous retraining for more complex work and the transfer of high level skills gained in the work context needs to be underpinned by attitudes and learning skills gained long before in the education system prior to entry to the workforce.

Reich argued that skills such as working effectively in groups, working co-operatively with and through other people and being able to analyse problems and develop solutions are paramount in the 'new economy'. He concluded:

> *It is not enough to produce a cadre of young people with specialised skills. If our enterprises are to be the scenes of collective entrepreneurship—as they must be—experts must have the ability to share their skills broadly and transform them into organisational achievement and others must be prepared to learn from them.* (Reich 1989, p. 103)

Sheldrake (1997) recently made some similar observations in the Australian context. He argued we are facing two massive changes in the global economic system—these being the increasing dominance of the free market capitalist system around the world and an extraordinary increase in the rate at which new products and services are coming onto the market. He likens the current 'knowledge revolution' arising from rapid technological change in the late 20th century to being as profound for the way economies and work are organised as was the industrial revolution in its day.

From all this, Sheldrake suggested that the skills of the future put forward in the Commonwealth Government's Industry Task Force on Leadership and Management Skills—*Enterprising nation*—are a useful starting point in looking at our future skill requirements. At the very least they might include (Sheldrake unpublished, p. 6):

- considerably enhanced *people skills*, especially in team leadership, communication, enabling, consulting with others and coaching
- *strategic skills* in developing businesses that take account of the increasing importance of knowledge as a factor (the factor) in competitive success
- *conceptual skills*, particularly those that enhance the ability to see issues from a variety of viewpoints, manage ambiguity and understand the complexities of other culture's values and priorities
- the ability to *empower others*, to be able to manage through dialogue and inter-personal negotiation rather than through power and control

- ❖ the capacity to recognise that *learning is an on-going process*, and to continuously re-think and re-examine approaches to work and other fundamental issues

Sheldrake went on to say that, in framing our educational and training strategies to prepare people for 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 is that most of what most of them say will be wrong ... The skills that are likely to be the most important over the next thirty years are likely to be generic skills. They will include the ability to reason, collect, assess and organise information, to prepare and deliver presentations that are well researched and analysed, and so on. Perhaps a better description of these skills would be 'generalist' skills.*
>
> (Sheldrake unpublished, p. 8)

This discussion serves to emphasise that the nature of work is changing so rapidly that the training approaches needed to prepare people for work of previous generations—that served us well for most of the 20th century—will not continue to meet our skills needs in the 21st century.

We do not know what the skill requirements will be because the new jobs and forms of work arising out of the 'knowledge revolution' have not fully emerged yet. We do know that skill requirements will continue to change ever more rapidly than at any time in our past—with existing specific skills becoming obsolete even more quickly.

The preoccupation among some sections of industry for the training system to deliver job-ready workers with industry specific skills will not be able to be sustained in the future.

The VET products of the future will need to be better balanced between providing generic skills and abilities needed if our workforce is to adapt and be innovative in an increasingly competitive global environment, combined with the specific technical skills that can only be provided in industry settings. Training policies will need to be focussed on continual skills upgrading as new skills emerge and recently attained skills become obsolete. In the future it will not be sufficient only to produce people with the specific technical vocational skills needed to meet the current skill needs of the day.

The *vocational education* part of the VET products equation will need to become more important than ever before in imparting generic learning and work skills. The *training* part of the VET products equation will need to place much greater emphasis on the contemporary industry context for skills acquisition and continuous upgrading. Life-long learning, rapid skills acquisition and continuous upgrading will need to shape the VET products of the future.

Conclusions

Conventional economic theory points to the central importance of the product and its characteristics in a competitive market, such a market being characterised by transactions between large numbers of buyers and sellers, which determine a rational

equilibrium between the quantity of the product demanded and supplied. In particular, conventional theory stresses the need for perfect information about the price, quality and availability of the product in a competitive market amongst all consumers and producers in the market.

The empirical evidence reviewed in this paper shows that for VET in Australia:

- there is not a single market for VET with a homogenous product
- there are large numbers of buyers and sellers in training markets although there are barriers to the entry and exit of training suppliers to VET markets
- there are problems with the availability of adequate information about VET products and services

I would argue that there is no *a priori* case to suggest that Australia's skill needs would be best met developing a perfectly competitive training market that replicates all of the theoretical preconditions of such a market. A VET sector that has much greater responsiveness to customer needs, flexibility, innovation and lower costs can emerge *without* all the theoretical preconditions of perfectly competitive markets being met, or indeed without all parts of the VET sector being open to full competition.

In particular, I would question whether an approach based on an even larger number of VET suppliers each supplying a relatively narrow range of homogenous or identical training products makes much sense, even though so-called 'optimum' levels of VET provision requires full competition between large numbers of suppliers of each VET product (with those suppliers being able to enter or leave the market at will).

In saying this I am neither arguing for or against a market-based approach to VET in Australia. Rather, I am questioning whether or not trying to replicate all of the competitive market preconditions is sensible and desirable for the VET sector in Australia.

All the evidence reviewed in this paper suggests that quality and customisation are the key features that enterprise and individual customers of VET are looking for in VET products. The focus in developing VET in Australia should be on the development of a more diverse range of high quality VET products and services that are better tailored to meeting a wide range of particular training needs.

Customer requirements for quality, diversity and customisation implies a need to *rethink* competition policies that are essentially based relatively on encouraging greater and greater numbers of suppliers—each competing to provide a standardised set of training products. Instead, an increase in consumer choice implies the need for policies based on encouraging a variety of different types of training providers in the market—TAFE, industry providers, commercial providers and community-based providers—each carving out a niche in the market (or markets) based on delivering the different VET products and services that different customers want.

Looking to the likely skill needs of the next century reinforces this view. Specific technical skills are likely to remain relevant for shorter periods of time. VET products will need to be orientated towards continual skills upgrading as existing skills become obsolete more rapidly than ever before. The preoccupation among some sections of

industry with immediate job-specific skills is unlikely to be an adequate basis to sustain our future skill requirements. A proper balance between the generic skills needed for the workforce to adjust rapidly to new requirements and even more emphasis on the continual acquisition of new specific skills in the industry context will need to be the focus of VET products in the 21st century.

This study has also found that information about VET products is not yet adequate in Australia. VET products need to be demystified. Enterprises and individuals are experiencing difficulty in understanding what is available and how it could meet their needs. This implies simplification of product design, better articulation of the VET product characteristics and clearer marketing strategies to the customers of VET.

As a first step, consideration could be given to:

- simplifying to AQF structure at the certificate level from the current four levels down to three or possibly even two levels so there are much clearer, and understandable, distinctions between the different certificate qualification levels
- focussing on the advanced diploma level, rather than introducing a new associate degree level which could well serve to confuse matters even more without adding any new value to education and training in Australia
- rationalising the existing array of sub-qualification level outputs such as statements of attainment and units of competency, so that consumers of VET have a clear understanding of what such outputs mean
- in the context of rolling out the new apprenticeships arrangements, doing away with the distinction between apprenticeships and traineeships—instead developing a single-structured training VET product (possibly retaining the apprenticeship brand). There is no continuing need for the distinction which is based on historical factors rather than on different industry or different occupational training requirements. Different levels of training within the single-structured training system should be determined by the particular training required, rather than persisting with the historical apprenticeship and traineeship dichotomy

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Developing international activities with VET

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In 1997 there will be well over 30 000 foreign students studying in Australia in vocational studies in Technical and Further Education (TAFE) and private colleges. IDP Education Australia plays a pivotal role in Australia's international education efforts and has strong links with TAFE and private vocational education and training (VET) institutions. In private overseas-student recruitment, IDP has not yet been established as the recognised spearhead of VET promotion, although it would like to do so and so would many VET providers. VET, or at least TAFE, is searching for a suitable vehicle for its promotion abroad. IDP's claims to do it—with much logic and infrastructure to commend it—have been diminished by the perception of IDP as the creature of the universities. However, IDP is strongly committed to collaboration with VET—recruiting a significant number of foreign students for VET each year. IDP would like VET to regard it as its primary national overseas marketing arm. Australia's push into international education since 1985 is discussed. IDP feels that this industry should be self-supporting and largely independent of government. Much work is being done internationally by the VET sector as a whole, including institution linkages, but calls for more marketing activity, developing brand identity, clarification of equivalences, academic credit and articulation continue to be made. In conclusion, IDP is improving its capability to work with VET institutions in 1998.

THIS YEAR THERE will be some 140 000 foreign students studying in Australia. Of this number well over 30 000 (not including ELICOS, the English language intensive course for overseas students) will be enrolled in vocational studies in Technical and Further Education (TAFE) and private colleges.

My organisation, IDP Education Australia, plays a pivotal role in Australia's international education efforts and has strong links with TAFE and private vocational education and training (VET) institutions. Indeed, we are managing two important contracts in Malaysia with a combined value of over $2 million (Australian) which involves the National Centre for Vocational Education Research (NCVER) as a partner. One is a tracer study for polytechnic development and the other requires a survey to be conducted of employers in nine sub-sectors of Malaysian industry in order to establish the country's requirements for engineers and engineering technicians to 2010.

In the area of private overseas student recruitment we have not been able to establish IDP as the recognised spearhead of VET promotion, although we would like to do that and so would many, but perhaps not all, VET providers. VET, or at least TAFE, continues to search for a suitable vehicle for its promotion abroad—ATI (Australian TAFE international) was one attempt at this. IDP's claims to do it—with much logic and infrastructure to commend it, are diminished by the perception of IDP as the creature of the universities.

IDP has a strong commitment to collaboration with VET—to TAFE, to the Australian Council for Private Education and Training (ACPET), to all institutions in this sector. On our Board of Directors we have two senior TAFE managers and one eminent person from the private part of VET. We do recruit a significant number of foreign students for VET each year and our exhibitions and publications give emphasis to the sector. In an upcoming review of our international student services we will be looking at ways of strengthening our promotion of the various sectors, partly by dedicating in our overseas offices resources and physical space exclusively to their needs.

We would like VET to regard IDP as its primary national overseas marketing arm—but we have work to do on this and we have to earn that right, and that honour. The parties need to get their heads together and work on it.

At this time, the Federal Minister for Employment, Education, Training and Youth Affairs is reviewing the future of the Australian International Education Foundation (AIEF). One hopes that the quality of outcomes of the review matches the length of time it has taken to undertake it.

It is in this context and with an eye to VET's perceptions of the role of the Federal Government and IDP that I want to take the opportunity presented by this forum to reflect on Australia's push into international education since 1985, to present a historical commentary on the full-fee student initiative of the Labor ministers, Susan Ryan and John Dawkins, and to consider what some of the lessons of the past twelve years offer for the future.

I believe that it is important for this to be done, and some public debate engendered, at a time when the Federal Minister contemplates the future of the AIEF and the role of government, the Australian government that is, in our international education activities.

The decision of the Labor government to establish the full-fee private student program in 1985–86 will go down as one of the great policy initiatives of that government and a landmark decision for Australian education. This said, there is little to compliment and much to criticise about the role of the Federal Government since that time. Indeed, government has sometimes hampered and got in the way of what has been a great success story. The ups and downs in government policy have puzzled and confused many institutional providers and those offering infrastructural support. It has swung from a hands-off policy in the early years to a progressively

interventionist role through the AIEF in recent years. A strategy not far short of nationalisation and appropriation of certain elements of the 'program' has been attempted. This view depends on your perspective, of course.

My perception of recent Australian international education history goes something like this.

In 1986, John Dawkins, the then Minister for Education, announced his policy of 'let 'er rip'. The export of education services was to be an exercise that would be self-funded and self-regulated. No government money was to be provided and apart from visa scrutiny of prospective students and the protection of places for domestic students, little else would attract government involvement.

Notwithstanding this policy stance, the government gave AUSTRADE the principal role in marketing education overseas. Confusion quickly resulted with AUSTRADE, Immigration, the Department of Employment, Education and Training (DEET) and the Department of Foreign Affairs all involving themselves in often inappropriate ways and with varying degrees of commitment: for example, in 1987 a locally engaged immigration officer in the High Commission in Singapore was the de-facto information officer and counsellor for Singaporean students seeking information on study opportunities in Australia. This officer kept 15 or so outdated and 'dog-eared' institution calendars in a corner of the public section of the High Commission and spoke to inquirers through an iron grille.

The conclusion I reached at the time (and advocated) was that all parties should work to achieve a logical and collaborative approach which would see:

- AUSTRADE promoting our education generically overseas (at least in the start-up phase)
- immigration confining itself to its regulatory role
- the Departments of Education and Foreign Affairs, as appropriate, registering institutions to offer courses abroad, actively addressing the necessity of intergovernmental liaison, facilitating our entry into new markets and resolving market impediments such as accreditation and recognition of awards. Much of this important work was not carried out—to our cost. These are still vital responsibilities which the Department of Employment, Education, Training and Youth Affairs (DEETYA), or perhaps more correctly the AIEF Review, seems finally to have recognised
- IDP develop, on behalf of Australian institutions, a comprehensive, impartial and authoritative information and counselling service for students and families. This was developed by IDP in the period 1987–90. Our investment of many hundreds of thousands of dollars in setting up the *Education Information Counselling Service (EICS)*, the forerunner of IDP's Australian Education Centre network (later part transferred to the government), was obtained from surpluses generated from our other businesses, particularly the Projects business

Had such a rational structure been established in the early stages (1986–88), most of the excesses and disasters of the second phase may not have occurred. (You will note that we have edged towards this pattern of management over recent years.)

Within the above structure institutions would have been well supported in a generic sense while they *themselves would take centre stage* in the promotion, marketing and recruitment of foreign students.

Phase two (1988–90) might be characterised as the period of chaos and mayhem' and led directly from the 'let 'er rip' phase. There had been no proper registration of institutions in Australia (virtually anyone could sell 'education' overseas). This is one area where I believe government involvement, dare I say it regulation, is required. DEET and the minister failed to recognise this until it was too late and then belatedly attempted to put arrangements (including legislation) in place. Meanwhile foreign governments wondered what was going on, a number of institutions went bankrupt (some deservedly), and the huge refund of fees problem in China was building steadily.

Phase three is the 'takeover' phase (1991–96). Having developed an industry and infrastructure almost completely with other than direct government support (a $2.0 billion plus industry in 8 years!), the industry heard the minister and DEET say that it was now time to put the whole thing on a proper footing and *'grow market share'*.

One must acknowledge that government financial support was courted in 1989 and 1990 to help the industry strengthen its marketing overseas. We should have been aware that with money comes involvement. As Robert de Crespigny of Normandy Mining said recently:

> *It's a dilemma that every industry faces when it wants government support. How do you phrase your demands so you get assistance but don't get interference?*

And so by 1994 we had established for us the Australian International Education Foundation, a body very much under the control of the sponsoring Federal Department of Education.

Let me not dwell on the AIEF's modest achievements or the none-too-subtle muscle exercised by its bureaucratic minders except to say that it did have potential and some sectors of the industry supported it strongly. Many of them would have been in the VET sector and they looked forward to seeing Australian education presented overseas not only *with* the authority of government but *without* the alleged partisan baggage carried by the likes of IDP.

As I have said earlier, there is a role for government but we need to get that right. The Australian government *can* assist the export of education services. A reconstituted AIEF and a DEETYA with a change of perspective can be of great help. What we need is *complementarity* in the role of government—a carefully thought-through role which enhances the overall effort, strengthens our strengths and modifies our weaknesses, a role which addresses appropriately the things best left to government and which allows the industry to develop the capacity to help itself.

Australia's international education industry is powerful and successful primarily because its individual institutions, government and private, have done such a good job in the international arena, especially since 1985. *This is an industry that should be self-supporting and largely independent of government.* Our institutions with their

infrastructural supports such as IDP, OPCV, AusTraining and so on should aim to be self-managing and self-sustaining in the realm of international education. The industry should get clear, and quickly, what minimally it needs of government, such as registration of institutions, inter-governmental liaison for market facilitation, endorsement in international tendering, assistance with course accreditation overseas and supportive visa arrangements.

Australia's VET sector is not homogeneous and one must be careful therefore of generalisations when examining its various motivations and goals.

The private element of VET has a long history of international engagement and clearly remains committed to it. It seems to be a particularly vibrant grouping of institutions and overall very successful.

TAFE on the other hand seems ambivalent about an international role for itself, as the recent article by Louise McDermott in *Campus Review*[1] suggests. While TAFE must remain primarily obligated to Australian industry, the attraction of international markets as alternative sources of income is a powerful magnet—a $50 million plus a year magnet.

The words of caution uttered in that article about over-zealous activity in the international arena are timely. This is particularly so in 'projects', or areas other than private student recruitment. Technical assistance and HRD projects are often only won after intense competition and considerable expense. Profit margins can be cut to the bone and one must sometimes ask whether some consultancy bodies, particularly those which are government-backed, actually bid at or under cost. If true, this is not a healthy situation for the Australian education consultancy industry, which may be weakening itself in the process.

So TAFE systems have plenty of thinking to do. Several of them have apparent governmental and systemic constraints which may restrict more effective institutional marketing approaches overseas. How significant in their missions should international education be? Where in terms of geography and activity (projects/students) should effort be put? How can winning business be done most cost-effectively and most powerfully—through associated consultancy organisations, under the auspices of their State government, as individual colleges or in consortia, or with agents and bodies like IDP?

As I understand it, Victoria's TAFE has been very successful in the international arena with involvement in a range of project and training activities overseas and with some 35 per cent of all international students recruited by TAFE.

Victorian TAFE colleges are free to pursue international activities individually and several, at least, have been vigorous in their commitment to the task. They have shown what can be achieved despite a funny name (TAFE) and without the aura of a university title. The flexibility of Victorian TAFE institutions in marketing their services, coupled with an aggressive spirit, appear to be key ingredients in their success.

Somewhat different matters confront the private providers. How do they achieve a more commanding stature in their marketing endeavours overseas? Their more ready endorsement of the government's initiative in establishing, in 1994, the AIEF and the anticipated marketing advantage from coming within its rubric, not just government registration, partly answers this question. It highlights too a difficulty *for IDP Education Australia* which, while wishing to represent the panorama of Australian education overseas, has had to confront its university origins and ownership. IDP has had to face up to the *assertion* that it could not promote all education sectors abroad while being so closely identified with the universities. Nor, it has been claimed, could IDP effectively undertake impartial *generic* information provision while being actively engaged in student recruitment. We do not accept these claims.

Notwithstanding their understandable readiness to strengthen their credentials in foreign markets through association with government agencies, or indeed with IDP, private institutions have affirmed the lessons of the first 12 years: have a significant degree of institutional and business autonomy; do a lot of the marketing work yourself—do not leave it to others; carefully identify customer needs/niches and deliver a quality service which can claim a reasonable return and hence avoid profitless activity.

Finally, I want to record some observations provided by our overseas office managers. Incidentally, in seven of our major offices we have 11 counsellors who have studied in Australian VET institutions. I also include with this paper, as addenda, summaries of two background briefings provided by our Centre in Cambodia and Office in Hong Kong.

A common refrain from our overseas managers regarding VET/TAFE is that this sector needs more conceptualisation for overseas audiences and *better* marketing. In short, what do these terms from Australia mean in the Asian marketplace?

In Hong Kong, for instance, our office has listed a quite impressive array of initiatives it has undertaken for VET since 1995. But the manager there reports that VET must be more active. This call is repeated in Thailand, Indonesia and Malaysia. I am told that there is a strong correlation between types and level of marketing activity and student recruitment! It seems also that individual TAFE colleges running effective marketing campaigns are more successful than 'systemic' State TAFE marketing on behalf of institutions.

In relation to private VET institutions there is some local scepticism about their capabilities, at least in Hong Kong. This is a perception to be surmounted, if true.

Again, the Hong Kong authorities have established a strong VET sector, recognising its importance to the economy and industry. The same cannot be said for Malaysia, Thailand or Indonesia, but at least the latter does recognise the challenge.

These comments are not to infer that VET from Australia is inactive. Much work is being done internationally by the VET sector as a whole, including institution linkages, but the calls for more marketing activity, developing brand identity, clarification of equivalences, academic credit and articulation continue to be made.

In conclusion, IDP believes it could do more to work with VET institutions. At present we are talking over issues with the members of our Board from VET to strengthen and better target our contribution. I expect that we will improve our capability to deliver better and greater support in 1998.

Developing international activities with VET: Cambodia

The Australian Centre for Education (ACE), Cambodia has been offering accredited VET training through ACE since 1994. Courses have been in the areas of accounting, basic office skills and management.

Issues in the training have involved the use of English as opposed to Khmer, the introduction of alien concepts in a non-technical culture, the cost of a predominantly expatriate organisation providing training about foreign concepts in a foreign language, the advantages of accreditation and a pathway, the clash in local law/regulation/conventions and the Australian way. There is therefore the need to customise, the need to balance a high level of customisation with the need to retain the integrity of the original course/curriculum and associated competencies, the desire/need for foreign accreditation also to fit into a local framework of accreditation/national standards.

VET training is very much in need in less-developed countries such as Cambodia. Accreditation is a plus, but at not too high a cost. What is really needed are practical skills. Accreditation is a luxury sought more by the wealthy or international aid groups.

ACE has offered an equal amount of accredited and non-accredited VET. The non-accredited has more advantages—being more flexible and in particular able to be delivered more easily in the desired language. Accreditation through an Australian institution can come later when the market is more developed.

Sending large numbers of VET trainees to Australia from a country such as Cambodia, or even more developed countries, is not all that economical or sensible, since the training is so job-related. Train-the-trainer courses in Australia, introduction to competencies and how to write curriculum would be highly sought after—but it is a niche market.

VET needs a higher profile as a name in itself. VET and TAFE suffer from a low profile. The name polytechnic is more understood, and attracts attention more easily. The successful links between the VET sector and industry in Australia could be marketed more overseas, and successful examples from Australian VET overseas could be highlighted more. Interviews with Asian bosses who are happy with Australian VET training would go down much better than promotional material about what is done in Australian training institutions. A focus on how productivity has been raised in these successful examples is what would sell in Asia.

Highlighting the number and diversity of Australian VET institutions currently established overseas would be an eye-opener to many in Asia and, even if this generic

promotion mentioned specific examples of big institutions, it would not be to the detriment of smaller ones which are in the same business. The point is to show that Australians are rolling up their sleeves in Asia. Australia is a logical provider in the region and successful examples of how it is already being done will add to the confidence of Asian managers in using Australian expertise generally.

Train-the-trainer models always go down well in Asia, because even in more developed countries, the concept of technology/knowledge transfer is well appreciated. Handing over control is what is often desired, and should not be feared, because there is always more business to follow, if it is done well.

Using the alumni associations of mainly university graduates who are now back in Asia in managerial positions could be a useful entree into factory-level training, much of which is now under the control of some of these Australian graduates.

Present strengths are the close ties to industry and the generally good name of Australian education. Australian VET has been quite successful in Asia—especially where strategic alliances have been formed. Customer focus is an aspect of the better VET providers in Australia, and where the provider has been close to the client, the results have been very successful.

Weaknesses include:

- the lack of understanding of Australian articulation arrangements
- lack of awareness of concepts such as recognition of prior learning and competencies
- a perception of Australia as unproductive in some north-east Asian countries
- a lack of cultural sensitivity by some Australians in the VET sector

Translated courses could be very successful, but this puts some Australians out of their comfort zone. Understanding the local market sufficiently to ensure that VET provision fits into local accreditation patterns is also important.

There is plenty of interest in quality training at a good price. Many countries such as Thailand have neglected the VET sector and currently suffer from a gross shortage of skilled labour. The competency approach is more systematic than the traditional on-the-job training and if it can be shown that this more comprehensive approach is superior, it will be embraced. Some studies of productivity increases resulting from this training would be of advantage. Even if they are Australian-based studies, statistics of reduced worker injury or a happier, more contented workforce because of more thorough training would also be good.

The VET courses in Australia would be more attractive to Asian students if the articulation arrangements could be highlighted more simply.

Australian Centre for Education, Cambodia
IDP Education Australia Limited

Developing international activities with VET: Hong Kong

IDP Hong Kong refers to the 'VET' sector to convey more easily this type of education provided by Australia. Hong Kong, itself, has a well established, high quality of VET provision led by its Vocational Training Council. Over the past 15 years or so, with the Hong Kong economy booming, a great deal of funding has been available to develop and fulfil VET needs. The City Polytechnic and the HK Polytechnic (now both offer degree courses and so re-named 'university') have also catered very well for the community's needs.

There are also many government technical colleges, as well as private ones, and private companies that provide in-house, tailor-made courses. Local bodies naturally prefer to support local institutions, so they have traditionally not needed services/ short courses from overseas, except where they have not been available in Hong Kong.

A number of VET providers from Australia are now creating linkages with local bodies, to offer their courses and qualifications in Hong Kong, and indeed, the Hong Kong office of IDP is assisting in this process. Caution is stressed, however. The more courses that are offered in Hong Kong, the fewer students may come to Australia, until the China market becomes more accessible and then VET providers will be able to move more readily into that market.

The IDP office has discussed the possibility of having the Hong Kong Vocational Training Council students and Australian students exchanging courses, or taking courses in the two countries. One major obstacle is 'equivalences'. There are Australian academics in Hong Kong who could be involved in this work and IDP Hong Kong is well placed to co-ordinate and supervise it. Funding, however, is needed. If VET providers from Australia each were willing to contribute a proportion of the funds it would not be such a costly exercise.

The IDP office in Hong Kong undertakes visits to schools to talk to students about all Australian education sectors, including VET. The office also conducts a VET Interview Program every year in May and the response from institutions has grown over the past two years, e.g. 100 per cent growth in 1996 compared with 1995, a 53 per cent growth in 1997 compared with 1996. The growth in visitor numbers for the Interview Program was around 30 per cent in 1997 over that in 1996.

The IDP Hong Kong office also has given VET more exposure through its *Ming Pao* newspaper supplement which occurs four times a year and has a circulation of 450 000. The office will also produce soon a three-times-per-year bilingual newsletter for international schools in Hong Kong. Editorials in English and Chinese newspapers have also been prepared by the office. In addition to these initiatives, contacts with Hong Kong institutions for Australian VET providers also have been made.

What must VET do to market itself overseas? The Hong Kong office is adamant that Australian VET must be more active! The institutions which do best in Hong Kong are

those which advertise more, hold more interview sessions (can be done in IDP's office), and participate in more events. Although it may seem obvious, there is a strong correlation between these kinds of activities and the number of students recruited.

TAFE colleges which are represented systemically appear not to do as well as individual TAFE colleges in their marketing. A state TAFE is a neutral, administrative entity which is difficult to 'sell'. The Victorian model, where every TAFE college is responsible for marketing itself, works best in Hong Kong.

IDP Education Australia, Hong Kong

Endnote

1 *Campus Review*, 2-8 July 1997

Selling Australian expertise to Indonesia

Dr Susan Holland
Chair, Board of Directors, Austraining International Pty Ltd

International development opportunities and the key role of Austraining International in vocational education, the economic development and internationalisation of Australia is outlined. Background information about Austraining is given, and examples of project work in which Austraining is involved, including a case study of a current project in Indonesia. Finally, the long-term benefits which accrue to the vocational sector through involvement in international project work such as that outlined in the case study are indicated.

Introduction

I AM PLEASED to have an opportunity to speak to you about international development opportunities and in particular to outline the key role that Austraining International is playing in contributing to the economic development and internationalisation of Australia. My paper is organised into three sections: first, some background information about Austraining, second, some examples of the kind of project work in which Austraining is involved using a case study of a current project in Indonesia and third, I will sum up by indicating the long-term benefits which accrue to the vocational sector through involvement in international project work such as that outlined in the case study.

Austraining

Austraining International is one of Australia's premier international consultancy organisations specialising in the vocational education sector. Austraining is unique. It is an Australian training organisation that, in terms of ownership and operation, crosses State boundaries. It has been in operation for over five years, and evolved from a co-operative agreement between the South Australian Department of Technical and Further Education (SA TAFE), the New South Wales TAFE Commission (TAFE New South Wales) and SAGRIC International Pty Ltd, the South Australian government's international project management and technology transfer company. Austraining

International is the vehicle through which the overseas commercial project and consultant activities of New South Wales TAFE and SA TAFE are managed. Austraining International is owned by these three organisations, each of which provides complementary resources, expertise, systems and skills.

Austraining works on projects and activities located outside Australia, and focuses on developing technical and vocational training, polytechnic education, system development and skill formation. This ownership and management structure provides a balance of specialist technical staff, strong institutional support, and effective project management systems. It enabled Austraining to undertake international project work with both the public and private sector. This means that Austraining is aware of and is able to be responsive to the skill requirements, technological needs and management training for industry. Austraining also focusses on the challenges facing vocational education systems within developing economies.

Of relevance to international development and skill formation is the involvement of New South Wales and SA TAFE within the Austraining organisation. This provides direct access to around 50 per cent of Australia's vocational education system. This enables Austraining to apply proven project management systems, integrated with a large proportion of the TAFE capability in Australia. In addition, Austraining links with other Australian TAFE systems, as appropriate, for international projects. It also has a good working relationship with the Department of Employment, Education, Training and Youth Affairs (DEETYA) on international project work.

It is Austraining policy to source expertise from universities, institutions, companies and individual consultants from across Australia, based on the needs of the client and in the interests of quality. As an example, Austraining recently signed a Memorandum of Understanding with the National Centre for Vocational Education Research (NCVER) covering co-operation in international project work.

Austraining's head office is located in Adelaide, Australia. Another Australian office is located in Sydney and the company has a permanent regional presence in Asia through its subsidiary company, PT Austraining Nusantara located in Jakarta, Indonesia. Austraining International is registered with the Asian Development Bank and has working relationships and joint venture agreements with organisations in Asia, the UK and Germany. The operation of Austraining reflects its ownership and management structure, and provides support and access to the vast resources and expertise available through the Australian TAFE system through a single point of contact.

Austraining specialises in a number of key education and training and sector activities. These include:

- project design and review, especially in the senior secondary and post-secondary sector
- training needs analysis and training planning in public and private sector organisations
- establishment of industry-based HRD skill training systems

- ❖ fellowship training and management, especially customised training in Australia and Third World countries
- ❖ non-formal education and training
- ❖ curriculum development and training program evaluation
- ❖ linking of public and private sector training systems

Austraining is currently managing in excess of $20m of international work in six countries. Since 1991, the company has implemented over 40 projects and has worked in Thailand, Indonesia, China, Papua New Guinea (PNG), Nepal, the Pacific and North Africa. Typical project work carried out by Austraining incorporates on-site and institution-based training, as well as study tours and fellowship programs, often involving links with international agencies and training providers. This provides an integrated and comprehensive education and training service.

Austraining is a recognised Australian consultant organisation, representing a large proportion of the available vocational education and training expertise. It is currently managing a range of development assistance projects and fellowship programs, and providing consultancy services for the public and private sector. The company has an established reputation in a number of key education, training, consultancy and fellowship areas, including:

- ❖ conducting training needs analysis for organisations in Indonesia, North Africa, Thailand and PNG, including planning for facilities, training programs and HRD
- ❖ linking with Australian universities, TAFE institutes and private sector training organisations for short- and long-term projects requiring quality Australian consultancy services and training programs
- ❖ conducting specialised fellowship training programs across Australia for AusAID, the Asian Development Bank and the World Bank. These are customised to meet industry or agency needs, and include specialist technical management and train-the-trainer programs, combined with work placement
- ❖ assisting in the development and adaptation of curriculum documentation and assessment techniques for training institutions, and in the establishment of management, skill upgrading and professional development programs for teaching staff

Case study: Indonesian Australia specialised training project

To provide some insight into the scale and scope of Austraining's project work and consultancy capability I have chosen to detail a current project being managed and implemented by Austraining for the Indonesian government.

Through the Indonesian Australia Specialised Training Project (IASTP) the Australian government has allocated A$17.5 million through AusAID over three years to provide a program of short-term specialised training courses in Australia and Indonesia. These 'tailor-made' courses develop professional or technical experience through attachments to public and private sector agencies.

The co-operation between Indonesia and Australia through this project was preceded by the High Level Consultation Meeting in Canberra on 6–7 September 1994, which was followed by the signing of the Memorandum of Understanding at the beginning of 1996. This project is important because it covers practical short-term education programs and its training fields and programs are appropriate for the needs of Indonesia.

The skills transfer for requirements of the *in-Australia* training generally involve a three-month starting term and are supported by three months of pre-departure English language training in Jakarta or Bali.

In-Indonesia training consists of one-week and two-weeks courses to be cost-effective in involving key public and private sector groups and in strengthening linkages with counterpart agencies and institutions in Australia. Accordingly there is an emphasis on the multiplier effects achievable through the 'train-the-trainer' approach.

Selection criteria for the involvement of staff from the Indonesian agencies in the training programs reflect technical capacity, motivation and levels of English proficiency to benefit from the training. Candidates for overseas training are mid-career professionals within the age range 30 to 50 years and from positions where it is expected they will be able to utilise their skills after the program. The nomination and selection process is biannual and involves English language testing. Candidates for in-Indonesia activities are selected by their respective agencies in association with the project managers.

The costs of pre-departure English language training, airfares, accommodation stipends and tuition fees in Australia are met by the Australian government through Austraining funding. Costs of activities in Indonesia are shared between the Australian and Indonesian governments.

Specific training programs such as 'Intellectual Property Rights' strengthen the economic and trade co-operation between the two countries. 'Small Business Development' was chosen because the future role of small business needs to be strengthened in Indonesia to assist in meeting the challenges of globalisation and free trade. The role played in generating economic wealth through small business across a range of vocational fields by women was considered of key strategic importance, so a program was developed to specifically address the issue.

Table 1 outlines the duration and emphasis for IASTP courses.

In Indonesia the Cabinet Secretariat is the nominated Project Co-ordinator with the following participating ministries:

- Ministry of Industry
- Ministry of Manpower
- Ministry of Justice
- Ministry of Mines & Energy
- Ministry of Health
- Office for the State Minister for the Role of Women

There are other government agencies, state-owned enterprises, non-government organisations and private sector organisations for the project.

Table 1: Duration and emphasis for IASTP courses

In-Australia courses	
(3 month duration—18 participants per course)	
COMPONENT 1: Management of Change	
Public Sector Development Policies and Strategies	3 courses
Intellectual Property Rights	3 courses
Commercial Law	2 courses
Small and Medium Scale Business	3 courses
Hospital Administration	2 courses
COMPONENT 2: Industrial Technology	
Production Enhancement	4 courses
Energy Planning & Management	3 courses
Power Station Management	3 courses
Industrial Pollution Control	3 courses
Management of Hazardous Waste	2 courses
COMPONENT 3: Health and Safety	
Workplace Safety	2 courses
Detection and Monitoring of HIV/AIDS	3 courses
Information & Counselling of HIV/AIDS	3 courses
Supply of Quality, Safe Pharmaceutical	3 courses
Midwife Training of Trainers	2 courses
In-Indonesia Seminars & Courses (40 participants per activity)	
Intellectual Property Rights	9 seminars
Confidence for Business Women	15 courses
Hospital Management	9 seminars
Training for Midwife Trainers	10 courses

Long-term benefits

Informal discussion with fellows at the closing ceremonies as well as formal feedback sessions indicate that they value the program primarily because the knowledge and skills gained in their respective courses will assist them when they return to Indonesia. There are several reasons why this is the case.

- The course topics have been carefully chosen by the co-ordinating agencies because they are relevant to current issues in Indonesia, and to areas of recognised expertise in Australia.
- Industry visits and work placements are designed to enable fellows to gain first hand experiences of the techniques and practice used in Australia, and to provide the opportunity to 'learn by doing'.
- Action plans and mini-projects are used to create a bridge between the activities in Australia, and the workplace in Indonesia.
- Finally, and perhaps most importantly, fellows see the relevance of the courses because they themselves are interested, highly motivated, and keen to apply the information when they return to Indonesia.

Some specific examples illustrate these general observations:

- Alumni of Midwife Training of Trainers courses participated as presenters of the in-country Midwife Tutorial program with support from Northern Territory University.
- Alumni of Hospital Administration and Pharmaceutical Supply courses have also been involved in presenting an in-country training program funded by the Department of Health.
- An Indonesian government agency invited a presenter from the Centre for International Education and Training in South Australia to participate in a Small Business course in Jakarta.
- A major public hospital in Padang, Indonesia has signed a Memorandum of Understanding with Queen Elizabeth Hospital for staff exchanges on quality assurance.
- The University of South Australia conducted a tele-conference with alumni of the Hospital Administration course three months after their return to Indonesia.

On a broader scale the project funding partners in Australia and Indonesia, AusAID and SETKAB, also consider that there will be longer-term benefits:

- Many fellows will have become close friends with their course presenters and hosts in Australia, and will individually maintain professional and social contact.
- Government departments, agencies and employer bodies in each country will utilise the contacts made through the course to develop and maintain institutional and commercial linkages.
- The emphasis on Training of Trainers during in-Australia courses aims to obtain the maximum benefit from the training by assisting the alumni to share the information and experience on their return to Indonesia.

As with all large-scale projects, the longer-term benefits are more difficult to measure and require commitment and support from both the fellows and their

supervisor or employers. Commitment is also required from the Australian side to maintain contact and to continue to explore avenues for on-going co-operation and mutual benefit.

Perhaps this is an important point with which to conclude. Participation by Australia consultancy and project management agencies such as Austraining International in international development work is not a one-way street. Benefits accrue to the teaching and project staff as well as to our business and service sector. While the countries in which we work are by definition at a different stage in respect of economic development, many of the challenges are common and so there will always be a two-way flow of information and expertise. Austraining International is proud to be part of this technology transfer process.

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Coercion and user choice: Whose market?

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The Australian vocational education and training (VET) system is not alone in undergoing transformational change. In many respects the change process has been even more vigorous within the United Kingdom. This paper examines the development of the VET training market from two perspectives, *organisational stability* and *product longevity*, and reflects upon the experiences of two countries, finally proposing one set of critical questions for future development.

The paper takes the view that we have in fact a *quasi training market* and that development based upon preconceived models or the use of coercive discourse to drive system change would be inappropriate, and is likely to create dysfunctional outcomes. The paper proposes that the new system exists in a complex environment which requires the inclusion of multiple discourses to produce a more flexible training text to better serve both industry and specifically individuals. This entails supporting both *provider development* and also the *take away shelf life* of the learning experience offered, to enhance not only the relevance of what is on offer to customers, but the diversity and eventual profit. In contrast, where coercive or manipulative models have been based upon a single text, the 'payment' has often been made by staff who can no longer identify the rationale behind the organisational changes, while the 'profit' in terms of customer learning has often been limited by the acquisition of skills with a very short shelf life.

The paper explores the macro implications of introducing more radical outcome-based incentives and industry-dominated financial controls to manipulate market development in matching needs and provision and associated *dilemmas of the staff* caught within such developments. The text then explores the need to develop the system outcomes at the micro level with less attention to content outcomes and with more concern for the provision of *sustainable learning processes*, which provide customers with learning that they can continue to use and develop in the future. While coercive changes in quasi training markets appear to attract more mechanistic training methodologies, this paper suggests that a more constructivist approach both provides a better reflection of the postmodern organisational environment and is more likely to produce learners with sustainable learning skills required for that environment.

The suggestion is that systems driven by outcome payments may coerce a more rational training menu but that the eventual profit from the system is determined in the long term by the *relevance*, *quality of delivery* and *longevity* of those menu items.

Conceiving the market: Pre-ordained genes or the opportunity for genetic enhancement?

THIS PAPER IS based upon concerns about what the real outcomes may be when developmental relationships are viewed as markets, and when manipulative or coercive change is applied to those relationships. While we may begin with the aims of giving user choice to learners of job-targeted training, there needs to be restraint and support to ensure that we do not end up with a system that restricts their learning abilities both during the training experience and in their workplace. *Coercive discourse* from government may in fact restrict user choice in this sense by pressuring the texts of training organisations through an often dislocating realignment that changes the focus to learning content at the exclusion of learning processes. Is something a market because we call it such and pretend that it is?

Last week I wanted to get a new video recorder. I went into Brashs and gave them my money and they gave me the video recorder. At no time did they inquire as to my capability to use the machine, neither did they test my competence (limited even with on-screen programming and G-code scanning). I was never apprehensive that I might be placed in a position where, having given my money to them, they would refuse to give me the machine because of my ineptitude and then, quite legally, they would retain my money. What a strange market that would be, not a market at all in fact, and that is what we have, a *quasi market of training*, as Whitty (1996) describes it.

We should therefore be careful about adopting all sorts of expectations and aspirations about a training market. As soon as we use the terminology, we consumers, and often players, bring forward concepts based upon our perceptions of less quasi markets and begin to construct a model that in many ways is inappropriate for the situation. Harvey (1989) urges us to first recognise that we live in a very different world where increasingly old models are insufficient to cope with the complex and multiple requirements of the postmodern organisation. Then in response he encourages us *to embrace the fragmentary, ephemeral and discontinuity that surrounds us* and build new models that reflect the multiple discourses of this environment. There is a lack of definition in this quasi market between buyers and sellers unless we decide to make it so.

The concerns of this paper centre on two significant misconceptions about how such a quasi market will respond to coercive development, and how the resultant structure may develop dysfunctionally. The two issues the paper raises concern first the *investment necessary in terms of infrastructure* to develop and adapt quality products and, second, the marketing of a *product that will have longer shelf life*. That is why we cannot just coercively chop and change training suppliers without affecting product quality and how manipulating this virtual market may surface cheaper, easy to take products, at the expense of lasting growing products.

The fear expressed within this paper is that a coercive market built with extreme manipulative interference, and we shall view the United Kingdom as a good and relevant example of such, gains outcome profits, in terms of a more effective match

between relevant skill training and industrial needs, *at the expense* of receiving short shelf life skills from often disenchanted and poorly resourced trainers. This paper is written to indicate the dysfunctionality of commencing a discourse based upon the misconception that the development of learners is a pure market, and attempting to construct a model based upon an inappropriate metaphor and erroneous assumptions.

The suggestion is that the Australian model has the opportunity to learn from the mistakes of others and create a virtual training market through acknowledging diverse discourse and producing a flexible text that both supports training organisation development and thinking learners, as well as targeted industrial skilling. When it is not easy to define customers, then perhaps it is more appropriate to build a system by listening to the real discourse of partners in this development rather than *use past and inappropriate models*. If the Brashs' analogy is inappropriate, perhaps a more appropriate metaphor would be the maternity ward, as we are giving birth to new learners. There is a delicate balance here between clinical operational needs and retaining the unique experience for all parents. Similarly the virtual training market needs to nourish both the organisations and the learning experiences to achieve the best outcome for industry. Learners who have been enriched by their experience cannot only apply their learning critically in the workplace but can also continue learning and adapting that workplace environment.

This paper will move to explore why we should construct a new model that matches all of our perceptions of the current training relationships rather than borrow from past experiences. It will then investigate the dysfunctionality of coercion upon the quality of provider infrastructure and then emphasise the need for a system to support learning skill development. Finally the paper will attempt to indicate the critical questions that should be asked in constructing this new model.

When is a market not a market? Recognising that our creation may look like others but that it is our rearing that will make it unique...

So do we really have a market, or should we be constructing a model that reflects as Bergquist (1993, p.xiv) suggests,

> ... *the seemingly complex and chaotic nature of the postmodern organisation.*

Most players recognise that relationships between government, states, providers, trainees and industry are complex. Do they form a market? For a classic market to exist, Pride and Ferrell (1993, p.85) indicate that certain conditions should exist:

> ... *the need or desire for a product and the ability to purchase it ... to be able to use that power and have the authority to buy.*

It would appear that our market may fall short of this definition. So let us examine what we do have and begin to construct a more appropriate metaphor for such a quasi market that may guide us in the development. Lindblom (1977, p.17) in fact cautions us about making assumptions about what is a market.

A market is like a tool designed for some jobs and not others—but then they could also use it when they should not, like an amateur craftsperson who carelessly uses a chisel as a screwdriver.

Pretending that we have something we do not or not recognising what we actually have, will lead to dysfunctional outcomes when we attempt to manipulate the interactions as we would wish them to be, rather than how they are. Carnoy (1995, p. 29) continues the tool metaphor and sees the market as,

an instrument of, rather than alternative to, democratic decision making.

The recognition here is that, far from the *freedom of the market*, what we have is more like, as Levacic (1995, p. 67) defines it,

... the separation of the purchaser from the provider and an element of user choice between providers.

This is a *quasi market of education and training* as Whitty (1966) describes it, based upon the realisation that it is the most mixed part of a mixed economy and provides a difficult-to-define service. Berry (1988, p. 72), to add to our plight, suggests that service markets are intrinsically difficult to define, due to the nature of their products which are:

More intangible than tangible, produced and consumed simultaneously.

So we have a quasi market of training, providing a service to a variety of customers in an increasingly complex and fragmentary organisational environment. The Australian National Training Authority (ANTA) Implementation Plan of 1994 noted this *complexity* when proposing the development of a *user choice* model. But a new situation requires a new model. It is increasingly difficult to pinpoint the user in an environment where the traditional divisions between customers, clients, collaborators and competition are blurred and trainees become value-added resellers. Whitty (1996) suggested that the creation of educational and training markets is often more about manipulation and creating control over what was taught and how much was taught, rather than the development of user choice. Who is constructing the discourse of this quasi market? Moran (1995) talked of the *competitive allocation of public funding*—and a *responsive training system for increasing numbers of participants.* Can such a system be constructed through encouragement of multiple discourse and the acceptance of diversity? The Allen Consulting Group (1994) recognised that the market was already composed of direct-funded, funding-market and commercially-funded sectors. Perhaps there may be value in such diversity? Anderson (1996) discusses Geiger's typology of private sectors in education and the power of governments to hinder or encourage the growth of parallel private sectors. Might there be arguments for developing the current diverse provision according to different scripts?

What are the implications for following a single national script? Fisher (1993) showed concern that treating a quasi market as a production market would lead to three central disadvantages. The first was that competition may focus a training provider on short-term outcomes and smother innovative investment. The second was that diversity would be stifled, as in a competence environment *national consistency is an anathema to market logic.* Finally, providers would suffer from conflict in their

response to both industry and learners, with the cost being paid in diminished good practice.

In such an environment there is the concern that the *payment* may be made by staff who can no longer identify the rationale behind the organisational changes, while the *profit* in terms of customer learning may be limited by the acquisition of skills with a very short shelf life. Competitive tendering may move providers towards industrial or client wants, but how can we ensure that they are also needs? Developing this quasi training market is about two things, first, changing the product range to match industrial needs and then developing the product quality to what is required in the future. A radical manipulative approach to these issues, using a traditional market approach to ensure quick profits, may end up in serious payment by staff and customers in the long run. Recognising market segmentation and focussing on learner needs by enabling diverse discourse in building the system may ensure both objectives are met with a more appropriate model. This quasi market is fragmented already. Perhaps the greatest asset is in that fragmentation. This is, however, not easily learned for those of the modern era as Harvey (1989, p. 49) has suggested.

> *The fragmentation, the pluralism and the authenticity of other voices and other worlds poses the acute problem of communication and the means of exercising power through command thereof.*

Fisher (1993, p. 27) urged us to recognise that we have only a partial and a regulated market and that therefore heavy-handed control did not appear an applicable strategy.

> *There appears to be realisation that such a command economy approach to training priorities is in itself inconsistent with the usual market expectations.*

In a situation where we have a quasi market in a complex organisational environment we should be prudent in applying manipulation that may have been modelled in previous markets, and mindful that the results of such action may well be dysfunctional. The model that is created needs to be informed by diverse discourse and produce a flexible text for training. No other will meet the fragmentary needs of industry and learners, and certainly not past models.

Coercion and the story of forcing a model: Throwing the babes onto the trident of coercive change

What are the implications of introducing more radical outcome-based incentives and industry-dominated financial controls to manipulate market development in matching needs and provision? The transformation and vigorous change process activated in the United Kingdom market since 1990 serves as an interesting illustration. This section will examine the *reality for providers* in such an environment and explore the implications for industry and clients. The previous grand narrative of Australian colonialism included importation of systems from the United Kingdom. There is every reason why importing

such a coercive model of change is inappropriate and why using diverse voices within the nation would be more appropriate.

The transformation of the United Kingdom training system was based upon a number of linked initiatives to reorientate a *provider-led system* (Jessop 1992). Skill deficits were well documented and the Layland (1992) reflects that,

> *Britain had a Lumpenproletariat unlike that of any other advanced nation.*

The focus of the changes was the movement of virtually all training funding to consortia of business leaders who bid to gain the contracts for running training, in much the same modes as state training authorities, in each locality. Typically each Training and Enterprise Council (TEC)—not elected!—would serve a population centre of 2 to 4 million and take responsibility for needs analysis and contracting training with a budget of $60m. Provider-led moved to employer-led, assessed, funded and controlled. What was the effect of such coercive change in the training market? The effects for providers were like being speared by a three-pronged trident.

The first prong for many was the pain of finding that *all funding* would come from annual contracts competitive in renewal, that the competitive process would include quality monitoring and that clients would be given the *virtual vouchers* as Sexton (1991) describes them. This created more than competition in the market, such as we can already see emerging locally (Honeywood 1997, p. 9).

> *Blind Freddie would be able to ascertain that TAFE in NSW is very inefficient compared with Victoria.*

The second prong was the imposition of nationally devised competences, where they existed, as the *sole outcome* that would be accepted for training contracts. With these national vocational qualifications (NVQs) came the necessity of introducing a complex assessment network to achieve external quality monitoring of the final outcome of the training. Many provider staff were unable to move to such a world.

Finally, the third and cruellest prong of the trident was that which impaled training organisations with *simultaneous funding cuts and restrictions*. First funding was cut significantly. Then funding was changed, not to places available for training but on the actually hourly time-clocked attendance of trainees. Change in payment arrangements meant that funding which had been paid in advance was changed to be six weeks' retrospective. Last of all, 20 per cent of all payment, and often more, was held back to be paid on qualification accreditation only.

Economic reality had a tendency to dominate training creativity. As Ford (1993) has said in a review of the early years of TECs and the market changes,

> *... a plethora of new initiatives, despite the marketing hype, have failed to live up to their expectations.*

De Sousa (1990) expressed concern on the basis of the policy initiative at the start indicating that,

> *In TECs we are entrusting training responsibility to people who have a track record of disaster. TECs are controlled by private enterprise which for the past 50 years has allowed British workers to become deskilled ...*

Henig (1994, p. 169) saw the failure of using such coercion in the market as a conflict between the attempt to promote user choice and the introduction of financial restraints at the same time.

> *... the difficult problem of protecting the condition that makes choice work from the erosion due to fiscal and political pressures.*

Ford (1993) suggests that what was really needed was a new debate based upon *policy rationale* rather than funding and structure change, suggesting that,

> *The impact of new initiatives is governed largely by the size of resources offered.*

The suggestion here is that if the government were not making *the payment* it was the personnel with training organisations who were making the payment in terms of rapid structural dislocation. What was the profit from such an adventure? Smith and Tizard (1995) report that in the United Kingdom, while the quantity of training is nominally on the increase, real learning skill development is being restricted within the competence approach by prescriptive goals, limited interaction and restricted learner responsibility. For training organisations, crafting their product is an organic process. The development of trainers and systems responsive to learner needs is damaged by annual contracts and funding reductions which break and rejoin organisation components.

Coercive manipulation of the market for flexibility can be dysfunctional to training organisations. Time allocated to product marketing may detract from product and professional development. Bartlett and Le Grand (1993) detail in their study how the manipulation of education and training markets may encourage a competitive provider to go *cream skimming*, that is, to go for those trainees who will provide the fastest turnaround of capital and the greatest profit. Who *pays* here? The disadvantaged and those on the periphery of the market pay. Merriam (1996) has made a substantive argument that we are often wasting our time in focussing upon the more efficient systems of learning and that we would gain far greater returns on investment by looking at who our current discourse includes and excludes from training. Coercive change in a training market is unlikely to promote equity.

A quasi market of training needs to be diverse in focus and be informed by many voices. In contrast, a coercive and manipulative market is liable to focus providers on easy targets and short-term learning, for the heart of any system is at the point of measurement. Is this how we should interpret *user choice;* as encouraging flexible response to learners' needs? Whitty (1996, p. 33) takes this view and suggests that,

> *... in some sense then, the current interest in devolution and choice may be indicative of tendencies of global proportions perhaps associated with post Fordism or Postmodernity.*

Supplying such opportunities requires providers with a developed infrastructure and that is a critical issue for the development of a quasi training market and one that may be lost with a more coercive approach to change. There is a further implication when the structure of providers is subjected to significant stress and that is in the quality of the product finally delivered. The next section will move from the effects of coercive change upon providers' structure and look at the resulting implications for the training product.

Outcomes fit for a new age: Why we must ensure that our children have something better than we were offered

Training has increasingly been focussed upon outcomes with the introduction of criterion referencing and the competence approach. These outcomes have correspondingly during the same period been centralised and systematised to meet industrial needs. While in theory the competence-based approach provides training providers and learners with a more open platform from which to construct their training methods, there is evidence that in many cases this does not occur (Barratt-Pugh 1997). In fact training continues to follow old models towards the now pre-set training objectives. There is a focus on content, and competition from a quasi training market would most likely manipulate an even greater focus on the speedy acquisition of content as in the United Kingdom model. What is the disadvantage here? Learners are learning more efficiently. Perhaps we should examine *what* they are learning and what they will *need* in the future before passing judgement.

Let us tackle the latter issue first; what they will need. It is indisputable that learners will be thrust into an increasingly complex organisational environment. Training based upon fixed competences is limited in preparing such learners for this future. They will increasingly need skills that will help them *learn in the workplace* and from the workplace. Bergquist (1993, p. 160) sees commitment to such continuous learning processes within organisations as critical.

> *Skills of reflection and inquiry are particularly important in a world filled with unpredictability and change.*

That is, they will need to develop their metacognitive and cognitive strategies to build their learning skills. This brings us to the second issue: what are they learning? When the focus of training is pressed towards skill acquisition, a focus on the training and learning process is restricted. Learners have fewer opportunities to construct their own learning because it does not fit set or time-efficient patterns, and they have less time to reflect upon the learning process and begin to build their repertoire of learning skills. A substantial argument can be made that it is these skills that will be the most relevant to their employers in the future, *their ability to learn again.*

Lifelong learning or continual learning is often measured currently by the capacity to keep acquiring qualifications. The Department of Trade and Industry (DTI) in the United Kingdom (1995–96) define it through the number of NVQs that have been obtained, again using an outcome measure on a developmental process. Continual learning skills are far more about the development of each individual's ability to develop and use their learning skills. Eraut (1988) suggests that one of the major weaknesses in the development of learning design as educational technology has been,

> *a failure to develop learners' awareness and control of their own learning, what we now call metacognition.*

A pressured system may focus on content acquisition at the expense of such *sustainable learning processes*. Skills with a short shelf life will be taken away at the *expense* of acquiring learning skills through reflection that would provide a building base for further learning in the workplace. The lack of investment in the training process will therefore produce a short-term profit in terms of the learning of yesterday's skill efficiently, at the expense of a long-term gain in terms of learning abilities for both the individual and the employer.

In addition, learning is not just about the acquisition of skills, but about their application. Learners need to be part of a learning process that enables them not just to acquire skills but to become critically aware of where to apply them and how they will be valued. Luke and Carrington (1997) have suggested that learning is of no value until it is applied. Using the model of Pierre Bourdieu (1977) they describe how skill acquisition may add to the individual's 'habitas' or personal qualities but it does not become *capital* for that learner until it is applied in a field that values that skill. Developing learning skills, and being skilled at where to apply your learning, is learning that does not come from simple content acquisition, but from being involved in the construction of learning.

If such a case is accepted, quasi training markets concerned with producing such quality from competence based systems should recognise that investing in developing training methodology may provide dividends in terms of more critical and able learners who can continue learning and apply such skills in the future.

What should we be doing? Preparing for rebirth

So where should we go? This paper suggests two main guidelines. The first is to beware of using a single discourse, a coercive text to manipulate the system as it may damage the infrastructure you seek to use. It is far better to include diversity and seek to support providers. Is the system being driven by short-term political expediency or through good research? Second, be progressive in recognising the pivotal relevance of learning skills in the organisational environment and promote learning technologies that will maximise their development.

To what extent does current training structure and methodology match such expectation? Burns (1996), discussing artistry in training, suggests the role of the trainer is to *tell them what they have learned* and *to control the meaning of everything the students sees, hears and feels*. This paper proposes a move towards a training methodology where the individual perspective is valued and where individuals are encouraged to construct their own knowledge—where they say what they have learned in reflection and where they control meaning. The most important aspect of their short learning experience is to equip them to control the vast opportunities for learning in the workplace afterwards. As Cunningham (1991, p. 42) suggests, the idea of learners as passive data processors is outdated, for, despite the grand narratives of linear learning situations, learners inevitably take away different messages:

> *The mind does not process information, it constructs it.*

Jonassen (1989, p. 30) indicates that each learner has a different learning outcome because learners carry out this learning construction from very different starting positions and therefore perceive learning experiences (or texts) very differently,

> *Learners activate existing knowledge for the purpose of interpreting newly presented knowledge which, when decoded and interpreted, is* added to existing knowledge.

Basing learning upon such assumptions encourages not just acknowledgement of what happens in the learning situation anyway, but has the dividend of encouraging the development of learning skills. The eventual profit will be in a training provision that is based upon learning providers who can provide learners with similar skills, sustainable organisations providing self-sustaining skills.

We must be careful not to replace one discourse for training with another, one grand plan with another. It is diversity that will enable the real target of individual growth to flourish. The quasi training market must be *comfortable with paradox*, rather than rely on a single grand text. In this case, what are the relevant paradoxes we must use as a guide? They are the paradox that will bring structural support, *that fragmented is unified*, and the paradox that will produce high value outcomes, *that the ability to learn is skill.*

This paper has attempted to map the dysfunctionality associated with following a singular and manipulative discourse based upon an inappropriate model and focussed on provision realignment with funding reductions. The alternative vision rests upon the development of providers who can build skills in each individual to not just learn, but learn again. The acceptance and inclusion of multiple discourses, specifically those that include learners, will assist in building and supporting such a system, while promoting a more constructivist methodology that can assist in building the reflective and learning skills that will be required in the future. Karpin expressed concern about our large numbers of untrained front-line managers and their ability to,

> *... be at ease with uncertainty and ambiguity and to have the conceptual frameworks and experience to deal confidently in situations that are unfamiliar.*

It is today's vocational trainees who will increasingly take up those managerial roles, and they need a system that will provide the right skills though a better match with their working reality and the needs of our organisational environment.

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Mapping the training market: Which model works?

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A section of the research report *Mapping the training market*, which deals with models of a training market and their application is considered. How market models can include the role of individual clients in vocational education and training, so that the models are of most use to planners, researchers and deliverers of vocational education and training, is explored. The future of the training market is at best uncertain and at worst constrained by models of, essentially, funding allocation. The attraction of markets is their diversity and dynamism, but to achieve this in training a focus on the role of individuals is needed. Choice, greatest efficiency and effectiveness of outcomes all depend on the best link between training provision, learner/employee and industry or enterprise. It is a multi-tiered market, that needs an injection of market behaviours.

Introduction

'MAPPING THE TRAINING MARKET' is a research report undertaken with the Australian National Training Authority (ANTA) national project funding, Western Australian Department of Training project design and management and significant contributions from everyone in the project team including representatives from every State and Territory in Australia.

As overall project manager I am grateful to the Steering Committee members, Fran Colley, Department for Employment, Training and Further Education, South Australia, Robin Shreeve, New South Wales Technical and Further Education Commission, Dr Peter Smith, Karratha College, Fran Thorne, then at Office of Training and Further Education, Victoria, and also to Linda Barker, the principal project officer, and Dr Margaret Crowley, Director Strategic Planning and Development, at the Western Australian Department of Training.

The project outcomes offer a new perspective on the training market and I hope this session of the National Centre for Vocational Education Research (NCVER) conference will provide an opportunity to debate and discuss the training market, its unique characteristics and its possible future directions. I will be speaking to one section of the

project report, the models of a training market and the application of these models. The intention is to explore how market models can include the role of individual clients in vocational education and training so that the models are of most use to planners, researchers and deliverers of vocational education and training.

Background to the research

This research was planned to fill a gap in the discussions of the training market. The concept *training market*, as I saw it being used, bore only a small resemblance to more commonly understood market activity in which a product is developed in response to customer demand, marketed, wholesaled, retailed and purchased, with no real confusion about who purchases what from whom. This clarity has not been there for the training market concept.

The project 'Mapping the training market' took four approaches to understanding the training market and developed each concurrently. They were:

- an analysis of the different models of the training market in operation
- developing a rationale and logic for a marketing oriented approach
- examining how market segmentation applies to the training market and providing examples of different market segmentation approaches, including our most common segmentation tool—participation statistics
- a summary of all States' positions in their development of a marketing approach

It appears that the language of a training market appeared in the late 1980s with the expanding definition of vocational education and training (VET). VET was defined as including all post-compulsory, non-university providers of training that leads to employment. With reforms to the VET sector, VET became much more than Technical and Further Education (TAFE) and relevant government agencies were charged with the responsibility for assuring quality and portability of qualifications across Australia, including those gained in the privately-funded sector. This expanded definition brought the private sector under the government policy umbrella and made all parties in the VET sector much more aware of the potential for expansion of market activity.

The release of the Competition Policy raised many questions around the conduct of government businesses, including what should be defined as government business. It set new ground rules for the management of government agencies with a view to achieving maximum competitive activity in areas which previously were considered purely the province of government activity. Education was excluded from the need for competitive activity but training was not; training was included in the goal of expanding competition and the market.

Vocational education and training encompassing both education and training was left to try to define itself as a training market which maintained all the previous government policy commitments of quality, national recognition of skills and portability of qualifications. In addition the government's equity and access goals were

to be maintained. The maintenance of government policy objectives prohibited full open market activity and provided great challenges to achieving an effective and operational training market.

The inclusion of public and privately-funded training organisations within the province of recognition and accreditation arrangements and standardised training outcomes, based on competencies, was a preliminary step towards establishing the *training market*. The Competition Policy was the major impetus for a training market and led to a period of introspection by government sectors aiming to define how government funding could generate market conditions. During this period the training market concept became common parlance, yet it was understood in a variety of ways.

The aim of achieving a training market was pursued in the belief that competition leads to reduced costs, increased efficiency, diversity, quality and improved customer focus. The first self-conscious forays into training market activity were based on Hilmer's analysis of the need to separate service provision from policy and funding, only the latter two being legitimate core business of governments. This framework facilitates market activity through making government funds available to private providers via competitive tendering. The achievements of States and Territories in establishing competitive tendering as a basis of the training market was the topic of a separate national project managed by WA, titled *Developing the training market*.

First models of the training market

The *training market* at this point was defined by the government-funded VET sector in accordance with public-sector reforms and was mainly concerned with the allocation of public funds. It was the model of funder (which is central government), purchaser (which is the State Training Agency operating in response to industry-determined priorities) and provider (which is either a public or private sector training institution, including schools and enterprises, which bids for funds to run courses). The State Training Agency purchases training outcomes from providers in the best strategic interests of the State.

This first representation of training market activity showed how government-focussed and un-marketlike (if I can coin a phrase) is the funder purchaser and provider model. The addition of client to the model adds to the description of the training market, and funder, purchaser, provider, client is the model used by the Allen Consulting Group, in *Establishing an effective training market*. In this model, industry is clearly defined as the client. Industry expends $4.4 billion on training per year purchasing from public and private providers, while government purchases $2.7 billion training per year.[1] Nominating industry as the primary client meets government policy objectives of achieving an industry-driven system, although at the point at which the State Training Agency purchases training on behalf of industry, it may be hard to recognise specific industry drivers.

This model is a useful representation of the move from a government-funded public provider system to a more competitive vocational education and training sector, where private providers can compete for public funds, and government policy can drive the direction of public expenditure through funding priorities. This model was the first description of the competitive training market based on an economic perspective of the training market. More recently the Australian National Training Authority produced *Developing the training market of the future* (November 1996), which provides a very clear account of the supply side, demand side and the products of vocational education and training. It details a range of training market models, from the purely public to the purely private. These models are constructed around who purchases training from which agencies, using which funds. It is a full elaboration of the economic model of the market and a clear demonstration of the realisation of the funder, purchaser, provider model achieving a level of competitive activity.

Value-added models

It is worth questioning whether models should do more than describe and what other purposes they may serve. The first models are snapshots of the training market and the subsequent ANTA supply-and-demand models provide a single, government-focussed perspective of the training market. I suggest there are several missing elements and therefore these models have limited value for planners or others wishing to manage outcomes of the training market.

The missing elements include the:

- market process
- role of students
- description of outcomes or outputs that are purchased
- product and consumer of the product

This set of missing elements could be labelled the who, what, how, and why of a training market. More detailed issues such as market share and open competition between public providers are just too hard at this point.

The missing element of greatest significance is the who, the individual client or student. In general, individual clients are recorded as student contact hours or as enrolment numbers, yet they represent the critical component of the skills acquisition process. Our level of knowledge about what and why they make choices is limited to the type of statistics available from TAFE and other VET providers through the Australian Vocational Education and Training Management Information Statistical Standard (AVETMISS), for example whether they are: fee paying; apprenticeship or traineeship; part-time or full-time; male or female; of different ethnic backgrounds; from different geographic locations; and so on, but this in itself does not clarify their role in the market.[2]

One aim of this research project was to produce a model of the training market which demonstrates the flow of a training market and the influence of individual clients in the market, as well as demonstrate a useful marketing approach.

Addressing the what and the how

By building on the economic model and differentiating the outputs and outcomes needed by each of the players, an integrated view of the process of the training market was developed. This is included at Appendix 5 of the report.

			OUTPUT		OUTCOME
Supplier	Federal government	=	Increase skill base	+	Global competitiveness
Business	State government	=	Meet customer demand	+	Maximise return on investment
Intermediary	Training providers	=	Successful completion	+	Competent workforce
Buyer	Students	=	New skills	+	Employment
Final customer	Enterprise	=	Skilled people	+	Productivity

It is particularly useful because:

- it positions the student in the first and most familiar model of the training market—the funder, purchaser, provider, client concept
- the intended outputs and outcomes for each section of the market are included to provide added value for planning and reporting purposes

In showing that the different players have different outputs and outcomes it becomes much easier to see that the planning and marketing activity will have different stakeholders, methods and audiences. While the State Training Agency and individual providers both aim to meet customer demands at maximum return on investment, the planning and marketing activities clearly need to be focussed differently for the different players. The questions arise:

- How can marketing approaches assist in differentiating between customers of the State training agencies and of the provider networks?
- What strategic value is added by adopting a market approach?

Market models of the training market

The use of a marketing approach can be viewed cynically as a means of selling ice to Eskimos, or positively as a means of ensuring that agencies and providers attract sufficient students to enrol in, and complete courses which will meet industry's workforce needs and government policy.

The strategic marketing approach is described as customer needs driving the business and organisational goals being met via customer satisfaction[3] (which sounds very like the aim of a client-responsive and customer-focussed VET sector). This strategic marketing approach was explored in the research project for its value in devising more useful models of a training market.

The simplest consumer market model includes a manufacturer, retailer and consumer. The products produced by the manufacturer are based on identification of the needs of

consumers (buyers) and generally sold unchanged by retailers to consumers. The intermediaries, retailers, do not consume the product but simply provide physical storage and channelling of the product. They do however select what they will retail based on known or perceived customer requirements. Information flow for product development or modification, packaging, or pricing goes from the consumer to the manufacturer.

There are a number of differences between the simple commercial structure and the VET sector marketing structure:

- There are two levels of consumption: providers produce and deliver courses to voluntary students, who in turn deliver these skills to industry via employment; providers are both manufacturers and retailers.
- There are several clients: agencies' clients are government and industry; providers' clients are agencies, individual employers and voluntary students.
- Voluntary students are both buyers and resellers: they purchase products (courses) that provide them with skills, and then on-sell these skills to employers, that is, they are value-added intermediaries.
- The content of providers' products are not based on their direct customers' needs, but on their indirect clients' needs, nor do providers have control over pricing. However, they do have control over product delivery and other elements where they can demonstrate a marketing philosophy and apply marketing principles and practices.

Student decisions around what to purchase, what to on-sell and when, become critical to the success of governments, State training agencies and providers in achieving their outputs and outcomes. The need to understand the benefits of a marketing approach for all parties at all levels is critical. Without having the capacity to influence individual clients' entry decisions, larger shifts in participation and skilled workforce outcomes are unlikely. As the training market develops, so does the need for the players in the market to know to whom they should market and what.

Given that this marketing approach is useful for modelling the training market, it is opportune to introduce three basic principles of marketing which may assist with strategic requirements such as making a shift in the participation patterns of clients. They are:

- the principle of differential advantage—an analysis of the marketers' resources versus those of the competition
- the principle of customer value—the notion that all elements of what is called the marketing mix (i.e. the product itself and its price, promotion and distribution) contribute to the perceived value of a product
- the principle of selectivity and concentration—the notion that an organisation should identify, select and concentrate on one or more segments of the market in which it has a differential advantage in delivering customer value

The research report provides a review of these principles and their application to the VET sector. It may be useful at this point to more closely examine the principle of differential advantage.

In determining where an organisation has an advantage it is essential to define what business it is in. Taken from a range of perspectives and considering the range of underpinning motives it is apparent that the VET sector is ultimately in the jobs business, and therefore competition exists in a number of forms. The VET sector competes with:

- attitudes to work and the role of work versus other life choices, e.g. unemployment or part-time work, attraction of unskilled low responsibility-type employment, immediate income
- the tertiary sector for those people who achieve sufficient tertiary admission scores
- occupations and courses that might be popular with students but do not meet industry and workforce requirements
- all other promoted activities for the individual's available time, leisure and recreational pursuits, media and entertainment industries

Concluding comment

The future of the training market is at best uncertain and at worst constrained by models which are essentially about funding allocation. The attraction of markets is their diversity and dynamism, but to achieve this in training a much greater focus on the role of individuals needs to occur. The notions of choice, greatest efficiency, effectiveness of outcomes, all depend on the best link between training provision, learner/employee and industry or enterprise. It is a multi-tiered market that needs an injection of market behaviours.

Questions that would be usefully progressed by training agencies and providers include:

- In consideration of the best advice from industry representatives, what shifts in participation of individual clients and client outcomes would you see as ideal and how can you achieve this?
- What is the role and responsibility of industry in promoting occupations for which there is insufficient demand? In the labour market environment, what can industry do to ensure that individuals are attracted to appropriate occupations and what partnerships should be pursued between government and industry to achieve it?

These questions lead to consideration of strategic partnerships and alliances and lead to a whole new area and set of models of the training market.

In summary, the aims of a marketing approach assist in:

- identifying the whole range of clients, potential and actual, in terms which are useful for promoting the benefits of VET to the clients
- identifying the locus of control of the different agencies involved and therefore their capacity to influence participation in VET
- identifying the outputs and outcomes for the different client groups and therefore how to contribute to achieving a customer service approach at the different levels

Endnotes

1 From *Developing the training market of the future*, Australian National Training Authority.
2 Useful options for segmenting student populations are included in the report *Mapping the training market* and are the subject of the address by Linda Barker at this conference, titled, Individual Clients.
3 From Rob Donovan's commentary on marketing and market segmentation in the VET sector, chapter two, *Mapping the training market*.

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Mapping the training market for individuals

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Based on the research report, *Mapping the training market*, the focus is on the attributes and potential usefulness of market segmentation for management of vocational education and training (VET). Strategic planners and system managers within State Training Agencies (STAs) are asked two questions: How comprehensive is the understanding of individual clients? and How is this understanding used to manage the training market?

STAs compile information about training needs gathered from many sources to construct the 'big picture' from which distribution of resources must be determined. STAs should undertake market research about individual clients to develop an understanding of the individual client market.

STAs must balance the training needs of all their clients. Their prioritising function forms the basis for marketing management of the system and, although it is not recognised as such, this is where target marketing begins. The potential value of market segmentation for STAs is their capacity for contributing to cost-effective and efficient training purchases, based on a better understanding of existing and potential individual clients.

Introduction

WITHIN THE CONTEXT of a training market, it is generally accepted that the purpose of vocational education and training (VET) is the acquisition of skills to meet the requirements of industry, and that an enterprise is the 'end-client' of the skills gained. But as Ryan aptly observes,

> *To move from this truism to the assertion that an undefined entity referred to as industry, or even some specific enterprise, is the 'customer' in the training market is a considerable leap in logic ...* (Ryan 1995, p. 45)

Ryan remarks that, in spite of the importance placed on a customer-focussed system, the individual client has been virtually ignored in issues associated with the concept of a training market. This paper is based on the project report, *Mapping the training market: Segmenting the market for individuals*,[1] a project initiated to address the dearth of discussion about individual clients.

Mapping the training market is informed by marketing principles, practices and philosophy, and guided by the view that the maintenance and expansion of the VET sector is linked to its capacity to attract and sustain the participation of individual clients.

This paper focusses on the attributes and potential usefulness of market segmentation for management of the VET sector. Underpinning the paper are two questions for consideration by strategic planners and system managers within State training agencies:

- How comprehensive is the understanding of individual clients?
- How is this understanding used to manage the training market?

Individual clients in the training market

As part of the *Mapping the training market* project, Dr Rob Donovan, associate professor at the Graduate School of Management, University of Western Australia, developed a simple marketing model of the VET structure (Barker 1996, p. 18). In the model, Donovan identifies individual clients as 'value-added intermediaries'; they are both *consumers* and *on-sellers* of job-related skills; that is, as participants in the training market individual clients not only learn new skills, but they also supplement the skills with other attributes valued by employers. While validating the role of industry as the 'end client', the model illustrates the essential and fundamental role of individual clients to the operation of the VET system.

This view of the training market is no revelation to people working at the coal-face of the training system, e.g. lecturers, trainers and student services personnel. It is well supported by an examination of the VET participation data collected by States and Territories. It is individual clients who enrol in training modules, the unit of measurement of training transactions is 'student contact or curriculum hours', individual clients receive qualifications, and so on. Given the fundamental role of individual clients, it seems reasonable to assume that a better understanding of them will enhance the management of the training market.

Marketing, market segmentation and State training agencies

Marketing, advertising and selling are commonly taken as interchangeable terms. However, in his commentary on VET marketing, Donovan (Barker 1996) explains that marketing as a discipline draws on concepts and understandings of several sciences including economics, psychology, sociology, anthropology, operations research, mathematics and communications. Advertising and sales promotion are sub-disciplines of marketing, as is strategic marketing-management. A marketing orientation (or philosophy) is an attitudinal approach to doing business, one in which organisational goals are met via a genuine concern for customers and their satisfaction (pp. 15–16).

Market segmentation is a process of separating a market into groups with similar characteristics. The purpose of segmentation is to fine-tune the match between products and clients, and to inform strategies to attract potential clients.

For the project, State training agencies (STAs) provided information about their strategic marketing and market segmentation activities. In 1996, these included:

- a commitment to a client-focussed training system
- a view that industry is the primary VET client, but that individual clients are important, too
- a centralised planning function which establishes training priorities and broad participation targets and is reflected in the state training profile (that is, training purchased with public funds)
- a wide range of marketing-type functions undertaken across departments (usually in an independent rather than co-ordinated manner) e.g. planning, fee-establishment, course purchases, promotions, and evaluation
- shared responsibility for marketing campaigns and promotion of training between STAs and individual providers, with the general promotion of Technical and Further Education (TAFE) and publicly funded VET being the responsibility of the STA
- market targeting focusses on historically defined client target groups (e.g. school leavers, equity groups) or on course types (e.g. full-time/part-time, mainstream/fee-for-service/bridging)
- limited use of evaluation of individual client satisfaction or training outcomes for planning or marketing purposes
- limited market research about existing or potential individual clients
- little or no distinction in marketing mediums or messages for different target groups

Donovan's analysis of the information provided about VET marketing practices indicated that:

- the marketing framework is not recognised in VET
- marketing role delineation is necessary in a devolved VET system
- reconsideration of VET competitors is needed
- appropriate market segmentation will assist States to attract potential clients

Methods of market segmentation

As stated earlier, segmentation is the separation of a market into groups with similar characteristics. Not surprisingly, the characteristics of a segment depend on the variables used to interrogate the market. The four primary categories of variables are listed in Figure 1.

Figure 1: Variables commonly used for market segmentation

Category	Variables
Demographic	Age Gender Employment status Occupation Income Ethnic group Level of education Stage in life (e.g. school leaver, retiree)
Geographic	Region (eg. metropolitan, rural, remote) Locality (e.g. postcode, suburb)
Psychographic	Self-concept, personality Lifestyle Learning style
Behavioural	Products purchased and usage patterns Benefits desired Perceptions of and attitudes about products

Source: Adapted from Solomon 1992, p.8

VET client participation data

Which model works? Demographic and geographic variables are regularly used by STAs to examine client participation in VET. The data is normally used in aggregate form to establish broad generalisations about individual clients in the system. Segmentation involves disaggregation of the data and the examination of relationships between different variables.

One of the segmentation methods explored as part of the project was based on Western Australian AVETMISS-compliant data. AVETMISS data is a potentially rich source of marketing information, comprising demographic, geographic and consumption or product usage variables.

The study profiled individual clients using age cohorts and gender as the primary variables for segmentation, producing seven major segments and 21 sub-segments. Each of these segments was then described in terms of other demographic variables, including Aboriginality, language spoken at home, prior educational experience and employment status, as well as participation patterns. Australian Bureau of Statistics (ABS) demographic and geographic data was used to make comparisons between TAFE populations and the wider community.

The study methodology was framed by a series of questions:

Question	Answer technique
Who are VET clients and what are they 'buying'?	Examine current enrolments and client demographics for each segment.
Which are the 'best selling' courses and who is buying them?	Examine 'Top 10' course enrolments.
Which are the 'industry growth' courses and who is buying them?	Examine enrolments for industry growth courses (based on industry advice provided in the State Training Profile).
Which are the 'greatest client demand' courses?	Based on applications for courses and provider advice.
Which client groups ought to be targeted?	Use policy and strategic information which incorporates community and industry needs to determine desired client profile.
Who are potential clients?	Compare to existing client profile and community demographics. Determine market segments for targeting.
Where are potential clients located?	Using geographic representations of data, determine areas where potential clients are located.

The findings of the study provided a more detailed picture of individual client participation in publicly funded VET in Western Australia than is usually undertaken. One issue identified was the potential effect of reductions in training delivery in Business and Office Studies courses and increased delivery in Information Technology. The shift in training delivery is informed by industry demand and growth. There is an over-supply of office and clerical skills, whereas Information Technology is a growth industry.

Analysis of individual client data indicates that young women aged 15–19 years are the major 'buyers' of the business and office studies courses, while young men predominate in the information technology courses. Participation rates for the under-25 age groups are already skewed toward males. Commitment to access and participation principles in Western Australia requires that publicly-funded training be gender inclusive. What effect might the proposed shift have on participation rates of young women? How can the effects be counteracted? What marketing management strategies are required to encourage appropriate gender balance in growth industries?

Market logics and buyer behaviours

Another segmentation method, used by the Corporate Marketing Group of New South Wales TAFE, relies on behavioural variables and a typology based on the work of the business strategists, Gattorna Chorn.[2] This method switches the marketing emphasis from the product (a supply focus) to the client (a customer focus) by segmenting the market on the basis of 'buyer logic'; that is, taking into account customers' considerations for 'buying' courses. This approach does not segment the market to define new market groups, rather it categorises existing market groups according to buyer behaviours.

Gattorna Chorn research showed that various elements of market characteristics tend to cluster, and that most markets can be described as a combination of four key logic orientations.

Figure 2: Gattorna Chorn Market Logics

Market logic	Characteristics
Product	Results orientated, price sensitive, not loyal to suppliers
Orientation	Suppliers need to respond quickly
Administration	Control/bureaucratic orientation, value stability and structure, price sensitive
Orientation	Suppliers have to provide reliable, predictable services
Integration	Long-term relationship, joint-venture mentality, stress consensus
Orientation	Suppliers have to be patient and seek long-term relationships
Development	Innovators who value novelty, not price sensitive, entrepreneurial
Orientation	Suppliers have to provide constantly novel and innovative services

Source: Shreeve 1996

Market segments are determined by using a four-step process; the steps are analysed for each identified client group. The four steps are:

Step 1	Determine who is the: ❖ Client ❖ Influencer ❖ End User	**Step 2**	From the client's perspective answer the following: ❖ What is being purchased? ❖ Buying process? (How) ❖ Benefits being sought? (Why) ❖ What is the business 'culture'?
Step 3	If the influencers and end-users are important to the decision-making process, ask: ❖ In what way do they influence the decision? ❖ What is the impact?	**Step 4**	Determine who pays

Figure 3: Market segments for New South Wales TAFE

Segment	Market logics	Typical clients within segment
Aspirants	Production/development	School leavers, groups with special needs
Career Builders	Administration/production	Employed adults
Value Seekers	Administration/integration	Large businesses
Hard Bargainers	Production/administration	Government departments
Respondents	Production/development	Small business

Source: Shreeve 1996

Client groups with similar market logics are grouped into segments. Identified characteristics assist with determining suitable segment 'descriptors' (e.g. aspirants, hard-bargainers—refer Figure 3). Note that the client in this market analysis includes business types and industry groupings, as well as individuals.

The market logics segmentation has assisted TAFE New South Wales to focus on customer needs and customer aspirations, rather than the traditional marketing focus of product demarcation. Marketing messages do not only provide information about courses, but also address the factors considered important by clients when making training purchase decisions.

Segmenting for success—a style guide for women

Another example of the use of *market* logics as a segment variable is the development of a style guide for marketing VET to women clients. The national women's VET strategy project, *Segmenting for success*, has been informed by the *Mapping the training market* project and also draws on the Gattorna Chorn methodology. Based on a review of existing information about priority target groups for women, the consultants identified four buying logics or buyer orientations (Figure 4). The style guide is due to be launched and disseminated nationally in the near future.

Figure 4: Characteristics of buyer orientation for women

Buyer orientation	Characteristics
Understanding	Interaction, empathy, support, community oriented
Surprise	Ideas, options, flexibility, fun, creative
Consistency	Practical solutions, reliability, predictability, price sensitive
Respond	Responsive, fast, time sensitive, competitive, professional

Source: Adapted from *Segmenting for success: A style guide for women*, 1997

Psycho-graphics and lifestyle segmentation

Segmentation using demographics and participation data facilitates an understanding of *who* buys *what*, *when* and *where*. Unfortunately, the data has limits; it is static. It cannot illustrate the reasons and motivations for clients choosing to participate in the

VET system. In some ways statistical data can be likened to the fossil records studied by palaeontologists trying to better understand dinosaurs (and their extinction). It can never be more than a best guess, because, as Professor Ian Malcolm explains, '... bones are not behaviour' (Crichton 1995, p.209).

Segmentation using behavioural variables such as the buyer logics models described above, offer some insight into the attitudes, perceptions and aspirations of clients. However, it is the use of psychographic variables which provide a method for probing the motivations and underlying values that drive individual behaviour.

Because psychographics (or life-style segmentation) attempts to flesh out the bones of statistical data, it has been described as 'breathing life' into demographics. The dimensions used to assess life-styles are listed in Figure 5.

Figure 5: Lifestyle dimensions

Activities	Interests	Opinions	Demographics
Work	Family	Themselves	Age
Hobbies	Home	Social issues	Education
Social events	Job	Politics	Income
Vacation	Community	Business	Occupation
Entertainment	Recreation	Economics	Family size
Club membership	Fashion	Education	Dwelling
Community	Food	Products	Geography
Shopping	Media	Future	City size
Sports	Achievements	Culture	Stage in life cycle

Source: Solomon 1992, p. 499

Lifestyle values were used as the basis of a market segmentation study undertaken by Roy Morgan Research as part of the *Mapping the training market* project. Information on VET participation was drawn from 1000 Computer Aided Telephone Interviews (CATI) of Perth residents over 16 years of age, not planning to permanently cease employment within the next two years, and not currently at university. The sample was randomly selected from the Perth *White Pages* on disk. The questionnaire used in the interviews contained wide ranging questions relating to VET including:

- the type of VET undertaken, e.g. full-time or part-time, day or evening, area of study, TAFE/private/employer provided, qualifications achieved
- intention to undertake VET in the future
- job skills formation, e.g. improvement in job skills levels during career; how that improvement was achieved; satisfaction with current skills level; methods used to increase skills level
- personal information such as:
  - highest level of education achieved and age achieved
  - highest level of education of parents
  - ethnicity and parents' ethnicity

- ✦ age, gender, income, occupation, industry, marital status, household structure
- ✦ values and goals in life

Information about the general behaviour of members of the Roy Morgan *Value segments*,[3] their attitudes, values and media habits is drawn from the Roy Morgan Research Consumer Opinion Trends Survey (January–December 1995) and numerous qualitative and quantitative studies specifically undertaken for the on-going enhancement of the model. Figure 6 lists the ten Roy Morgan *Value segments* and their representation as a proportion of Australians aged 14 years and older.

Figure 6: Per cent of Australian population over 14 years of age in each *Value segment*

Per cent	Roy Morgan Value Segment
18.7	Traditional family life
16.0	Visible achievement
12.8	Look at me
10.7	Socially aware
10.3	Conventional family life
8.6	Something better
7.6	Young optimism
6.5	A fairer deal
4.4	Basic needs
4.4	Real conservatism

Source: Roy Morgan 1996

Limited space prevents the inclusion of descriptions of all the *Value segments*, but a summary of the characteristics of the three most commonly represented segments follow.

Traditional family life

(18.7 per cent of the Australian population 14 years and older)

Traditional family life refers to a pattern of responses associated with the older counterparts of the *Conventional family life* segment. The *Traditional family life* segment is motivated by similar values in terms of security, reliability and providing better opportunities for their family. However, they are now, within Australia, generally 'empty-nesters' or extended families.

With their children grown their focus is on re-building their relationship with one another, finding time to do all the things they could not do while their children were growing up. With such a strong focus on the family, however, they still spend a great deal of time with their children and grandchildren.

VET participation: Having more time on their hands, but still desiring intellectual stimulation and learning, *Traditional family life* members are more inclined than average to undertake general TAFE courses. In a number of cases, they report that these courses have lead to a small source of income (selling the things they made). However, that is not the motivation for doing the course.

In the past, most *Traditional family life* members finished school (often leaving before the TEE or equivalent) and went straight into a job. Few have done any form of VET course, and most who have, have done this early in their working life as a means of getting a job. Since then, a small proportion have undertaken some form of employer training to supplement their work skills. However, on the whole, they are part of the 'learn on the job' group.

Some *Traditional family life* respondents reported having been retrenched or taking forced early retirement. Faced with this, some choose to re-train, however, most choose to seek a new job in the same industry, use their pay-out to establish a small business (often with their children), or retire.

Communications and media: Traditional family life members are characterised as being:

- heavy readers of the daily newspaper
- light readers of magazines. However, they do read gardening magazines and older, more conservative magazines. Newspaper inserts of TV magazines are also popular due to higher-than-average television viewing habits
- television viewing habits suggest an interest in solving problems or puzzles and keeping mentally agile. They tend to watch game shows, detective mysteries, and documentaries

Visible achievement

(16.0 per cent of Australian population 14 years and older)

Visible achievement refers to a pattern of responses offered by respondents who are visible success stories. They have 'made it' in whatever field they are involved in and are confident in their own abilities and position.

Despite being successful, they retain traditional values about home, work and society. The family is very important to this segment and they place great emphasis on providing their families with a high quality environment. They work for financial reward and job stimulation.

Being highly individualistic, they do not need to prove themselves to anyone nor impress anyone. They are very practical and realistic, looking at the most efficient and effective way of doing things. Getting things done is a key feature of this segment.

VET participation: While higher than average in terms of university experience (33.0 per cent vs 22.7 per cent population 14+), the *Visible achievement* segment is more associated with people who have worked their way up through the organisation to senior management or work for themselves as very successful tradespeople. Hence, they are more likely than average to have undertaken a job-related TAFE course than attended university. Over the course of their career, they have relied heavily on TAFE courses for their education, being more likely than most segments to have undertaken multiple courses.

The practical orientation of this segment appears to give them more of a future leaning to TAFE than private courses. However, at this point in their career they do not feel that TAFE (or any other training avenues) offer relevant courses or skills.

Being very family oriented, the *Visible achievement* segment generally do not want to take time out of their limited family time to study, particularly when they have already achieved considerable success in their career and are comfortable in that success.

Communications and media: The members of the *Visible achievement* segment are characterised as being:

- heavy readers of newspapers, particularly national newspapers
- heavier than average readers of magazines, particularly business and finance-related magazines. Due to their frequent flying they are readers of *Qantas Club*, *Australian Way* and *Panorama*
- only light viewers of commercial television, as they consider work and family time as being more important. Aside from television programs reflecting their magazine reading habits such as *Business Sunday* and *Money*, they are more likely to watch ABC programs such as *News*, *4 Corners* and *GP*
- light commercial radio listeners, tending towards stations playing 'Gold' and 'NewsTalk'

Look at me

(12.8 per cent of Australian population 14 years and older)

The *Look at me* segment refers to a pattern of responses associated with rebellion from the family or household. Members of this segment are looking for fun and freedom away from the family, being a part of 'their generation', the 'in-crowd' of their peers. While this pattern of responses is more often found among teenagers, trying to 'stand out' to seek recognition by the family for being 'grown up' can occur at any time in a person's life.

Being very active socially, they prefer a party to staying at home. They like to be seen as 'outrageous' and taking part in 'cool' or 'hip' activities. They tend not to become involved in social or political issues. Sport, leisure and fun are too important to be interfered with by longer term commitments.

The *Look at me* pattern of responses tends to be associated with hedonism, only 'living for today' and often seeing themselves as invincible. Not considering the consequences of their actions is a common feature in this segment.

Money is very important to segment members, but not if it requires financial planning or thought for tomorrow. Money is essentially a means to an end, something needed for enjoyment.

VET participation: Look at me members are largely inexperienced in the workforce and form a significant proportion of the new school-leaver, TAFE and private college VET market. In total almost 40 per cent intended to do some form of formalised VET course in the next few years (or after school). There is a leaning towards TAFE among the males, and private colleges among the females.

Almost without exception, *Look at me* members' reason for considering TAFE was to obtain the skills or, perhaps more appropriately, the qualifications to get a job, and their attitude towards VET is very short term. Therefore, if they can get a job without it, then

there is no point in training. They invariably expressed a frustration with needing to go down this route in order to get a job and would much prefer not to. However, they recognise that they need money to live and enjoy themselves and therefore need a job.

Communications and media: Look at me members are characterised as:

- believing music is an important form of expression, and a key mechanism for rebellion against the family
- being heavy viewers of music-based television programs including *Rage* and *Video hits*, and readers of magazines such as *Smash hits*, *Juice*, and *Rolling stone*. They are also more likely to listen to Top 40 radio stations
- being attracted by media which reflects their peer group and generation, particularly programs such as *Heartbreak high* and *Neighbours*, and magazines such as *Girlfriend*, *Dolly* or *Cleo*
- including males who tend to reflect their peer interests in cars and bikes with *Hot metal*, *Fast fours & Rotaries* and *Live to ride*; and their interest in women with *Playboy* and *Penthouse*

Why market segmentation?

Mapping the training market explores the potential for market segmentation to contribute to State Training Agencies' central management functions, for example, to assist with the development of strategic planning information, training resource allocation and system monitoring. Some of the potential contributions of market segmentation to STA functions include:

❖ Creating new views of the market and target groups

Stereotypes of 'typical' customers may not match actual customer characteristics. For example, what characteristics are assumed about the typical 'school leaver' or 'Aboriginal' or 'sole-parent' or 'male student'? State training agencies often operate on the basis of a historical understanding of client needs. New ways of looking at the market can reveal new information about target segments and assist with development of new market management strategies.

❖ Improved match between training products and services and clients

Some segmentation methods assist identification of product features valued by particular clients, as is the case with the 'buyers logic' segmentation. For example, people who enjoy the company of others and value socialising may not respond well to campaigns promoting flexible delivery modes such as individual computer-based learning, but may find independent study combined with 'study groups' appealing. On the other hand, promoting computer-based learning may be the most appropriate message to attract the 'techno-geek'.

Psychographic segmentation can improve the understanding of how VET fits, or does not fit, into the overall lifestyle of a particular client segment. This information

can assist with the development and promotion of services, courses and delivery modes which are more consistent with target segments' desired training environment.

❖ New information for system planning

One of the most valuable aspects of segmentation methodology for STAs may be the capacity to use it in combination with methods already developed for determining industry needs such as the Victorian Labour Market Training Needs Model (Allen Consultancy Group 1994, p. 235) and the Western Australian Training Needs Model (Barker 1996, p. 112). These models are designed to forecast the numbers and types of skilled workers required and, therefore, determine the types and amount of training that need to be delivered and purchased by STAs. They are seen as useful tools for managing industry-driven 'shifts' in the supply-side of training.

Using market-segmentation methodologies, there may be a capacity to match potential clients with industry-required training, that is, to incorporate client needs, wants and behaviours into the existing models. A possible approach is to develop segment profiles of clients training in declining or no-growth industries, as well as those training in growth industries, with a view to identifying their demographic and participation characteristics.

These profiles could be compared to profiles of potential clients and analysed in conjunction with information about anticipated changes in the wider population such as increases or decreases in the numbers of school leavers or increases in rates of overseas immigration. Market segmentation would assist with the management of the shifts in client participation necessary to meet the shifts in industry-required training. The potential for combining labour market analytical models and marketing segmentation techniques merits further investigation.

❖ Defining new measures to assess system performance and responsiveness

Implicit in the operation of a customer-focussed system is the need to assess the level of customer satisfaction and to determine system effectiveness and responsiveness to client demand. Currently this measurement focusses on teaching effort, that is, the number of student contact hours delivered, rather than the number of clients who obtain a satisfactory outcome. There is scope for investigation of additional ways by which training effectiveness might be measured to give more emphasis to the training outcomes and delivery features desired by individual clients.

The use of module completion as a measure of success assumes that the *core* product (that is, the primary benefit to the customer) is a 'qualification' and not a 'job'. If, in the eyes of the client, the *core* product is 'getting a job', and the client finds training-related employment without having completed the course, is this not a satisfactory outcome for the client and the system? What do student satisfaction and graduate destination and outcomes surveys tell us about client satisfaction? How is the information used in planning and management of the system?

Conclusion

The role of the State Training Agency is to compile the information about training needs gathered from many sources to construct the 'big picture' from which distribution of resources must be determined. In the same way that STAs undertake their own research about industry and labour market needs to complement information provided by industry training advisory bodies and industry training councils, it is appropriate and desirable for STAs to undertake market research about individual clients in order to develop an understanding of the whole individual client market.

One of the most complex responsibilities of State Training Agencies is the requirement to balance the training needs of all their clients. It is the prioritising function of the State Training Agency which forms the basis for marketing management of the system; and, although it is not recognised as such, this is where target marketing begins. The potential value of market segmentation for State Training Agencies is its capacity for contributing to cost-effective and efficient training purchases, based on a better understanding of existing and potential individual clients.

Endnotes

1 The 'Mapping the Training Market' project was funded by ANTA and managed by the Western Australian Department of Training.
2 The information is a summary of a presentation by Mr Robin Shreeve at the Mapping the Training Market national workshop held in Fremantle, Western Australia in January 1996.
3 *Value Segments* have been developed in conjunction with Colin Benjamin of the Horizons Network. They are © Roy Morgan.

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Competitiveness is the key

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Vocational education and training (VET) is a relatively large and diverse market, yet it does not act as a market. It is important to appreciate its dimensions, about 1.3 million enrolments, over twice as many enrolments as in higher education. There is unmet demand for VET of around 60 000 people unable to gain a placement in 1996, compared with fewer than 30 000 people for higher education. The VET sector has a wide variety of providers, Technical and Further Education (TAFE) currently having the lion's share of publicly funded VET, and also many quality providers in the market place. The pursuit of market-based reform in VET is important. User choice will be implemented in the New Apprenticeships but much more needs to be done to create a truly demand-driven system. The VET sector must become highly competitive to support the highly competitive industry it services. VET faces domestic competition and competition in the global market place. The rapid increase in technology has opened up new and exciting delivery possibilities—and problems. The demand for VET has increased substantially and will continue to increase. The big challenge for government and providers is to look beyond their histories of dictating the market and erecting artificial barriers, to become more client-focussed (regardless of who the client is). TAFE must respond effectively to local demand yet still take advantage of opportunities globally. TAFE institutes and their staff should operate as publicly owned institutions with overly restrictive management practices by its owner—government—minimised. TAFE as it is currently cannot expect to survive. The world is changing and if TAFE adapts slowly, it will be marginalised by technology and markets.

Introduction

IN TALKING ABOUT a market for vocational education and training (VET), it is important to appreciate the dimensions of the market. There are about 1.3 million enrolments in VET, over twice as many enrolments as in higher education, so:

- around 10 per cent of Australia's working age population is at any one time enrolled in a VET program and this is only publicly funded VET—it does not account for the significant VET effort through the private sector: particularly given that half of Australia's VET expenditure comes from enterprises and individuals

There is unmet demand for VET of around 60 000 people who were unable to gain a placement in 1996—compared with less than 30 000 people for higher education. Moreover, the VET sector has a wide variety of providers.

While it is true that Technical and Further Education (TAFE) may currently have the lion's share of publicly-funded VET, there is in fact a plethora of quality providers in the market place to choose from.

So, we have this relatively large and diverse market, yet there are still problems with the way it operates—specifically, there is a problem because it does not act as a market.

The fact that there is a conference devoted to the market for VET is a signal of the importance of the issue. Over the course of this conference, you will hear much about the different elements of the market.

Today I want to focus discussion on why the pursuit of market-based reform in VET is so important. I am reminded of a speech made by Dr Michael Keating here in Adelaide at our Australian National Training Authority (ANTA) conference this time last year. In his address he stressed the importance of a competitive training market for the future of VET. He went on to say that to achieve a really competitive market there was a real need to break with the supplier-dominated training system and give more power to clients through arrangements which ensure their demands are met. He also expressed considerable concern about the ability of the system, as it currently stood, to move towards such a market. He made the comment that the training debate was too often dominated by turf wars over roles and responsibilities rather than starting with the key features of an ideal training system and working toward that goal in a collaborative manner. These comments were made over a year ago ...

It is true that we will now be implementing user choice in the New Apprenticeships—but there is much more to be done to create a truly demand-driven system.

We are also operating in an environment where it is difficult to operationalise agreements that are made at the ministerial level because of the challenges they represent for some of the key players at a State level who are overwhelmed by the task of managing change at the provider level.

As a sector, we must move beyond these differences and work to build a VET sector that will take us into the next century—a sector which is highly competitive itself to support the highly competitive industry we service.

This imperative is coming into sharper and sharper focus as the VET sector faces many challenges. The rapid increase in technology has opened up new and exciting delivery possibilities:

- learning will become enmeshed in our lives in the workplace and in communities
- less and less will learning be something for which we must withdraw from these lives to the formality of traditional educational precincts

However, technological change has also opened up a number of deficiencies in the current system. Does 'on-the-job' and 'off-the-job' mean 'formal' and 'informal'? The whole concept of contact hours has become outdated as a measure of performance. The notion of having a capital works program focussed on bricks and mortar is questionable when training can be delivered down the Internet.

Providers also face enormous challenges in terms of not only keeping up with the technology, but in how they view themselves. Rather than having teachers stand at the front of classrooms, the pressure is on to go out to the workplace and the community, there to act as facilitators of learning—very different to the traditional methods of many providers—but I will return to this topic later.

Technology also renders State-Territory borders meaningless and national borders porous. This raises a number of issues as to how government resource allocation is currently handled across the governments of Australia and highlights the need for a national training market. This is all the more problematic because State officials refused to implement one feature of the ANTA agreement—the payment of funds to a central point.

Not only does technology pose a challenge in terms of keeping up with the latest in the provision of VET, but there is a real link with technological advance and the opening up of new markets. As other industries, either in Australia or overseas, take up new technology, there is likely to be a greater call on the VET sector to train for those industries in the use of that technology. This in itself poses the additional challenge for the sector of not only having to keep up-to-date with the technology itself, but to be pro-active in looking to support those industries which need the training.

Alongside the technological revolution and analogous to the breaking down of State and Territory barriers and opening up of new markets is the increasing internationalisation of the economy. So not only are we facing the pressures of domestic competition but there is now the pressure to be competitive in a global market place. It is another example of the old argument about the firms which export needing support from suppliers of goods and services who are themselves internationally competitive.

For a high-skill, English-speaking country, the world is an exciting prospect in this context—we will have new opportunities to grab, and a new set of challenges to overcome.

It is time to reflect that not only do we face these pressures as a sector ourselves but, as VET is a major factor underpinning the success of other industries, it is absolutely crucial that we keep up with these other industries to help secure their position in a highly competitive marketplace.

Recent research commissioned by ANTA shows that there is a strong correlation between world competitiveness ranking (as assessed for the World Economic Forum) and ranking in terms of qualifications profiles derived from adjusted Organisation for Economic Co-operation and Development (OECD) statistics. We are far from the top in

either. This research identified three issues which education and training in Australia need to address:

- When Australian qualification stocks are compared with those of other OECD countries, there is an imbalance between Australia's ranking on degrees (5–7) and rankings for all post-compulsory qualifications (15). This imbalance seems likely to restrain attempts to improve national competitiveness, unless the balance is corrected by maintaining the competitiveness of the degree ranking while also increasing the post-compulsory ranking.
- An analysis of future profile growth across all OECD countries suggests that the post-compulsory qualification ranking for Australia is likely to weaken further, unless growth is accelerated, particularly at the year 12 and skilled vocational levels of qualification.
- The failure to match the qualification profile growth of key competitors is partly explained by the relatively high level of education and training resources required to maintain Australia's existing qualification stocks as a proportion of a growing overall population.

ANTA is currently developing a position on this important piece of research in the context of the new national strategy for VET.

Finally, and it is something which we have created, and I am not ashamed of, the demand for VET that I mentioned in my opening comments has increased substantially and will continue to increase. Yet it is a reality that there are limited government resources, so to meet this growing demand we have to work smarter with public funds and create a system that industry wants to invest in.

Earlier this year ANTA conducted extensive consultations with industry groups, community groups, government and providers about developing the training market. One of the interesting outcomes of those consultations was that industry was supportive of the moves toward implementing market reform to VET yet, from certain areas of the sector, we were still questioned about why we are moving to a training market when there is little documented evidence of the benefits of competition, in particular.

I take industry's support of the training market as reassurance that it is the way forward and I question the motives of those who speak out against it, particularly those from government ranks.

State and Territory training authorities were specifically established to be led by industry advice—all the signs are that industry people involved in these authorities support more emphasis on the market. So, then, what are the benefits of competition in a market? In VET, this translates to:

- greater choice and diversity of products and services for consumers at a reasonable cost
- more flexibility, innovation and responsiveness to client needs by providers

This will result in increased quality and quantity of VET provision, including through the recognition of that part of VET which was previously cast to the nether

world of education and training outside the established recognition arrangements which TAFE dominated.

We would, thereby, reduce wastage of government resources and maximise returns on the private training dollar with the ultimate goal of developing a deeper and more dynamic national skills pool that is necessary to support industry. TAFE is not the Atlas of VET, carrying on its shoulders responsibility for all that needs to be done. There are in the economy thousands of other providers whose capacity to help improve our national effort should be recognised and supported.

It is true that these benefits are not written in stone, however, they are based on observations in other markets, including schooling.

Before proceeding, let me clear up some of the myths and arguments that are usually put in the way of any considered debate over the training market, so we can get on to talking about more important matters:

- yes—the training market is not a pure market—how can it be with such a huge government presence?
- no—having a training market will not mean opening up all government funding to open tender with full competition between providers
- yes—individuals are important clients, along with enterprises and industries in VET
- yes—government will continue to play an important role as provider through TAFE, purchaser (particularly of community service obligations), funder and regulator
- yes—co-operation, rather than competition, between providers can often lead to the best outcomes for clients
- no—the whole VET system does not need to be exposed to competition to reap the benefits—competition applied at the margin can lead to enormous changes to the behaviour of a TAFE institute as a whole
- no—competition is not being pursued for the sake of competition—it is being pursued as one means of delivering VET that the client wants and needs—that's the bottom line and something we should not lose sight of
- we as a sector are here to serve our clients—whether we are from government or whether we are providers
- we are not vestal virgins tending the flame of educational purity, unaffected by the world of work. Like the vestal virgins, some in TAFE face entombment alive for a lack of chastity ... a lack of chastity meaning that they fail to work to achieve real intimacy with industry

The big challenge for government and providers is to look beyond our histories of dictating the market and erecting artificial barriers to changing our behaviour so that we are more client-focussed (regardless of who the client is). The way government goes about its business will change. But more importantly, the way providers operate will inevitably change. After all, providers are not reliant on public funds alone—43 per cent of VET is currently paid for by enterprises—and we expect that as VET

delivers more of what clients want, private investment will increase, along with public investment.

So, what about providers in the future training market? Unlike some of the rhetoric going around, providers will play a more important role in the future training market than they are playing now. It is the provider which will have direct interface with the client and in many cases be a major support centre for community development, particularly in regional Australia.

The dead weight of bureaucracies will be reduced. Providers will be where the ideas for new products and services originate. Most of the talent in VET is at the provider level. It is this talent, particularly in TAFE, which must be unshackled for a better VET system to emerge.

Providers will, however, need to change the way in which they operate. There will always be a role for traditional approaches to learning but there are so many more options available through:

- packages of training delivered on-site or in the community, particularly through Adulty and Community Education (ACE)—utilising available technology
- more use of video-conferencing and other forms of transmission
- learning through the Internet and other distance education methods
- and means that are yet to be developed

There is so much scope for innovation. Indeed, in a training market aimed at satisfying client needs, innovation will be rewarded. However we should be careful to avoid the temptation to prescribe the way in which training is provided. This places restrictions on how providers may operate; it may cut off options available to clients; and it could stifle progress. It is the market which will sort out the balance between the various delivery modes made possible by technology.

It is fair to say that if the training market were not an issue which governments had decided to pursue, the new technologies would have forced it upon us anyway. Developing a market means preparing ourselves to cope with the new technologies.

It can be argued that private providers do this as a matter of course, but the real challenge is to bring TAFE into this fold. It is an understatement that there is considerable resistance from many to TAFE reform. I can understand this to a certain extent—change is always scary—if that is how you view the world.

However, what I do not understand is how these critics cannot see that, without change, TAFE as we currently know it cannot expect to survive. The world is changing—we cannot stop that. If TAFE adapts slowly, it will be marginalised by technology and markets.

What I find frustrating is that, after talking to many TAFE directors, I know they want to change their behaviour and become more business-like but are thwarted in their efforts by those who approach TAFE as the educational equivalent of a command economy.

There are also moves in some areas in VET to integrate TAFE with higher education institutions—is TAFE so similar to these other institutions that they can be combined? This is an open question and there is much risk to be assessed in selecting a future course.

People come to the VET sector for a very different educational experience to that offered by higher education institutions. The focus is very much on getting job-ready skills defined by competency standards and delivered through competency-based training (CBT). Further, the institutions themselves operate very differently—VET institutes are far more focussed on responding to industry.

Do not get me wrong. I am not saying that the approach of one sector is better than that of the other—I am saying that the sectors and their approaches are different and that these differences should be acknowledged and respected.

Higher education and VET do and *should* compete; Australia benefits from this.

I would see it as a dark day indeed should the worth of VET providers be measured against benchmarks set by the university sector. This is an approach which would subordinate TAFE to the educational imperialism of some universities and distract it from its primary obligations to industry.

At this point, I return to why we are pursuing a competitive training market so strongly.

I cannot say it strongly enough—I agree with Dr Keating's comments 100 per cent that a competitive training market is absolutely essential if we as a sector are to survive and prosper and be able to best support development of a more competitive and prosperous Australia.

So what then needs to happen? We have seen progress in terms of user choice, training packages and the Australian Recognition Framework. However, there are some major reforms still required if the training market is to develop fully. The future competitiveness of the sector as a whole is intrinsically linked with the competitiveness of its major providers—TAFE.

However, despite widespread support for public ownership of a strong TAFE system, it is questionable whether current management arrangements are compatible with further strengthening TAFE's position in an increasingly competitive training market.

TAFE must be able to respond effectively to local demand yet still be in a position to take advantage of any opportunities presented in a global market place. We therefore need to investigate how to develop TAFE institutes and their staff to operate as publicly-owned institutions with any overly restrictive management practices by its owner—government—minimised. However, we should remember that TAFE will operate within the national training framework.

A necessary component of building a responsive and client-focussed training market is being able to translate demand signals into supply side responses. Evidence

suggests that the best outcomes are achieved when the demand and supply sides of a market interact directly and as closely as possible.

However, the current VET system tends to detract from this relationship. Because of the educational framework I mentioned earlier, there will always be some form of boundary within which the client-provider relationship will operate.

The real question is—what is the minimum level of external intervention in the client provider relationship that is necessary to ensure quality VET outcomes?

All governments have now made fundamental decisions to move towards a new system. I'd like to focus on one of these areas—namely funding. There is a real concern about how government purchasing decisions do not adequately reflect true demand. For example, current government purchasing decisions are largely based on demand for VET products, which have been defined through regulation, or through planning processes which aggregate demand via providers to State level.

Neither of these approaches adequately captures the true demand at the client level nor do they guarantee an adequate supply-side response to client needs—something that is critical in a more demand-driven system. We therefore need to clarify and simplify government purchasing practices in the training market.

One of the fundamental questions of a market is who pays for what. In a training market with more informed clients and more funds being allocated by contestable means, focus has been drawn to what government pays for. The answer to this question typically relies more on historical precedent than on any systematic approach to fund market failure or to purchase training based on clearly defined policy objectives. This has led to concerns of 'cost shifting' and inequitable access to public funds across industries.

Although the issue of who pays for what is an old dinosaur in education, the moves to more transparency and more open funding policies means that we can no longer shy away from the issue.

I don't know what the final outcome may look like, but there is a real need to clarify and simplify government purchasing practices in the training market. Once this is done, of course, it will be a lot clearer what VET is expected to be funded (and how) from private sources.

We are as much about looking to promote private investment in training as getting the government's house in order. In conducting this exercise, particular emphasis is needed on developing expertise in costing and pricing of the VET products and services.

Without accurate prices and costs, the market will not operate effectively. Comparisons between products and providers—the bottom line in any market place—would be difficult and inefficiencies may be hidden if full costings are not factored into prices. Clients and government would not know whether they were receiving value for money—providers would not be able to plan in a more business-

like manner. And of course we must also, as a priority, clarify and develop government's role as market facilitator.

We are already moving to a simplified regulatory framework, we are developing training packages and streamlining approval processes—all of which should aid market facilitation greatly. However, much needs to be done to improve the information flow that is necessary to support market activity. Of course, this is not a sole function of government—providers and training brokers should provide information as part of their competitive edge. However, there is still much that can be done in terms of:

- improving client awareness
- better product descriptors and better marketing of the products
- better information on the performance of providers than is available to those people who are making the training decisions

I am sure you will agree that this is an ambitious shopping list, but unless we tackle and resolve these issues, the competitiveness of the training market will be seriously undermined.

In concluding, I would like to reflect on the debate on the training market. Why is the subject of introducing market reform to VET often discussed with such consternation? Are we as a sector so arrogant as to think that the economic realities facing other sectors will not affect us—that we are somehow immune from change? That education is special, different and exempt?

There is change all around us—that is a fact. But this does not necessarily mean that change is bad. The new technology and the internationalisation of the sector that I spoke about earlier offer new opportunities, new frontiers for the VET sector to 'strut its stuff', yet debate still tends to focus on the intellectual niceties of 'who is the client?', 'what are the benefits of competition?' and so forth.

It is disappointing to me that much debate gets caught up on these minor issues, given the challenges in front of us. I am particularly concerned that these messages consistently came from the research community during our training market consultations. While I am not against intellectual rigour, there comes a time when you need to look at the bigger picture and move on.

I therefore urge all to seize the challenges presented by a competitive training market and look to how we might best contribute to its development.

As I look back over the past ten years, I am struck by how much has changed in vocational education and training. With few exceptions, governments have appointed non-educators to the most senior and powerful positions at State and national levels. This reflected the strong wish of governments for an improved response to industry as a client and greater efficiency. The educators who sat around the table nearly 10 years ago at my first meeting with national TAFE directors (now called ANTA CEOs) are all gone. They were victims of the new mood.

Most of what has happened in the past 10 years relates to these twin themes of industry response and efficiency:

- Australian Qualifications Framework
- NFROT (National Framework for the Recognition of Training, soon the Australian Recognition Framework) which admitted 2500 private providers to the field once occupied exclusively by TAFE
- competency standards and national curriculum, and now training packages—the new core product of the system (all necessary to relevance and labour mobility)
- improved information, research and evaluation
- benchmarking, including client surveys and measurement of efficiency
- moves to improve the training market, including tendering of delivery and user choice
- greater independence of TAFE institutes (all necessary to achieving more responsive providers)
- a national strategy and associated mechanisms for achieving State and Territory commitment to change and accountability for delivering it
- new approaches to access and equity
- New Apprenticeships as a means of reviving employment based training—the heartland of TAFE
- more VET in schools
- growth in group training

Against all these changes, governments have funded significant growth in public resources and student places. Much remains to be done in all of these areas, but they are not a sufficient strategy for the next 10 years.

The time ahead will be driven by:

- technology
- an emerging consensus that we must raise our national qualifications profile further to become more competitive and prosperous
- the emergence of a global educational market place on the back of technological change

As I said earlier, these changes would have themselves driven the move to a training market if governments had not otherwise thought to introduce it. As it is, they will compound the market pressures on providers already set rolling by governments.

In this context, governments must therefore facilitate a training market through:

- regulation of providers and products
- information
- approaches to funding
- the encouragements they offer to providers to change

But the real challenge will be at the provider level. And thus, educators, driven from the seats of power at the centre 10 years ago, will return as the dominant players in VET through the emergence of providers as the focus for the significant plays in VET in the future.

It is my hope that we get the framework right. The distinctiveness of VET will rely on this. Thus far, it is all moving in the right direction ... but never fast enough!

Employer perspectives on the market for VET

Steve Balzary
Director, Employment and Training, Australian Chamber of Commerce and Industry

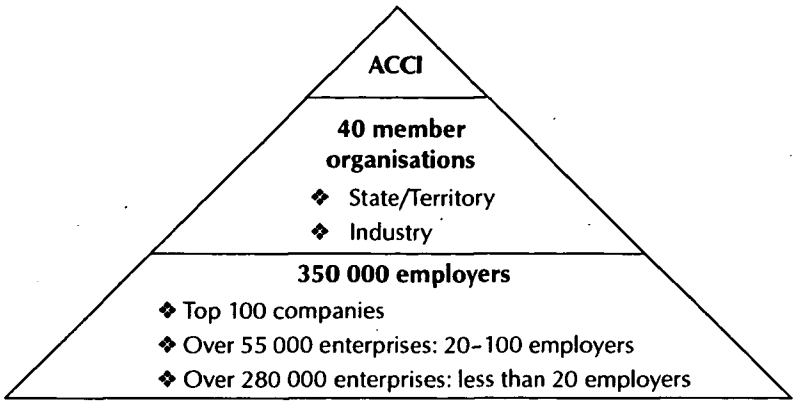
Employers, and industry generally, are an important client of the vocational education and training (VET) system. The Australian Chamber of Commerce and Industry (ACCI) regularly surveys employers on a range of issues. A number of issues affect employer participation in VET. In tight economic conditions the 'bottom line' plays a major role. Employer involvement in training should be linked to direct benefit to the business in profit and human resources. There is an increasing emphasis on school/employer/industry links. Employers have become critical of the reforms in the training system which have not produced expected outcomes. They would like involvement by employers; a simple, flexible and responsive system; minimum bureaucratic involvement, and agreed national framework for training outcomes and qualifications and full introduction of user choice. Each stakeholder has a role: business (national/State-Territory/local) government (State and Federal), providers, schools, students and parents. Co-operation between the stakeholders and commitment to the introduction of changes is critical to the future of Australians. Issues affecting employers are general economic conditions and profitability, other factors affecting business operations; a ready supply of a willing and trained labour force; a responsive VET system; and a supportive training culture operating from a national level to each enterprise.

Introduction

I AM PLEASED to be here today at this important conference, particularly pleased, in the light of this section of the conference that recognises employers, and industry generally, as an important client of the vocational education and training (VET) system—not just an onlooker.

Today I would like to touch on a number of issues affecting employer participation in VET.

Figure 1: ACCI: Structure and roles



Firstly, the Australian Chamber of Commerce and Industry (ACCI), with the assistance of member organisations, regularly conducts surveys of employers on a wide range of issues. In 1996, around 2500 individual businesses—covering firms in every State, in every industry and in corporate firms of every size—outlined issues which employers identified as needing change as a priority for government.

Apart from pleas for changes to the unfair-dismissals legislation and other general employment inhibitors, employment and training issues were not identified in the top 10 most important issues requiring immediate government action.

However, employment and training issues still rated as very important, particularly:

- recruiting employees with appropriate skills (rated 14)
- unemployment (16)
- training wages/junior rates (17)

Other issues rated as important for government attention were:

- employee productivity
- training employees

In another survey on employment creation, changes identified by employers as leading to an increase in employment were:

- first, economic factors relating to the operation of a business—for example, an increase in sales (1), improved national economy (2), and an improvement in profitability (3)
- second, instigating changes to employment conditions including reduction in on-costs, easing of award conditions, and easing of termination restrictions

Identifying the need

ACCI surveys show:

- economic factors are a major issue in training and employment creation

- ❖ the importance of recruiting employees with appropriate skills
- ❖ ongoing training is required for employees to improve productivity

What we can see from these surveys is a clear focus by employers on factors affecting their operations directly relating to participation in education and training activity. It is evident that in tight economic conditions, increasing 'bottom line' considerations play a major role. This is not to say that this has to limit participation in training activity—but it does demand that the VET system accommodates and responds to general economic factors affecting business. Training must be effective and responsive to business, particularly small business, and provide a proven value-added contribution to operations. Other broad factors affecting activity are also listed.

I am also pleased to announce today that ACCI will be conducting a large survey of businesses across Australia, on perceptions and involvement in vocational education and training. The survey will be conducted later this year.

Another factor that employers identify as being of critical importance to their recruitment needs is a steady supply of adequately educated, keen labour.

The recently released Mortimer report, despite being out of the bounds of its terms of reference, highlighted the poor regard industry has for the education system. In addition, employers are becoming increasingly concerned over the expectations of students of work, occupations and optimal learning pathways. There is a need for industry to act.

This has led the Australian Retailers Association to develop a kit entitled *Seize the opportunity* for schools throughout Australia with the aim of:

- ❖ breaking down the good job-bad job perception of some occupations or industries
- ❖ identifying pathways for students and career guidance teachers which included participation in VET

It is hoped that the exercise will establish retail as one career option, assist employers in meeting labour shortages that exist in some areas, and lengthen the time spent in the industry by workers.

This is one example of the increasing emphasis placed on school/employer/industry links by industry and employers.

I think an increase in VET in school activity also provides some exciting options for student-school-employer interactions.

Another way of assisting employers to increase participation in education and training is to modify the system to meet employer needs.

Employer involvement in training

Employer involvement in training will always need to be linked to the direct benefit to the business in profit and human resource terms.

Key reasons employers are involved in training include:

- an increase in the competitiveness of enterprises and need to respond to global competitive pressures
- employee satisfaction/motivation through acquisition of higher skills
- flexibility/adaptation of workers to change in the workplace
- ability of companies to draw on workers in emerging labour markets and meet new industry needs
- allowing enterprises to build upon skills of existing workers, particularly younger workers, to adapt them to a particular workplace

Some areas needing attention are:

- the need for industry to perceive training as an investment
- broadening involvement and ownership of training
- broadening involvement of employer organisations

Key aspects of employer involvement in the system

The national training system continues to undergo fundamental change. Over the past few years, employers have become increasingly critical of the reforms of the training system, which did not produce the anticipated outcomes.

Key aspects of employers' continued involvement in the process are:

- meaningful involvement by employers in the development, implementation and review of training products and systems
  - it is important to maintain the promise of an employer-led system as outlined under the framework provided under the then Modern Australian Apprenticeship and Traineeship System (MAATS). There is some concern by employer organisations that this objective has been watered down over time. It should remain as one of New Apprenticeships' main objectives
  - responsive and representative Industry Training Advisory Bodies (ITABs) are one mechanism to ensure input but not the only option
- a simple, flexible and responsive system
  - a key change that has occurred under traineeships has been the move to provide an increasing proportion of training on the job. This is particularly evidenced in the success of the Small Business Traineeship. It is a crucial aspect of small business participation in training
- minimum bureaucratic involvement in product development, approval and monitoring arrangements
- red tape should be kept to a minimum
- an agreed national framework for training outcomes and qualifications which lead to a truly national system where recognition of products and providers in one jurisdiction automatically flows to others
  - ACCI supports the Australian Qualification Framework as the single national training structure

- ✦ there have been some concerns from employers that the promises made under the National Framework for the Recognition of Training (NFROT) mutual recognition arrangements did not occur in practice; there are high expectations that the recent Australian National Training Authority Ministerial Council (MINCO) decision on mutual recognition arrangements will fulfil the needs of employers

- ❖ full introduction of user choice, including access by third parties to public facilities, which involves the move from a supply-based system to a demand-based system
  - ✦ One of the most fundamental changes proposed in the new system is the introduction of user choice. ACCI supports the full introduction of user choice as it will: change the emphasis on the training market from a supply-driven system, based on the needs of the public training provider to a system based on demand that is specifically aligned to employer and student needs and aspirations; it will encourage competition which will result in a more efficient and cost-effective process while increasing employer and student options, irrespective of the location of enterprises; it will increase the participation of employers in the training market by ensuring public funds are linked to employer demands and provider of choice, delivered in a flexible, user-friendly way.
  - ✦ ACCI will maintain an active interest in the implementation of user choice, particularly in: the operation of user choice in rural and remote areas and exception reports filed by State/Territory training authorities on instances where user choice has been deemed difficult to implement; and access to publicly funded infrastructure by training providers to ensure all providers have the best available resources at their disposal to meet the need of employers at a given location.
- ❖ adequate funding of regional one-stop shop entry-level training services aimed primarily at meeting the needs of employers
- ❖ development of appropriate marketing and support measures which allow employers to make informed choices of their employment, education and training options
- ❖ maintenance of adequate financial incentives to employers to employ apprentices and trainees
- ❖ public versus private funding—business needs funding support to ensure participation. Increasingly there is a view that much of the new focus is on shifting payment to employers in addition to provision of employment
- ❖ independent quality assurance arrangements including appeals and performance audits
- ❖ development of flexible options available under vocational, education and training in schools
  - ✦ the expansion of initiatives available under the broad VET-in-school label has considerable potential to cross industries and to provide maximum options for school students. These options vary from full-time secondary students undertaking VET studies as part of their senior studies to secondary students undertaking an apprenticeship or traineeship while at school
- ❖ support for articulation arrangements across the school, vocational education and training and higher education sectors

- it is important that there is a seamlessness between the three sectors, particularly as avenues for intersectoral co-operative arrangements and initiatives expand

Overview

In conclusion, my view of the *market for vocational education and training* has revolved around employer participation, but recognises the impacts of a range of factors on the employer issues such as:

- general economic conditions and profitability
- other factors affecting business operations
- ready supply of a willing and trained labour force
- a responsive VET system
- a supportive training culture operating from a national level all the way to each enterprise

All of these factors impinge.

In addition, each stakeholder has a role:

- business (national/State–Territory/local)
- government (State and federal)
  - providers
  - schools
  - students
  - parents

The co-operation between each of the stakeholders and commitment to the introduction of changes is critical to the future of Australians.

The industrial relations framework for training and productivity

Pat Wright
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The conjunction of training and industrial relations in the search for higher productivity is the focus of this paper. Globalisation and international competitiveness necessitate improvement in productivity in key industries to ensure Australia's continuing economic viability. Training is a source of increased productivity. How best to become competitive; the complexities of reform; the extent to which training reform and industrial relations reforms are industry-driven; the community of interest; and a fall in the numbers of awards with reference to training are discussed. The declining emphasis on investment in training and growing emphasis on negative cost-cutting associated with new decentralised industrial relations such as enterprise bargaining runs counter to industry's needs for productivity growth for international competitiveness. To reverse this trend and meet industry needs, VET providers need to assemble human resource bundles of more than just task training for a broadly educated workforce which can negotiate enterprise agreements which include training.

Introduction

THE THEME FOR this part of the conference, 'Addressing industry's needs', is open to a variety of interpretations. The needs of industry may be greater than the felt needs of industry and certainly greater than the wants of industry. Also, the precise definition of industry may vary—from the narrow conception of industry which coincides with the employing leaders of industry, to the broad conception of industry as a productive activity which maintains and transforms our society and its economy.

Coming as I do from an academic department of social inquiry, it will be no surprise to you to find that my approach to the theme uses the broadest definitions of both industry and needs. In fact, I choose to interpret the 'needs of industry' as broadly as the growth factors in the Australian economy, since economic growth is essential for the continued existence of industry. This should be sufficiently broad and general to be sure of encompassing any definition of 'industry needs' which one might wish to use.

I therefore wish to address one aspect of our economic growth and prosperity—in particular, the conjunction of training and industrial relations in the search for higher

productivity. I take it as a basic assumption that in these days of globalisation and international competitiveness, continuous improvement in productivity is a necessity to ensure our continuing economic viability. There is widespread agreement that now that the Australian economy must compete in the global economy, key industries must improve their productivity to be internationally competitive. Such industries need increased productivity—and training is a key source of such increased productivity in many of those industries. There is no consensus, however, on *how* industries can best increase their productivity to internationally competitive levels. In fact, at the macro level, there are two contending schools of thought about how best to become internationally competitive.

The contenders

The theory of comparative advantage suggests that we make a realistic assessment of our natural endowments and concentrate on cutting the costs of production and distribution in those industries where we have natural advantages—primary and extractive industries are the obvious cases in point and waterfront reform one obvious way to cut the costs of exporting their products. On the other hand, the theory of competitive advantage (Porter 1990) suggests that we make a realistic assessment of our capabilities and concentrate on making the processes of production and distribution more efficient and effective. The 'working smarter' slogan is the popular version of this theory and the elaborately transformed manufactures of what the Australian Manufacturing Council called our 'emerging exporters' are the best examples of innovation and a commitment to continuous improvement (McKinsey 1993).

The whole economic and industrial reality, of course, is too messy to fit neatly into either of these theories. The truth is, different approaches work in different industries, and sometimes the efficacy of these approaches varies across different sectors of an industry or even across different enterprises in an industry sector, so no general rule is possible, even across just one industry sector. National averages hide more than they reveal.

If such a general rule short-cut were available, we would be saved a great deal of inquiry into the social reality, but unfortunately we cannot avoid the hard work of applying our intelligence to analyse the diverse and multi-faceted needs of different industries.

At the national level, this has been highlighted recently in the Mortimer (1997) report on industry assistance, which advocates a more focussed and targeted approach to industry assistance in the hope of doubling our growth rate from 1.7 to 3.4 per cent per annum over the next five years.

This is not a simple call for the government to adopt an approach of 'picking winners' but neither is it a completely hands-off reliance on our natural advantages alone. Obviously, a judicious mix of cost advantages and strategic interventions is called for in different proportions across different industry sectors. This is true not only

for macro-level industry policy but also for micro-economic reform in the areas of training and industrial relations.

The complexities of reform

Nearly all of the training and training market reforms of the past decade have been productivity-seeking for international competitiveness, but these smart(-ness) bombs have had a very differential impact on different industry sectors. Some industry sectors have benefited enormously in productivity growth from investment in training, while others have gained little from training—some of them have improved their short-term productivity figures through the simple, bean-counting expedient of quick and dirty cost-cutting and job-shedding.

Similarly, the industrial relations reforms of the past decade have largely been productivity-seeking and have had a differential impact on different industry sectors. Once again, some industries' productivity growth can be attributed to the industrial relations reforms, but much of it is more clearly due to cost-cutting and job shedding. Both training reforms and industrial relations reforms have included elements derived from the economic rationalist theory of comparative advantage and the neo-mercantilist theory of competitive advantage—and the two approaches continue to contend, as is evident in the Mortimer report.

Which school of thought is in the ascendant in a particular industry at a particular point in time is certainly not determined by the Federal Government of the day. The 1987 National Wage Case principle of Restructuring and Efficiency, also known as the Two-Tier System (Australian Conciliation and Arbitration Commission 1987), was clearly influenced more by economic rationalist cost-cutting. The 1988 National Wage Case principle of Structural Efficiency, the SEP (ACAC 1988), was clearly more neo-mercantilist in its eschewing of 'negative cost-cutting' in favour of positive incentives to work smarter. The 1991 National Wage Case principle of Enterprise Bargaining (Australian Industrial Relations Commission 1991b) was clearly a bit of both, which probably contributed to the fact that it took two sets of hearings (AIRC 1991a) to get the principle approved—and legislative change in 1993 to make it more effective (Australian Government 1993). Similarly, elements of the training reforms of the past decade have been used to further the economic rationalist and the neo-mercantilist agendas.

The conjunction

Another similarity between the training reforms and the industrial relations reforms is the extent to which they have both been industry-driven—and often by both sides of industry, employers and employees and their respective organisations. Tri-partisim has thrived in both the vocational education and training (VET) and industrial relations (IR) contexts. The strongest coincidence of interests, however has been in those industries where VET and IR have worked in tandem to pursue a neo-mercantilist agenda. These reforms have often been driven by trade union leaders as much as by their tri-partite partners—the captains of industry and the public officials.

This has occasionally led economic rationalists to advance conspiracy theories of almost Mel Gibson proportions to expose the trade union takeover of the world. Less paranoid commentators note this fact with rather more composure (Roberts 1997). This is not to say that there has never been a trade union militant suffering from such delusions, nor that there are no trade union leaders, or redneck employers, for that matter, who are so deeply wedded to class warfare that they would never even consider taking the high road to productivity growth through training for international competitiveness. There are also industry leaders on both sides of the great divide between labour and capital who are politically motivated, in the sense that they have party-political advantage as their first priority and the collateral damage to their industry arising from wildcat strikes or ideological union-busting is merely a price worth paying. There are also some industries where the labour input or the potential gain from training is so small that the old school of adversarial industrial relations is the most economically rational approach for all concerned—certainly it is much more economical of intellectual effort.

However, there are industries which have increased total factor productivity and labour productivity in recent years—and the increases are largely attributable to training and industrial relations reforms. These industries were the subject of research by our department of social inquiry at the University of Adelaide (Wright 1997). In short, we found that training can increase the productivity of certain industries, particularly when integrated in what Macduffie (1991) calls a 'human resource bundle' codified in a mainstream industrial relations instrument such as an award or certified agreement. In these circumstances, training pays off best. The National Institute for Economic and Industry Research (NIEIR) used its modelling capacity to show that the intensity of training across industries (measured as a ratio of training expenditure to sales) is strongly associated with Total Factor Productivity (TFP) growth, with output growth and with export growth.

The commitment of management to training and to consultation with the workforce or their representatives is also a key factor in providing an environment for productivity growth, according to case study research. Such a commitment to training should not be restricted to the technically advanced, according to Lester Thurow (1992). He points out the distinction between the invention of new products on the one hand and the innovation in production processes on the other. Whereas the former products usually call for the highest levels of research training and education of a few experts, the latter processes are reliant upon the ingenuity and adaptation skills of a broadly-educated workforce. It is Thurow's contention that the broadly-educated workforce is more important for national economic performance than the highly-educated elite, particularly since the latter is increasingly mobile internationally, as is their intellectual capital.

The community of interest

The importance of teamwork in fostering innovation was recently emphasised by the American economic historian, Francis Fukuyama (1995), in his book, *Trust*, and echoed

in the Australian context by Dodgson (1996). Fukuyama advocates in economic calculations the allocation of a costed value to what he, like De Tocqueville, calls the art of association. This art of association can be developed through the family (as in China, Italy or South Korea) or through non-kinship community values (as in Germany, Japan and the United States, to a waning extent). The non-kinship community values route requires a high level of confidence in the fairness of open and public rules. This is the key to building a high-trust community of interest which can lead to higher productivity and international competitiveness. Cultivating this art of association and developing the skills of the workforce to participate fully in innovative work groups is an investment in productivity. Arguably, those enterprises in which workers have demonstrated a propensity to associate by joining an association committed to strategic unionism will have a competitive advantage.

VET, then, should not be focussed solely on task skills but should be associated with more general social and communication skills, particularly in industries requiring teamwork. Such an association is evident in the human resource bundles implicit in award clauses such as those for consultative committees, managing change, productivity improvement teams, enterprise flexibility and dispute resolution procedures.

The accommodation: Contemporary comparisons

Throughout the 1980s, federal and State awards reflected more and more a concern with flexibility, productivity, efficiency, competitiveness and training. A quick scan of South Australian awards, which are highly representative of all awards, reveals that nearly 80 per cent of them include a reference to training, usually in association with labour flexibility, often arising from an award variation to incorporate the 1989 Structural Efficiency Principle. The mainstream industrial relations system, then, is quite capable of accommodating human resource bundles with a strategic role for training. More recent outgrowths from the mainstream industrial relations system, however, such as enterprise flexibility agreements and enterprise bargaining agreements, have proven much less hospitable for training arrangements.

South Australian Enterprise Agreements, for example, declined in the incidence of such training provisions from 75 per cent in 1994 to just less than 60 per cent in 1995. At the same time, the main issues covered in these Enterprise Agreements shifted from a concern with functional flexibility to a cost-cutting concern with flexibility in terms of working hours and cutting penalty rates.

The Enterprise Bargaining Reports from the Commonwealth Department of Industrial Relations (Department of Industrial Relations 1995, 1996) show a similar decline. Training was covered in 68 per cent of federal Certified Agreements, but only in 48 per cent of State Agreements and in 32 per cent of unregistered agreements. Data from the Australian Workplace Industrial Relations Survey of 1995 (AWIRS95) suggest that in federal agreements women workers and workers of non-English-speaking

background are disadvantaged with respect to access to training. Agreements where the workforce is predominantly (60 per cent) male are 69 per cent likely to include a training provision, whereas agreements where the workforce is predominantly female are only 53 per cent likely to include a training provision (Morehead et al. 1997).

The Australian Centre for Industrial Relations Research and Training (ACIRRT) maintains a comprehensive database of some 2930 enterprise agreements in various jurisdictions as of March 1997. The proportion of enterprise agreements which include some reference to training fell from 67 per cent in 1995 to only 40 per cent in 1997 and only 29.6 per cent made explicit reference to some form of training structure or program.

Robyn Alexander, of the Professional Educators, Workplace Trainers and Assessors Association (PEWTAA), estimates an even more severe fall in the proportion of enterprise agreements with specific training programs for the workplace from 34 per cent to only 16 per cent from 1992 to 1996.

The breakdown by industry of the ACIRRT agreements with training provisions shows two industries, communications and metals manufacturing, leading the way with more than 50 per cent of agreements with training provisions, and a further four industries, mining/construction, transport/storage, food, beverage and tobacco manufacturing and other manufacturing with more than 40 per cent of agreements with training provisions.

Of course, a training clause in an enterprise agreement does not necessarily mean that the training occurs, and much training takes place without being referred to in an enterprise agreement, but there is a high correlation between the ACIRRT database (1997) and AWIRS95, which suggests a high level of compliance by employers with this feature of enterprise agreements. Further confirming evidence is available from the Australian Bureau of Statistics (ABS) 1993 survey of Employer Training Expenditure (ABS 1994). This shows three industries, communications, metals manufacturing and mining/construction with more than 5 per cent of gross wages and salaries spent on training and another two, transport/storage and electricity, gas and water with more than 10 hours training per employee. It is noteworthy that the industries that devote most time and money to training are also the industries in which a well-co-ordinated and represented workforce have their training codified in a mainstream industrial relations award or agreement. These same industries are the only ones in the Australian economy to have a Total Factor Productivity compound growth rate of more than 2 per cent per annum from 1990 to 1996, according to the NIEIR economic model. The communications industry leads, with a compound growth rate of TFP of nearly 8 per cent, followed by the electricity, gas and water utilities at more than 4 per cent, transport/storage at more than 3 per cent, and mining/construction and metals manufacturing both averaging above 2 per cent per annum in TFP for the seven-year period.

At the other end of the scale, the industries with the lowest expenditure on training hours were likely to be unregulated or to have unregistered agreements and have the lowest rates of TFP growth. They are also among the largest employers of

women workers and organisations with more than 75 per cent female staff spent an average of $105 per employee on training, while organisations with 75 per cent or more male staff spent $235 per employee.

Conclusion

The declining emphasis on positive investment in training and growing emphasis on negative cost-cutting associated with new decentralised forms of industrial relations such as enterprise bargaining would seem to run counter to industry's needs for productivity growth for international competitiveness, just when the pay-off for such a strategy is being confirmed. To reverse this trend and meet the real needs of industry, VET providers will need to assemble human resource bundles of more than just task training for a more broadly-educated workforce which can negotiate enterprise agreements which integrate training in the development strategy of the enterprise.

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A market for all

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An industry-led system and a training market are discussed. Ownership of decision-making now belongs to one stakeholder because reforms in the vocational education and training (VET) sector have been driven by narrow economic imperatives, and throughout the 1990s governments of all persuasions saw reform in VET as a strategy to improve the competitiveness of industry and the economy. There is now a business/employer-led VET sector focussed on short-term goals, with an exaggerated emphasis on entry-level training and meeting the immediate training needs of individual enterprises. There is no balance between the various, often-competing interest groups in VET. VET is a bigger idea than employers and user choice, concerned with long-term national goals, the national interest and the public good. It is a dereliction of public responsibility for governments to hand over 'full ownership' to a group whose self-interest in these matters is legendary. The interests of enterprises and employees are not always the same. There should be a better balance of the competing interests in VET, inclusive and embracing all stakeholders. Attempts to develop an artificial market in VET have been less than successful; there are difficulties in applying market philosophies to education and training; and the training market is becoming an end in itself. Competition in a balanced framework should be pursued with a clear view about the role of public funding directed to the development of transferable skills and portable qualifications. The funding of highly specialised or enterprise-specific training should remain the responsibility of industry and enterprises.

Introduction

THE TITLE OF this presentation is rather ambiguous. I am not sure what it means even though I suggested it! At the time it seemed to lead somewhere but if you don't mind what I would like to do is ignore it and get on to say something about an industry-led system and a training market.

I want to begin with a story. For much of this year I have been managing a national project for the Australian National Training Authority (ANTA) that the Canberra Institute of Technology (CIT) won on tender. The project concerned staff development for VET staff in flexible delivery and involved a number of case studies.

I interviewed two Technical and Further Education (TAFE) teachers in another city about their work in flexible delivery. They explained to me how they delivered classes

at 3.00 in the morning for a particular company. I mumbled high-sounding praise for such dedication. They replied that this was the new TAFE, meeting the needs of industry etc. etc. They were two of the most conscientious TAFE teachers I have ever met. I asked them what staff development they had in flexible delivery and one explained that his staff development was reflecting on what happened at work when he was driving home; this prompted the other teacher to proclaim her development occurred as she reflected under the shower before coming to work! I asked if the course they were teaching at 3.00 am was customised for the client. Yes, it was. So the only students in the class were from the company? Yes, they were. And it was on at 3.00 in the morning? Yes. Well then surely, I ventured gently, not wanting to blow the interview for ANTA, this was a fee-for-service class? No! Definitely not. They fairly leapt on me. How dare I imply the company should pay? Such comments were the reason for giving TAFE a bad name. Did I want to lose this work to private providers? This is what TAFE has to do if we are to keep our jobs. What do you make of this?

An industry-led VET sector

In a speech to the UNESCO UNEVOC (the United Nations Educational, Scientific and Cultural Organization's international project on technical and vocational education) regional conference in Melbourne last November, the Minister for Schools, Vocational Education and Training, Dr David Kemp, said in summing up his opening address:

> *... the Australian Government sees the two essential features for the reform of the technical and vocational education system as:*
>
> - *giving full 'ownership' of the decision-making processes to industry*
> - *providing user choice by the end users of the training* (1996, p. 16)

I find the first of these two 'essential features' of reform quite remarkable. How have we reached a situation where 'full ownership' of decision-making belongs to one stakeholder? The answer is that the reforms in the VET sector are driven by narrow economic imperatives, and throughout the 1990s, governments of all persuasions have used reform in VET as one strategy to improve the competitiveness of industry and the economy.

The link between the competitiveness of Australian industry and VET is important. The opening up of the Australian economy in the 1980s was a watershed in economic history. Australian business entered a new phase of economic development. No-one wants to dispute the importance of industry, or the need for development of a highly skilled workforce to improve international competitiveness or that education and training programs must be relevant to the needs of industry or the importance of entry-level training and new apprenticeships.

What we do *not* want, however, and it seems to me this is what we now have, is an education and training system designed by business to meet narrow economic objectives and run along clinically commercial lines. We now have a business/employer-led VET sector focussed on short-term goals, with both an exaggerated emphasis on entry-level training for those in employment contracts and meeting the immediate training needs of individual enterprises. Confirming this shift is the new

business language permeating the sector and, not surprisingly, underpinning the whole is the ideological framework of the marketplace.

The point is, we've lost the balance—the balance between the various interest groups in VET, often competing interests. We are replacing the whole with the part. To say that one stakeholder has 'full ownership' of the decision-making process is to take an extreme position. VET is a big idea, bigger than employers and user choice. VET concerns long-term national goals, the national interest and the public good. As a result it is about government leadership. Governments hold VET in trust on behalf of all Australians.

It is a dereliction of public responsibility for governments to hand over 'full ownership' to a group whose self-interest in these matters is legendary. The latest self-interested comments from employer bureaucrats representing industry appear in a recent Briefing Note to the ANTA Board. ANTA employed Phillips Curran Pty Ltd to act as consultants in the development of strategic directions for the sector over the next three years. I give you three examples of this self-interest. One, and I quote:

> *The employer groups had little sympathy for the concerns expressed by a number of the ANTA CEOs about the impact of increased competition on the viability of individual TAFE colleges or the provision of services in regional areas and thin markets.*
>
> ...
>
> (Phillips Curran 1997, p. 4)

Two, the same employer groups admitted that access and equity issues were not a high priority and three, the same groups were unhappy with international activity in VET. They believe the extent of internationalisation of training should be, and I quote, limited to that *emerging from the demands of Australian employers* (Phillips Curran 1997, p. 3). Exporting Australian education was a $3b industry in 1996. The benefits from the knowledge and skills gained in the process of exporting education and the partnerships formed feed directly back into Australian industry. I thought that was understood!

There is a real danger that this self-interest could lead to a deskilling of those in employment contracts and the end of the traditional four-year apprenticeship scheme. As Robin Ryan points out, the 'collapse in apprentice numbers since 1989 has been spectacular' (Ryan 1997, p. 8). The recent KPMG management consultancy for ANTA looking at likely numbers and costs of the New Apprenticeship scheme up to the year 2000 sees virtually no increase in four-year apprenticeships but considerable increase in one- and two-year traineeships. Will apprenticeships be replaced by one-year traineeships with no off-the-job component? Government outlays would decrease significantly if the new apprenticeship scheme came down to one- or two-year traineeships. Perhaps this *is* the plan!

It seems to me the argument used to justify industry dominance is specious. The argument arises from the 1994 report by the Allen Consulting Group, *Successful reform: Competitive skills for Australians and Australian enterprises*. The argument is that individuals undertake training to achieve employment outcomes; the source of the employment outcome is the enterprise; therefore by responding to the needs of many enterprises, providers will best be able to meet the needs of all individuals (Allen

Consulting Group 1994, p. 55). The argument is badly flawed. The fact is that the interests of enterprises and employees are not always the same. I acknowledge there is some overlap but enterprises are generally not prepared to have their workers undergo training which they do not see as immediately relevant to their own enterprise needs. Individual employees are more likely to be interested in questions about general skills, qualifications and mobility than their employers. As Kinsman points out, there is *ample conceptual analysis and empirical evidence to show that individuals and enterprises differ in their approach to investment in training* (1997, p. 6).

Let me nominate just two examples. The evidence is clear in the study by Smith et alia (1995, p. 6) for the Office of Training and Further Education (OTFE) and the 1993 Organisation for Economic Co-operation and Development (OECD) report *Industry training in Australia, Sweden and the United States*. The OECD Report argues that:

> *Employers want competence-producing specific training that makes workers more flexible and adaptable and so more easily deployed horizontally within the firm. Employees, on the other hand, seek both general and specific skills that increase their potential for either vertical or occupational mobility.* (in Fooks 1995a, p. 6)

It seems to me this distinction between the interests of employers and employees in training is important and especially so when we consider the New Apprenticeship scheme where there is no longer any pretence about where the power will lie.

So, I am arguing for a better balance of the competing interests in VET—a balance that is more inclusive, that embraces all stakeholders. VET is complex with multiple stakeholders. It is the role of government to balance these groups and ensure the benefit from the billions of dollars that taxpayers put into VET is distributed fairly. I am appalled that TAFE teachers are delivering customised classes to a private company at 3.00 am at taxpayers' expense. Moreover, I believe there is a growing tension between the States and Territories endeavouring to serve the wide VET community through their TAFE systems and the Commonwealth and ANTA narrowly focussed on enterprises and industry.

The training market

I want to make four points about the training market; firstly that its introduction has more to do with ideology than any empirical evidence based on research; secondly that attempts to develop an artificial market in VET to date have been less than successful; thirdly that there are particular difficulties in applying market philosophies to education and training; and fourthly that the training market is becoming an end in itself.

Training market ideologically driven

The first point I want to make about the training market is that it is ideologically driven. It was introduced without public debate by the classic corporatist groupings of government, big business and big unions and no evidence was produced as to why a training market would add anything to the quality, the effectiveness or the efficiency of education and training. These matters were assumed. The National Centre for

Vocational Education Research (NCVER), in responding to ANTA's consultation paper, *Developing the training market of the future* (1996), asked a research fellow at the Centre for the Economics of Education and Training Monash University-ACER, Damon Anderson, to review the literature in Australia relating to the training market. The NCVER's submission concluded that the general research into training markets largely reflects more about:

> *... personal ideological positions on competition and market reform in the VET sector than objective analysis of relevant trends and developments. On the one hand, advocates of a competitive training market base their arguments on untested assumptions and deductions from economic theory while, on the other hand, market critics tend to rely heavily on speculation rather than substantive evidence about the actual operation and effects of competitive markets.* (NCVER 1997a, p. 4)

In summing up the research evidence, it was concluded that there is:

> *insufficient empirical evidence to either support or refute claims that increased competition will produce the benefits being claimed by proponents or the severe drawbacks being speculated upon by opponents of the training market.* (NCVER 1997a, p. 4)

Andrew Gonczi, Associate Professor at the University of Technology Sydney, in a recent address noted that the training market seems to be ideologically driven. Gonczi said:

> *There is something rather strange about a policy which subsidises private providers to supply courses in conditions and with infrastructure vastly inferior to those supplied by the public VET institutions. Even stranger is the effect, reported anecdotally, of TAFE teachers made redundant by the distribution of money to other providers being paid a redundancy package and then being hired by a private provider to deliver the same course. This ends up costing the taxpayer substantially more than had the money been given to TAFE to deliver the course. These sorts of things might be justified in terms of developing competition which might reduce costs in the longer term but they do seem somewhat ideologically driven.*
>
> (Gonczi 1997, p. 17)

Attempts to develop training market have been less than successful

My second point on the training market is that despite all the rhetoric and all the hooha about training markets, plus the distribution of public monies to private training providers in order to develop a market, along with the enormous cost in consultancy fees, in time and energy in promoting the market, the advocates of the training market have failed to produce a market of any significance.

The latest NCVER figures for 1996 include for the first time the statistics relating to private providers. What do they say? Of the total number of annual student contact hours, private providers are responsible for 2.2 per cent. TAFE is responsible for 92.1 per cent and community education providers 5.6 per cent (NCVER 1997b, p. 7).

Problems with an education and training market

My third argument relates to the particular problems in applying the market philosophy to education. Most people in a market can readily gain information and recognise quality. Buyers in an education market often have little experience, may lack information and may have trouble recognising quality. Users can be easily fooled in a training market (Gonczi 1997, p. 17). There is no analysis that I am aware of that demonstrates how the market philosophy can be applied successfully to a sector as complex as VET with its strong educational, social and community tradition and responsibilities.

Developing the training market—an end in itself

Fourthly, the advocates of the training market appear fixated in achieving their goals. We are about to see the second push (the first was under federal Labor) to develop the market with:

- the introduction of user choice (20 per cent or $500m of all recurrent funding in VET) in January 1998
- increased competitive tendering in some States and Territories, in particular Queensland and Western Australia (the changes in Tasmania are beyond my comprehension and can only be described as bizarre)
- the introduction of third-party access through the purchaser provider model in some States and Territories

Contestable funding brings VET activities under the *Trade Practices Act*. This Act was intended to regulate businesses conducted for profit, not organisations such as TAFE with their wide social and community obligations. Further these market policies add another (unnecessary) layer of costs and importantly work against co-operation and partnerships amongst providers.

User choice will go ahead despite the findings of John Ray and Associates (1995), who, in a consultancy for ANTA, found significant barriers to the introduction of user choice, mainly related to Australia's small population and its concentration in a few urban areas, along with the high capital costs of providing some courses. Ray's research assumed that much of the competition to TAFE with a user-choice funding model would come from private providers. The new policy for user choice, however, is to ignore both public and private providers and concentrate on enterprise-based training. How can you have a market if private companies are both purchasers and providers (Kinsman 1997, p. 4)?

As long as public funds can be used in this way we can expect a turning away from public provision irrespective of how efficient and responsive public provision is. Over time there could be a consequent shift in resources, including infrastructure, and diminished access to training for those not in employment (Fooks 1995b, p. 8).

Rae Taylor in his *Review of the ANTA agreement* (1996) warned against competition in VET becoming an end it itself. While supportive of a training market, Taylor argued that:

> *Market reforms, including greater competition, are important mechanisms which form part, but only part, of the overall drive for greater quality, responsiveness and efficiency in training. Markets are mechanisms for sharpening efficiency, but their use does not solve all problems of resource allocation or avoid the hard choices necessary in shifting resources from traditional fields of training to expand new training opportunities more suited to a rapidly changing economy.* (Taylor 1996, p. 9)

A way forward

I conclude with a model that puts the notion of competition in a balanced framework. The document produced by the NSW Board of Vocational Education and Training (BVET) and the NSW TAFE Commission Board entitled *Growth and flexibility: The development of vocational education and training and the role of TAFE NSW within a competitive framework* is in my view a balanced and sensible approach. The document states that competition in New South Wales will be pursued, not as an end it itself:

> *but where it will deliver greater benefits than if those services were provided by the public sector alone.* (BVET 1997)

BVET's strategy includes Competitive Funding Mechanisms as just one strategy to improve New South Wales VET along with seven others, namely structural reform, equity, devolution, communication technology, responsiveness and flexibility, co-operation and quality.

The New South Wales strategy is not about the 'pursuit of competition between providers for its own sake'. It aims 'to achieve effective competition to promote growth, efficiency, quality and equity in the VET sector'. Further, it aims 'to address situations where competition does not achieve efficiency or may conflict with broader social or community objective'.

The strategy has a clear view about the role of public funding which will be directed to the development of transferable skills and portable qualifications. The funding of highly specialised or enterprise-specific training should remain the responsibility of industry and enterprises.

I commend this strategy to you.

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Economic trends and outlooks

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All vocational education and training (VET) participants—individuals, enterprises and governments—are affected by changes in the economy. Greater international competition and new technologies have changed products and processes. Accompanying this has been public sector reduction, changes in work practices and industrial relations and increased part-time, casual and self-employment. This has increased the skills and knowledge needed by existing workers, the underemployed and unemployed and new entrants to the labour force. They need more and better targeted training. Employment has grown where employees have above-average education and training. However, access to training is reducing except for full-time permanent employees in large firms because the insecure economic outlook makes firms reluctant to invest in longer-term training such as apprenticeship and governments wish to contain education and training expenditures. Data on recent macro changes in production and employment and changes in workforce composition and its association with training are provided and reviewed. Government policy has been strongly focussed on entry-level training and employer involvement in training. Now attention has to be given to sustaining individual demand for training by the growing numbers not in large firms or in full-time permanent employment. Training and other programs for the unemployed, underemployed, other jobless and less advantaged remain a major issue.

Introduction

ALL PARTIES TO vocational education and training (VET)—individuals, industry and governments—are affected by changes in the size and structure of the economy. The opening up of the economy to greater international competition and the introduction of new technologies has led to changes in products and processes. Accompanying this has been the reduction in the public sector, changes in work practices and industrial relations and increased part-time, casual and self employment. These changes have increased the range of skills and knowledge needed by new entrants and by existing workers.

In summary the changes in the economy are associated with:

- increased productivity and a relatively high rate of economic growth
- an increase in employment insufficient to absorb the growth of the labour force

- consequent high levels of unemployed, underemployed and other jobless persons
- changes in the industrial structure of employment
- changes to the occupational distribution within industries
- outsourcing of work previously undertaken by the enterprise
- a reduction in public sector employment
- a decline in trade union membership
- changes in the distribution of employment among self-employed and employees; full-time and part-time, permanent and casual employees
- the growth in participation and employment of females largely offset by a decline for males
- an increase in the proportion of the workforce aged 25 and over
- an increase in the proportion of workers who have completed school and who hold post-school qualifications, most notably university degrees

On balance employment has grown in occupations where employees have above average levels of education and training. The sorts of changes occurring in technology, work organisation and quality assurance also indicate that workers within occupations require more training than in the past. Hence existing workers, the underemployed and unemployed and new entrants to the labour force may need more and better targeted training.

On the other hand, while more training may be needed, a number of factors may tend to reduce access to training or the provision of, training. These include:

- the association of a number of the changes listed with relatively low levels of training
- the insecurity of the economic outlook making firms reluctant to invest in longer term training such as apprenticeship
- the desire of governments to contain their expenditures on education and training

Australian Bureau of Statistics (ABS) data on employer expenditure on training in 1996 provide some degree of confirmation of these fears. A summary of some of the main findings and comparisons with 1993 are shown in Table 1. These data do not apply to the self employed or the unemployed or jobless. They show a substantial fall in expenditure in small and medium sized businesses in real terms. They show an overall decline in expenditure as a percentage of gross wages and salaries from 2.9 in 1993 to 2.5 per cent in 1996. The decline in training may reflect an unwillingness of employers in an uncertain environment to commit to longer term training, especially with a workforce that is increasingly less permanently employed.

The rest of this paper is directed at documenting several, though not all, of the changes in the economy and work force that have been listed in this introduction. First the major recent macro changes in production and employment are outlined. Next the changes in the composition of the workforce and their association with training are considered.

Table 1: Employer expenditure on structured training, Australia, 1993 & 1996 July to September

		Employer size			
		1-19 employees	20-99 employees	100 or more	All employees
% of gross wages and salaries	1993	1.6%	2.7%	3.2%	2.9%
	1996	1.2%	1.9%	3.2%	2.5%
Expenditure per employee $	1993	83	179	236	191
	1996	71	136	256	185
Training per employee - hours	1993	4.1	5.3	6.2	5.6
	1996	2.4	3.8	6.5	4.9
Total expenditure $ million	1993	108	176	818	1103
	1996	115	168	895	1179
% employers providing structured training	1993	16%	77%	97%	23%
	1996	13%	51%	88%	18%
For employers reporting expenditure Hours per employee	1993	13	6	6	7
	1996	12	7	7	7
Public sector % gross wages	1993	-	2.5%	3.4%	3.4%
	1996 est	0.8%	2.9%	3.2%	3.2%
Private sector % gross wages	1993	1.6%	2.7%	3.0%	2.6%
	1996	1.2%	1.9%	3.2%	2.3%

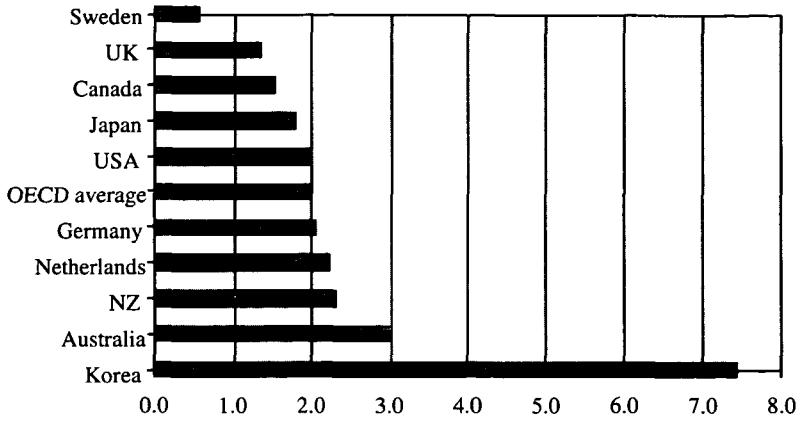
Note: Structured training is all training activities which have a predetermined plan and format designed to develop employment-related skills and competencies.

Source: ABS (6353.0)

Macro aspects of production and employment

The Australian economy has grown rapidly compared with the average for Organisation for Economic Co-operation and Development (OECD) countries over a long period. Figure 1 shows the average growth rates in selected economies since 1991. Australia has not matched the very high rates of growth of the emerging economies such as Korea. The faster growth of these nations is not surprising given their initially much lower level of output per head (Dowrick 1993), and the outlook for their future growth is now considerably less rosy.

Figure 1: Average annual growth in real GDP 1991 to 1996



Source: OECD, Economic Outlook No 61 June 1977

Gross Domestic Product (GDP) growth can be decomposed into growth in output per worker and growth in the number of workers. Australia has had a relatively rapid growth in the number of workers due to migration and to high birth rates until the 1970s. It has had a relatively low growth in output per worker—labour productivity. Over the decade to 1996 the input of labour rose by just over 2 per cent per annum. Labour productivity grew by 1 per cent per annum.

Table 2 shows growth from 1990 by major industry sector. Employment growth totalled only about 7 per cent from 1990 to 1996 or only about 1 per cent per annum, though this disguises the fall in the recession of the early 1990s and the later recovery. Productivity grew about 8 per cent or 1.3 per cent per annum, noticeably higher than in the 1980s.

Table 2 shows there is a very large variability in employment and productivity growth. Where productivity growth is high there is often little employment growth. The most striking example is for electricity, gas and water where the productivity growth can be largely attributed to maintaining output while cutting employment. In communications a massive increase in productivity is shown, though also above average employment. The increase in employment in communications may be temporary and associated with recent infrastructure development. Manufacturing has experienced quite high productivity growth by past standards and a minor decline in employment.

Table 2 shows that the highest rates of employment growth is in industries where measures of productivity growth are not available. For example very high employment growth has occurred in Property and Business which has grown with the outsourcing of work from both government and private business. It now accounts for 10 per cent of all jobs. The reason that values for productivity growth are not shown is that a satisfactory way of measuring it has not been developed for service industries. There are for example considerable productivity gains occurring in fields such as education and health but they remain unmeasured.

Table 2: Employment and productivity by industry, Australia

	Total per cent increase 1990 to 1996			
	Employment	**Output per hour worked**	**Employment in 1990 000s**	**Employment in 1996 000s**
Agriculture	-1	12	427	422
Mining	-4	35	95	91
Manufacturing	-4	18	1164	1119
Elect, Gas, Water	-34	47	104	69
Construction	2	3	589	603
Wholesale	-2	14	507	495
Retail	13	6	1100	1238
Accommodation, cafes	22	-5	311	379
Transport and Storage	0	24	392	393
Communication	10	56	150	164
Cultural and Recreational	29	0	146	188
Finance and Insurance	-16	na	371	312
Property and Business	28	na	633	813
Government Admin & Defence	2	na	364	372
Education	10	na	535	590
Health and Community Services	19	na	644	766
Personal Services	10	na	277	305
All industries 1990 to 1996	**7**	**8**	**7808**	**8318**
Annual growth rate	*1.1%*	*1.3%*		

Source: ABS 6203.0, 5204.0, na: no estimate available

The changing pattern of employment by industry in Table 2 does not in itself show a trend towards more skilled employment. The changes in employment from 1990 to 1996 by major occupation group are shown in Table 3. The expansion was large among Professionals and Salesperson and Personal Service Workers, though in the latter case it was associated with the continued growth in part-time work. Employment fell among Plant and Machinery Operators, and Drivers, Tradespersons, and Labourers. Finer analysis is needed to show the impact of these changes on skill requirements. Analyses of data to the early 1990s showed a trend to occupations where employees have had above average levels of education and training (Department of Employment, Education and Training 1995). These analyses do not account for the possible increase in education and training requirements within occupations, which needs much more research.

Table 3: Employment by major occupation, Australia 1990 and 1996, 000s

	1990	1996	% change
Managers and Administrators	866	881	2%
Professionals	1002	1178	18%
Para-Professionals	458	486	6%
Tradespersons	1221	1193	-2%
Clerks	1358	1360	0%
Salesperson and Personal Service Workers	1189	1440	21%
Plant and Machinery Operators, and Drivers	586	570	-3%
Labourers and Related Workers	1236	1230	-1%
Total	**7916**	**8337**	**5%**

Note: ABS adopted a new occupational classification in August 1996.
Source: ABS 6203.0, May data

While the apparent skill requirements of the workforce have grown so too have the educational levels. However changes in the classification of qualifications makes comparison over time difficult. Table 4 shows that there has been a very sharp increase in the percentage of persons with degrees, from about 10 per cent in 1990 to 15 per cent in 1996. There is apparent stability in other categories but definitional changes, e.g. excluding qualifications which can be acquired in less than a semester's full-time study, affect the comparisons before and after 1993.

Table 4: Labour force with post-school qualifications, Australia

	February data, aged 15-69			May data, aged 15-64	
	1990	1993		1993	1996
Labour force	100%	100%	Labour force	100%	100%
With post-school qualifications	47%	51%	With post-school qualifications	46%	48%
Degree	10%	12%	Degree	12%	15%
Trade Qualification	16%	16%	Skilled Vocational	16%	17%
Certificate or Diploma	19%	21%	Undergrad Diploma	4%	3%
Other	1%	1%	Associate Diploma	6%	7%
			Basic Vocational	7%	7%

Note: In 1993 ABS introduced a new classification of qualifications.
Source: ABS (6235.0, 6227.0)

The expansion in the number of graduates reflects the very rapid expansion of higher education in the late 1980s and early 1990s. The stability in skilled vocational hides the rapid expansion in numbers of apprentices in the late 1980s and the sharp fall in the recession of the early 1990s and the only partial recovery since. These changes are shown in Table 5 which presents estimates of apprentice numbers from two data

sources, the ABS sample survey in May each year and the National Centre for Vocational Education Research (NCVER) collection from State Authorities.

The recent large expansion in Associate Diploma (now 'Diploma') enrolments in Technical and Further Education (TAFE) institutes should lead to an expansion in the share in qualifications in this category and the jump in Traineeships should lead to an expansion in basic vocational qualifications.

Forecasts of employment have been carried out by a number of forecasting groups e.g. Dixon and Rimmer (1996). These forecasts include assumptions about the overall rate of economic growth, emerging changes in tastes, and the likely trend in production in the light of current trade policy. In general they show a continuation of the major features shown in Table 2.

Table 5: Apprentices, Australia 1988 to 1996, 000s

	ABS survey estimates		NCVER data	
	First Year	Total	Commencements/ Recommencements	Total in training at 30 June
1988	40	153	55	147
1989	56	176	63	152
1990	50	163	62	161
1991	24	139	45	151
1992	28	137	41	143
1993	30	111	46	123
1994	39	114	50	123
1995	39	115	49	124
1996	37	126	45	126

Notes: ABS data based on sample survey; NCVER data are from a count by training authorities and are for the year ended 30 June.

Source: ABS, (6227.0), NCVER 1995, 1997, and unpublished data

Employment and unemployment

Table 6 shows the overall changes in employment and unemployment from 1990. Part-time work rose about 30 per cent. Full-time jobs remain just above the level of 1990.[1]

The growth in part-time employment to some extent reflects the changing composition of industry, e.g. the growth of retailing relative to manufacturing, the growth in female employment and the overall lack of full-time jobs: over 500 000 part-time workers would prefer to work more hours. This is indicated in Table 7, which also provides a broader perspective on employment and joblessness.

Table 6: Employment and unemployment, Australia 1990 & 1997, 000s

	Employed Full-time	Employed Part-time	Total employed	Unemployed looking for full-time work	Total unemployed	Labour Force
1990	6142	1667	7808	476	585	8393
1997	6326	2129	8454	605	751	9205
% change 1990 to 1997	*3%*	*28%*	*8%*	*27%*	*28%*	*10%*

Notes: July data for 1997, August for 1990
Source: ABS (6203.0)

Table 7: Employment and joblessness, Australia, September 1996

	000s	% of population
Civilian population aged 15 and over	**14405**	**100%**
Employed full-time	6244	43%
Employed part-time and would not prefer to work more hours	1640	11%
Employed part-time and would prefer to work more hours	547	4%
Total employed	**8430**	**59%**
Unemployed: actively looking for work and available to start in reference week	800	6%
Actively looking for work but not available to start work in reference week	58	0%
Not actively looking for work but wanted to work and available to start within four weeks	822	6%
Not actively looking for work but wanted to work but not available to start within four weeks	308	2%
Total wanting to work	**1988**	**14%**
Did not want to work	**3988**	**28%**

Source: ABS (6203.0) May 1997

The total unemployed—that is, actively looking for work and available to take it—was around 800 000. There are over 1 000 000 more who are not actively looking for work, for a variety of reasons, but would like a job. If we are to review the need for training among the jobless who will seek to enter the labour force it is necessary to consider these persons more marginally attached to the labour force as well as those officially counted as unemployed.

The distribution of unemployment across age groups and the duration of unemployment needs attention in considering the implications for training. The distribution by age is considered briefly here. Table 8 shows that about 60 per cent of the total unemployed and 66 per cent of those unemployed and looking for full-time

work are aged 25 and over. The unemployment rate of teenagers, at 18 per cent of the labour force, is three times that for persons aged 25 and over. Unemployment among teenagers is of considerable concern as it may set the pattern for longer term joblessness and associated social problems. However, the actual number of teenagers unemployed and looking for full-time work is estimated at 72 000 or about 6 per cent of the total population of 15-19 year olds. The reason for the difference among these percentages is that over two thirds of teenagers are in full-time education and training. The numbers of unemployed looking for full-time work aged 20-24 is considerably higher than for teenagers and they comprise nearly 10 per cent of the population of the age group.

Table 8: Employment and unemployment by age, Australia 1997, 000s

	Employed full-time	**Employed Total**	Unemployed looking for full-time work	**Unemployed total**	Labour force	Unemployment rate	**Population total**	Unemployment as % population
15-19								
At school	8	**209**	4	**42**	251	17%	**677**	6%
At tertiary full-time	10	**104**	2	**14**	118	12%	**205**	7%
Not in full-time education	210	**286**	70	**74**	360	21%	**406**	18%
Total	*228*	***599***	*72*	***130***	*729*	*18%*	***1288***	*10%*
20-24								
At tertiary full-time	18	**106**	4	**15**	121	13%	**236**	6%
Not in full-time education	712	**857**	125	**135**	992	14%	**1135**	12%
Total	*730*	***963***	*129*	***151***	*1114*	*14%*	***1370***	*11%*
Aged 25+	5366	**6890**	404	**470**	7360	6%	**11917**	4%
Total	***6324***	***8452***	***605***	***751***	***9203***	***8%***	***14575***	***5%***

Source: ABS (6203.0), July data

Changing composition of employment

There are a number of other trends of relevance to training. These include the casualisation of employment. Table 9 shows that from 1990 to 1996 there was a decline in the number of permanent employees, those entitled to holiday pay etc., and a growth in casual employment of about 45 per cent. This increase in casual employees is greater than the increase in part-time employment, indicating that increasing numbers of full-time workers are in casual employment. The growth in labour hire firms is a factor in this growth in casual employment. Some casual employees are in regular work but overall there is an indication of reduced job security.

Table 9: Permanent and casual employees, Australia, 000s

	1990	1996
Permanent	5296	5221
Casual	1271	1841
Total employees	**6568**	**7062**

Source: ABS (6325.0), August data

At the same time there has been a relative growth in the number of self-employed. Table 10 shows this has mainly been among self-employed workers without employees. An increasing number of the self-employed have incorporated their businesses.

Table 10: Self-employed including owner managers of incorporated businesses, Australia, 000s

	Owner manager of incorporated business with employees	Owner manager of incorporated business without employees	Employer of un-incorporated business	Own account worker	Total 'owner managers'	Total 'owner managers' as % of total employed
1990	236	107	372	716	**1430**	18.3%
1993	222	123	341	825	**1511**	20.0%
1997	293	173	343	815	**1624**	19.4%

Note that owner managers of incorporated businesses are usually treated as employees in ABS 6203.0
Source: ABS (6203) July 1997 and unpublished data, February data

A decline of 15 per cent or 250,000 in the numbers of public sector employees has occurred since 1990. The private sector's employment has grown by 500,000, mostly in part-time and casual employment. The share of public sector employment is shown in Figure 2. Public sector employment has declined from 30 per cent of all employment in the early 1980s to 22 per cent in 1997.

Until the early 1990s there was a trend towards increased numbers of employees in small business (ABS 1996, p.13). The numbers in 'own account' work and employed in private firms of varying size are shown in Table 11. Employees in private enterprises with 1-19 employees, excluding agriculture, forestry and fishing, made up about 21 per cent of total employment in Australia. They represent about a third of all private sector employees. Including agriculture etc. and persons working in own business, small business accounts for about 40 per cent of all employment or about half of private sector employment.

Figure 2: Percentage of wage and salary earners in the public sector

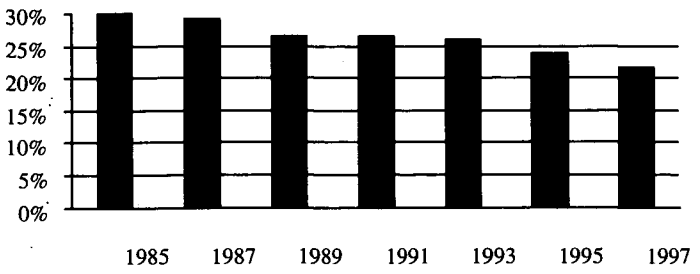


Table 11: Employed persons and employer size, Australia 1994-95

	Agric., forestry & fishing	Persons working in own business		Private sector employees by firm size						Public sector	Total employment
		Own account workers*	Employers*	1-9	10-19	20-40	50-99	100 or more	All private employees		
000s	335	641	309	1019	501	600	403	1979	4503	1592	7380
% of total employed	5%	9%	4%	14%	7%	8%	5%	27%	61%	22%	100%

Note: Small business, including manufacturing firms with up to 99 employees, had 1727 employees, i.e. an additional 207 on top of the 1520 in the 0-19 groups.

* excludes Agriculture, forestry and fishing and not comparable to number in Table 10.

Source: ABS (1321.0)

A factor accompanying the changing patterns of employment is the continued decline in trade union membership shown in Table 12. The decline in membership is related to the swing to the private sector where union membership was already low and has fallen more than in the public sector.

Table 12: Employees—percentage who are trade union members

	Public sector	Private sector	Total
1990	67	31	41
1996	55	24	31

Source: ABS (6325.0)

Table 13 shows the increase in the proportion of the labour force that is female. The proportion of full-time worker and of all workers has risen. The number of female part-time workers has risen but their share has fallen due to the rapid growth in male part-time work: 8 per cent of employed males were in part-time work in 1990 but 12 per cent in 1997.

Table 13: The labour force—percentage female, Australia

	1990	1997
Employed full-time	31.7%	33.1%
Employed part-time	78.1%	73.6%
Total employed	41.6%	43.3%
Unemployed	42.5%	40.4%
Total labour force	41.6%	43.0%

Source: ABS (6203.0)

Relationships with training

One implication of the employment and unemployment trends outlined so far is that more people will need training for a given number of hours of work. However what surveys in recent years have suggested is that less training may be sought or provided.

An indication of the extent of the problem is indicated by the data in Table 14. The data are for 1993. The results of a similar survey of education and training in 1997 are expected to be released shortly but the patterns themselves seem to be quite robust across countries (Groot 1997).

Table 14 shows that participation in training and study courses varies by a range of characteristics. Professionals for example receive or undertake considerably more than average as do persons who already have post-school qualifications. On the other hand relatively low rates of training are suggested for part-time, casual and self-employed, the private sector compared to the public sector and for non union compared to union membership. The unemployed also had a low rate of participation in training, even in 1993 when labour market programs were more prevalent than in 1997.

More detailed analysis is needed but there is a strong suggestion here that it may be difficult to sustain participation in training of the workforce with the trends in employment and unemployment discussed above.

Table 14: Percentage undertaking study or training courses, Australia, 1993

	per cent
Professionals	70
Labourers	27
Public employee	61
Private employee	42
With post-school qualifications	56
Without qualifications	39
Member of union	53
All employees	47
Employed in a firm with 100 and over employees	55
Employed in a firm with under 10 employees	36
Permanent employee	53
Part-time employee	43
Casual employee	39
Unemployed	36
Females	48
Males	46
Born non-English speaking country	35
Employer	23
Self-employed	15
Electricity, gas and water	61
Agriculture etc.	27

Note: Persons can undertake more than one type of study or training.
Source: ABS (6278.0)

Summing up

New technologies, work practices and increased competitiveness are increasing the need for training.

A number of trends in the workforce may tend to reduce employer support for training except for full-time permanent employees in large firms. There are a growing number of casual workers, self-employed and non-unionists for whom training has been relatively low. In addition there are large numbers—on some definitions over two million—who are not employed but who want work and who will not receive employer supported training. The majority of the unemployed and jobless are over the age of 25.

Government policy has been focussed on entry level training and employer involvement in training. This has included attention to training in small business and attempts to change the training culture in business. Increased attention has to be given

to sustaining demand and provision of training for older workers and those not in full-time permanent employment. Clearly a much faster growth in employment is a major objective for government policy but there is as yet little sign of it being achieved. Training and other programs for the unemployed, underemployed, other jobless and the less advantaged remain major concerns for policy development.

Endnotes

1 Despite the rise in part-time employment the total hours worked in the economy rose in line with the number of employees. The reason is that the average hours worked per full-time and part-time employee rose.

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Returns to enterprises from investment in VET

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This paper presents the findings of a review of recent literature on the topic 'Returns to enterprises from investment in VET', under two headings: *Enterprises and investment*, and *Enterprises and returns*.

The degree by which enterprises invest in training uses variables of size, specialisation and location, which influence the degree of investment in ways such as commitment to formal provisions of vocational education and training (VET), whether training is believed to be useful, the likelihood of needs being met by the publicly funded system and the proximity to institutions with appropriate programs. Enterprises' investment in training is focussed on the skills and knowledge relevant to their needs. However, with an increased emphasis on the training of the nation's work face within enterprises, severe imbalances may occur if the focus and distribution of investment remains uneven. Recent studies indicate that the enterprise commitment to training is stalling, with significant consequences for the national skill base.

Interest in finding out about the returns on investment in training differs. Government appears more interested in a cost-benefit analysis (CBA) than enterprises. Little interest was identified in enterprises securing detailed information about detailed returns on training expenditure. However, large enterprises are more likely to be interested in VET securing work performance and strategic goals than precise and detailed accounts of returns. Moreover, enterprise decisions about investment in VET are often handled as an annual budget item, or as an act of faith, without detailed analysis. Conversely, smaller enterprises reflect a belief that investment in training is not worthwhile. This may explain their reluctance to participate in VET. Different models of CBA are proposed in the literature. Given the lack of interest by enterprises in or practising quantifiable CBA, practical models which assess returns of a few important variables may be welcomed by enterprises.

Introduction

THE NEED FOR Australia to become more competitive internationally has resulted in the demand for the development and upgrading of the skills required for workplace performance. Enterprises need to respond quickly to market demand for innovative products and services. Such responsiveness requires a skilled workforce and places increased value on the knowledge and skills needed by enterprises to implement successful responses to market demands (Burke et al. 1994).

Australian governments over the past decade have focussed on the nation's global competitiveness premised upon a skilled and flexible workforce.

Moreover, they have encouraged participation in skill development through emphasising links between productivity and remuneration within microeconomic reform, which included mandating training arrangements in restructured industrial agreements. Initiatives were enacted to encourage more of the cost of training to be borne by the private than the public sector (Deveson 1990). The introduction of the now defunct Training Guarantee Scheme in 1989 was one such initiative. It aimed to encourage equity in the contribution by enterprises in the skill development of the nation's workforce through a commitment to their employees' skill development. Within this initiative, enterprises' contribution to workers' skill development is conceptualised as an 'investment' in the enterprise's skill base, rather than being a cost. The idea is that if all enterprises were to contribute, the nation's skills base would be maintained and the burden shared while securing national goals of increasing the quantum of industry training.

Microeconomic reform at the enterprise level and other enterprise-based factors are now influencing decisions about the investment by enterprises in developing the skills required for workplace performance. For example, Billett (1994a) reported that in the enterprises he studied, training was valued for more than its ability to develop skills and knowledge associated with specific vocational goals. It was also valued for its ability to assist with workplace change and the development of employees' skills in decision making, teamwork and continuous improvement. Similarly, Wolf (1996) reports from research across Organisation for Economic Co-operation and Development (OECD) countries that employers will pay for the development of current specific skills and some generic skills that will lead toward achieving the enterprises' strategic goals. The car manufacturer Ford in Australia also views their investment in education and training programs as the means of supporting organisational restructuring (Miller 1996).

The recent literature provides useful insights to understand further what motivates the degree to which enterprises of different sizes, speciality and location invest in training. It also informs about interest in measuring the benefits of training and in what ways. This review leads to questions about the effectiveness of policies which aim to encourage both the development of the nation's workforce through workplace provisions and increasingly attempt to place the cost of this development within enterprises. This is because it may not result in the increases in the quantum and quality of training that were proposed by its sponsors. The synthesis of the literature demonstrates the utility of the recent research, yet it also identifies gaps in knowledge which should become priorities for research.

Method

Using the criteria provided in the project brief, a review of literature, which is post-1990, largely focussed on Australia and represents enterprise perspectives, was

undertaken. From a review of some of the key papers, a framework was generated comprising *Enterprises and investment,* and *Enterprises and returns.* The literature was examined to determine:

- what the study or studies examined (purpose)
- their approach (method) and focus
- their findings
- how these related to the analytical framework

Through this process it was aimed to:

- account for the work that has been undertaken
- draw conclusions from what has been found
- identify areas of further refinement and those for fresh inquiry

Guiding the analysis is the view that government interest in investment by enterprises in vocational education and training (VET) is linked to the dual policy goals of attempting to increase the quantum of national VET activity and to transfer the cost of that provision to the enterprises which derive the benefit. Reference to VET in this paper encompasses both 'formal' (e.g. participation in accredited courses or courses organised by enterprises) and also 'informal' (e.g. learning on-the-job) provisions, although the majority of the research has focussed on surveys and case studies of formal provisions. In the sections which follow, the analysis of recent research presented in this summary is presented under two headings: *Enterprises and investment,* and *Enterprises and returns.*

Enterprises and investment

The degree of investment in training by enterprises remains uneven. Some enterprises will or are expected to bear the full cost of training while other enterprises' skill development needs are furnished through programs which are funded largely at public expense (Moran 1994). All enterprises, whether they intend it or not, also make a contribution through the provision of learning experiences which are often referred to as 'informal' (Misko 1996; Guthrie & Barnett 1996). Participation in structured entry-level training which includes both on- and off-the-job experiences is another kind of contribution with apprentices not always being viewed as covering the costs of their employment (Dockery, Koshy & Stromback 1996). The provision of an internal training role comprising staff and facilities dedicated to training is a more comprehensive type of investment which often results from particular enterprise needs (Billett 1994a). However, to understand further the factors which influence enterprises' investment in training, they can be categorised as:

- size
- specialisation
- location

These three interdependent factors are used to organise this section of the paper.

Size

Recent research indicates that, across enterprises, the investment in 'formal' training lacks uniformity with larger enterprises making a greater contribution than smaller enterprises (Baker & Wooden 1995; Burke 1995; Sloan 1994). The evidence suggests that medium and large enterprises are typically engaged in making considerable investments in VET. Admittedly, this evidence usually reflects 'formal' VET provisions and may not fully account for the 'informal' VET provisions which occur in both small and large enterprises. For example, Baker and Wooden (1995) report that large firms provide more training in management and support functions than small firms who focus their training on activities which are directly related to increased production of goods or services. Catts (1996) also found that the formal training employees received in four small- to medium-sized enterprises (SME) was highly specific, provided by product suppliers (vendor training) and took the form of product knowledge sessions and training concerned with the installation, maintenance and repair of equipment.

Factors such as the required level of skills (Baker & Wooden 1995), lack of incentive (Wooden & Baker 1996), other priorities (Catts 1996) and a preference for recruitment rather than training (Coopers & Lybrand 1994; Misko 1996; Sloan 1994) are proposed as reasons why smaller enterprises do not invest heavily in VET. A contributing factor is reported as a lack of knowledge within small business about training activities and networks (Wooden 1997; Callus 1994; Smith 1997). Guthrie and Barnett (1996) report a lack of understanding amongst enterprises regarding the formal accreditation of training programs and highlight perceptions of excessive bureaucracy as have Schofield (1994) and Callus (1994), who suggest these imposts have discouraged some enterprises from participation in the formal training process. The compliance cost for apprenticeship is reported as falling disproportionately on small business (Cabalu, Doss & Dawkins 1996). Also few enterprises used government incentives for work-based training (Misko 1996). Given governments' ongoing interest in small business, further work is required to examine how these impasses can be overcome (Schofield 1994). Such work may well benefit from examining the local-regional professional/occupational support strategies that have been adopted in countries such as Germany and Austria.

The form of participation in training most commonly reported by enterprises is informal, unstructured on-the-job training with the incidence of this type of training being significantly low only in very small enterprises with fewer than 10 employees. Seventy-eight per cent of these workers reported receiving informal training, compared with 84 per cent of workers in large enterprises (Australian Bureau of Statistics 1993; Baker & Wooden 1995). Misko (1996) also reports that a majority of small enterprises surveyed indicated that although they were not involved in any formal work-based training, practical training was provided by experienced employees who explain, demonstrate and supervise as new employees learn their tasks. The importance of informal training at enterprise level has not been fully recognised and is undervalued (Guthrie & Barnett 1996). In one study (Billett 1994b) the benefits of an investment in formal training in one enterprise were overshadowed by the reported contributions of everyday experiences (informal training) in the workplace.

Of major concern arising from recent research is that the interest in training is not being sustained in new enterprise-based industrial agreements. Callus (1994) reporting the results of a study of 119 enterprise agreements covering less than 20 employees found that only 44 per cent of agreements made any reference to training compared with 69 per cent of agreements covering 20 employees or more. Misko (1996) concluded that the provision of formal work-based training is not at all widespread in Australian enterprises. Smith (1997) also reported low levels of training provisions in enterprise bargaining negotiations among the enterprises he studied. Moreover, similar but more alarming findings are reported by Guthrie and Barnett (1996). Only one-third of the 1913 recent enterprise agreements they examined mentioned training arrangements and only a quarter of agreements had a structured training approach. Further, only a small percentage of these actually proposed structured training arrangements. Together, this data suggests that commitment to securing benefits through training is stalling.

Specialisation

Enterprises make different levels of contribution to their skill development needs based on their specialisation. Those whose training needs can be found in the existing publicly funded VET provisions, which are dominated by particular industry groupings (e.g. metals, construction, hospitality), may make a lower level of contribution than those enterprises whose specialisation is outside these provisions (Moran 1994). Apart from inequity, including some enterprises sponsoring the training of others, this situation may result in enterprises within strategically important or emerging industries being expected to make higher levels of contributions to VET, thereby potentially inhibiting these provisions (Billett 1994a; Curtain 1996). Hence, the development of the very skills which are a national priority may be inhibited. Equally, inequities in demands upon enterprises may well suppress levels of VET activity. An issue for national policy arising from this is whether different levels of investment expected of enterprises influence their contribution. Also, how does this influence VET provisions in emerging and important strategic industries. Are national VET goals best addressed by arrangements which favour one sector over another?

Location

Access to publicly funded VET provisions is not evenly distributed. Hence, the location of enterprises is likely to influence their contributions to VET. For example, enterprises in remote locations or distant from appropriate publicly funded VET programs may have to make a higher level of contribution or else recruit the required skilled workers from the labour market (Tasmanian Food Industry Training Board 1993). Given that many industries are based in remote localities this may be a factor in how and to what degree they invest in VET. However, it seems that they will invest when training is needed to achieve core business activity, which is likely to be enterprise-specific (Baker & Wooden 1995). Like specialisation, the effects of location on enterprises' contribution to training remains under-researched.

Discussion: Enterprises and investment

The investment in training by small and large enterprises has been the focus of much inquiry. Consistent findings suggest that the larger the enterprise the more likely it will be to make a significant investment in training. Small business investment seems to be inhibited by the nature of its activities, precipitous viability, beliefs about low skill levels and the lack of incentives for small business workers. Evidence suggests that where a skills gap is recognised there is a need to rectify the problem. However, the solution may be sought in the labour market, not through an investment in training. The fact that many small businesses are not involved in formal training must be of concern if the objective of training is to make Australian workplaces more productive, particularly when much of this strategy is premised on enterprises having a key role in the development of the nation's skill base. How can these businesses share the benefits of investing in training if they are not involved in the process or believe it has no relevance to them?

Although there is likely to be ongoing interest by government in the small business commitment to training, these findings suggest that unless fundamental shifts occur in the belief of small-business owners, national goals may remain unfulfilled. Support structures as proposed by Catts (1996) may provide a basis for further activity. Rather than being persuaded, if small businesses are able to experience the benefits of training more directly they may well take greater interest. It seems that 'informal' training provisions are common to small enterprises and should be encouraged as an approach to learning which best suits their needs. So further inquiry is required to identify approaches to informal learning in workplaces which can be modelled to encourage greater participation. Perhaps the work done in Germany, Switzerland and Austria by industry supported guild-based training consultants working with small enterprises might be worth examining in greater detail.

Enterprise investment in training is likely to be influenced by its speciality, and, in particular, whether there is coincidence between the needs of the enterprise and what VET provisions are available through the publicly funded system. Pre-employment courses provide a ready labour market for some enterprises; for others entry-level programs exist. However, many enterprises' specialisation may fall outside the public provision. Hence, they will have to sponsor their own training provisions. In a similar way, enterprises in remote locations are likely to have to invest more than their less isolated counterparts. Alternatively, they can recruit rather than train. There appears to be a gap in the literature on these matters and their likely influence on the overall contribution to the nation's training effort.

Therefore, questions emerging from this analysis are:

- In what ways does the different level of training investment required by enterprises influence their commitment to training?
- What is the impact upon national VET when publicly funded VET arrangements favour particular industries over others?
- What are the long-term national consequences of investment in training which is at a low level and is enterprise specific?

- How can the burden of the development of skills required for national goals best be shared in ways that encourage the investment in skill development by enterprises?

These questions are not addressed by current research.

Enterprises and returns

Returns on investment

Interest in securing information about the returns on investment in training differs widely. Government appears more interested in a cost-benefit analysis (CBA) than enterprises. The sponsorship of research in this area appears to reflect concerns with the justification and evaluation of government policy (Butterworth 1995). For instance, the term 'investment' used in this study and widely elsewhere, is associated with the policy goal of providing evidence that enterprises get a return on their training expenditure. However, the review identifies little interest by enterprises in securing detailed information about returns on training expenditure as Burke (1995), Carnevale and Schulz (1990) Davidson, et al. (1997) and Coopers and Lybrand (1996) have shown. Where it exists, enterprise interest in its investment in training is diverse. Improved work performance (Baker & Wooden 1995; Billett 1994a; Misko 1996), strategic goals (Baker & Wooden 1995; Billett 1994a, Catts 1996, Misko 1996) and compliance with legislation (Baker & Wooden 1995) are reported in Australian studies. The Coopers & Lybrand (1996) study of the economics of training in the 15 member states in the OECD claims that the majority of enterprises believe or acknowledge that staff training does bring returns in the areas of:

- productivity improvements
- greater workforce flexibility
- savings on material and capital costs
- a more motivated workforce
- improved quality of the final product or service

Carnevale and Schulz (1990) earlier proposed that the benefits of training programs can be considered in three categories:

- increased revenue
- decreased or avoided expenses
- intangible benefits

Increased revenue benefits relates to increased output; decreased or avoided expenses relate to improved quality measured by reduction of scrap, absenteeism, inaccuracy, accidents and wasted time or materials and intangible benefits are those benefits that are of value but very difficult to quantify (Misko 1996), such as employee flexibility and improved morale.

Yet in practice it seems that enterprise decisions about investment in VET are often handled as an annual budget item, or as an act of faith, without any cost-benefit analysis (Billett 1994a; Coopers & Lybrand 1996). Some large Australian enterprises claimed to have identified relationships between performance indicators of a general

kind and training (Kennedy 1997; Miller 1996). For example, Selby Smith and Selby Smith's (1996) indicators were of a more general kind—an improved working climate. Similarly, Vickery and Wurzburg (1992) report that the economic value of investing in new technologies was fully realised only when this investment was supported by the training of workers using the new technologies and was associated with appropriate changes in work organisation. Carnevale and Schulz (1990) also cite a number of US companies that evaluate their programs using mainly qualitative data.

In contrast to large enterprises, smaller enterprises appear to reflect a belief that their investment in training would not be worthwhile. This may explain their reluctance to participate in VET. In overview, these enterprises fail to see the benefits of investment in VET let alone having any interest in quantifying that expenditure. Industry trainers have taken a particular interest in demonstrating the benefits of enterprises' investment in training (Catts 1996; Carnevale & Schulz 1990; Leimbach 1994; Mountain 1994; Schneider et al. 1992). However, the evidence is that they or anybody else in enterprises rarely has expertise or uses cost benefit analysis (CBA) (Lombardo 1989).

Approaches to appraisal on returns

Various models of CBA are proposed in the literature. They can best be categorised by the claimed scope of their analysis. That is, there are those which use a few variables (e.g. participant satisfaction, relevance to workplace activities) to arrive at conclusions about returns. Other models are proposed which claim to account for all the variables which influence productivity or bottom-line effects (Bartel 1995; Schneider, Monetta & Wright 1992). Studies that have addressed the question of a direct cost-benefit analysis overwhelmingly concur that accounting validly for all the variables which influence return on investment is either impractical or impossible (Billett 1994a; Hedges & Moss 1996; Leimbach 1994; Robinson & Robinson 1989). The consensus is that there are too many compounding and contradictory variables to sensibly suggest that returns can be quantified in terms of a bottom-line profit. Articles proposing a comprehensive approach tend to be prescriptions for practice, rather than being based in practice. The exceptions offer analyses which are far from being comprehensive. Those studies reporting the frustration and complexity of the task are usually the product of empirical activities.

Given the lack of interest by enterprises in quantifiable CBA, models which measure returns of a few important variables may be welcomed. Arising from this review is the need to provide models of calculating benefits which address those variables in which enterprises are interested. This work has commenced with a number of studies using Kirkpatrick's earlier work to formulate levels of appraisal (e.g. Mountain 1994; Pine & Tingley 1993; cited in Davidson et al. 1997). In the most recent work, Davidson et al.'s (1997) report lists four stages of evaluation—budget evaluation, skills evaluation, project evaluation and strategic evaluation. This study also details six techniques enterprises can use to asses their return on investment. However, while these techniques are useful there is little evidence to suggest that, at this time, there is

either the interest or the expertise in enterprises (except perhaps the very largest) to use them.

Perceptions about the value of VET are the key factors in determining the degree of investment. So acts of belief, more than evidence, appear to be driving decisions about investment in both large and small enterprises. Further inquiry is required to address the task of determining the changing of the belief within smaller enterprises that investment in training is worthwhile. Such perceptions may change when specific and tangible examples are available. If such perceptions cannot be changed, a policy focus may need to consider how to address the danger of the erosion of the national capacity of VET by placing too great a responsibility upon enterprises. Given the recent data about low levels of interest in formal training structures being included in enterprise agreements this concern may be both pertinent and critical.

Questions emerging from the analysis of the literature on the returns to enterprises from their investment in training include:

- How best can barriers which inhibit investment in training by small business be overcome?
- If low levels of investment in training by small business continues, what approaches need to be implemented to maintain and increase the nation's quantum of training activity?

Discussion: Enterprises and returns

There appear to be differences between those returns being sought by government and those that enterprises are actually interested in or able to be identify. Whereas government is more interested in evaluating the impact of its policy decisions, enterprises are interested in whether training can provide specific provisions associated with goals of skill development or strategic change. There is not a lot of evidence of interest from enterprises to secure detailed statements of returns accruing from training, (e.g. Billett 1994a; Deloitte 1989, cited in McDonald 1995; Misko 1996). Four types of returns have been identified in the literature. These are:

- 'bottom-line' profit
- direct influence on productivity
- securing strategic or organisational change goals
- contribution to the community

However, there are quite distinct differences in the interest and expectations about identifying these returns. The relationship between 'bottom-line profit' and training is attracting little interest from enterprises, whereas government has a keen interest at this level, presumably to encourage wider investment in the nation's workforce by the private sector. Productivity increases arising from training were the focus of some studies, with the literature revealing alternatives between limited (e.g. Dockery et al. 1996) vs comprehensive models (e.g. Billett 1994a; Carnevale & Schulz 1990). Securing strategic goals through training includes reduced wastage, reduced absenteeism, fewer accidents, improved staff morale, quality improvement, multi-skilling, enterprise bargaining arrangements etc. (Billett 1994a). Interestingly, training as a contribution to

the community was not a widely reported concern. However, a study of the cost to employers of apprenticeship training (Dockery et al. 1996) reported that employers not only described the benefits of employing apprentices in economic terms, they also felt obliged to contribute to training in their industry and thus the supply of tradespeople. They also wanted to give young people an opportunity. In a study of OECD countries, Coopers and Lybrand (1996) claim a general benefit accrues to the community from a more educated workforce in the form of greater social cohesion, enhanced environmental awareness, improved health and an improved quality of life for individuals. Their report states that such benefits are very important and must be considered when governments and enterprises make investment decisions.

Conclusions

Noting what has been stated by Coopers and Lybrand (1996), it is important to separate national goals from those of enterprises. What is best for Australian industry nationally, in the form of vocationally educated and trained workers, may not be the same as enterprises' perceived needs for enhancing productivity (Sloan 1994; Yeatman 1994). Wolf (1996) states that vocational training systems must include a mix of skills from the categories:

- generic foundation skills development
- industry- or occupation-specific skills in response to current needs
- some specific skills development for the future

Wolf (1996) has shown across OECD countries that employers will pay for current specific skills and some generic skills in order to achieve their core business goals. However, young people setting out to secure employment will choose training which will develop generic skills to maximise job opportunities and adults will want to develop a mix of skills. Wolf (ibid) stresses the need for society to ensure that generic foundation skills, industry/occupation-specific skills and specific skills for the future are all developed and society must bear the cost of ensuring that this occurs in order to meet the demands of the future. As Moran stated in 1993, (p. 9):

> *We are at a critical point in the development of vocational education and training in Australia. Australians are coming to realise that if we focus on Australia's longer term interests, we can achieve a commitment to develop common goals and national plans.*
>
> (Moran 1993, p. 9)

However, the research reviewed here does not reflect this optimism. Rather, enterprises are emphasising their more immediate and specific needs. The degree to which the development of skills is aligned to developing an adaptable national workforce appears at best to be coincidental. From the work identified and appraised in this review it could be advanced that the twin policy goals of increasing the quantum of training and securing the sponsorship of that training by enterprises are not being realised.

It may be necessary to reconsider policy directions about providing support in order to achieve these national goals. Support may be needed for those enterprises which are

contributing to the development of the nation's workforce particularly in those areas which are of emerging national interest and where the expertise and infrastructure for this development is unavailable within the nation's training system.

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Freeing industry's training dollar

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The provision of training in Faulding Pharmaceuticals is discussed. Faulding's has a diverse range of activities, and therefore a range of training needs, and training providers, including in-house and external experts. The Code of Good Manufacturing Practice, the pharmaceutical industry, occupational health and safety (OH&S) legislation, industrial relations, the development of site 'culture', and competency-based training are discussed. Statistics are given on staff skills, occupations and prior education and learning. In-house skills training is outlined and participation in external training is encouraged, either off-site or on-site. Faulding's is prepared to share training, probably with Tecnical and Further Education (TAFE), but it would not be completely out-sourced. It would use the vocational education and training (VET) system for advice on trends in training, and as consultants. It would be interested in tailoring courses to its specific needs using a team approach. It could free up its own training dollars to spend with VET. However, the training must be flexible, for example, classroom training does not suit production operations and many operators work shift hours. A lot of money is spent on training, and the company expects to see a return. Training is not its core business, rather it supports the core business and is the key to developing a superior workforce. To free its training dollar, Faulding needs innovative, flexible, relevant programs. In VET's current structure, Faulding is not an attractive future customer.

Introduction

I AM NOT an 'industry expert', but I am well experienced in pharmaceutical manufacturing and have an intimate knowledge of what is required for my company, which is considered to be leading edge and highly successful. What I do in training, other companies may not want to do. Similarly, I may not want to copy other companies. However, I and my industry colleagues are interested in benchmarking and learning from each other.

We look to systems such as vocational education and training (VET) to support our training efforts and assist us in developing a world class workforce.

Our research and development efforts are only as good as the quality and talent of our research team (largely educated in the Australian tertiary system). Similarly, the

quality of our manufacturing relies heavily on the skills, adaptability and flexibility of our shop-floor operators (who are largely trained in-house).

In this presentation, I will talk about Faulding as a company and what it demands from its manufacturing and I will also explore whether VET is able to access Faulding's training dollar.

Faulding had its tentative beginnings on May 19th, 1845, when Frances Hardy Faulding opened his retail pharmacy in a shop at 5 Rundle Street, in Adelaide, South Australia. He dispensed physicians' and surgeons' prescriptions, medicine chests, toilet requisites and sheep, cattle and horse medicines.

Since then F H Faulding and Co has emerged as a dynamic and rapidly growing organisation. Faulding is one of only three major Australian-owned pharmaceutical manufacturers—and the oldest.

Today, Faulding is a world leader in the manufacture of pelletised modified-release drugs and anti-cancer injectible drugs. These are marketed in over 50 countries worldwide.

When as small as Faulding in the world scale of pharmaceutical companies, it is preferable to be in the value-adding niche market, rather than competing head-on with the large companies who are trying to create totally new drug substances.

This approach to niche marketing has been a key element in Faulding's success.

Some statistics about Faulding are:

- annual sales over $1.5 billion
- approximately 3400 employees worldwide
- approximately 2000 employees in Australia
- over 150 years with Adelaide as headquarters

Its main businesses are:

- health care services and distribution
- injectible pharmaceuticals
- pharmaceutical products
- health and beauty products
- bio-technology products
- product development
- manufacturing

Exports are approximately $100 million or approximately 60 per cent of our output from Salisbury and Mulgrave plants.

In Australia we are ranked 33rd in ethical pharmaceutical sales but third in exports.

Exports include:

- pharmaceuticals
- health care products
- patented novel products

- ❖ generic products (novel and value added)
- ❖ technology licences
- ❖ services (e.g. clinical trials)

Research and development comprises approximately 12 per cent of sales. Total Faulding research and development is approximately $36 million, of which approximately $22 million is spent in Australia.

There are four sites in Australia and a further four sites overseas.

Note that all manufacturing units function quite independently of each other on a daily basis, but at management level there is integration to achieve synergies.

The four Australian factories are managed as independent business units, within the manufacturing division, and each trains in its own way, and has its own training budget.

For Faulding, this makes a lot of sense, given the quite different manufacturing environments, pharmaceutical technologies and regulatory requirements for each different business.

For example, the 'no frills' soap factory at Shepparton has different business management, regulatory and training requirements from the high-cost, high-technology, sterile injectibles factory at Mulgrave.

The outside world sees Faulding as one large company. However, in operational and training terms, it is, in fact, a number of distinct, smaller and autonomous businesses.

There are approximately 340 employees at Salisbury involved in product development and operational activities.

These activities range from product and business development to high-tech manufacturing, with the supporting infrastructure of engineers, laboratory scientists, technicians, quality assurance and planning and logistics personnel.

The diverse range of these activities gives rise to a diverse range of training needs. Accordingly we have a diverse range of training providers, including in-house and external experts.

Why train?

1. Code of Good Manufacturing Practice

The Code of Good Manufacturing Practice is known as 'GMP' and is the code of practice which regulates the pharmaceutical industry. A Pharmaceutical Manufacturing Licence is obtained only upon demonstrating adequate standards of GMP. These standards may vary from country to country, and licensing inspections take place annually. We are required to demonstrate to various regulatory authorities that we are in control of our equipment, personnel and processes.

The Code of GMP stipulates that adequate training be provided to enable employees to perform their assigned functions adequately and correctly. Formal training records are required and these are reviewed during regular GMP and Quality Assurance audits.

2. Pharmaceutical industry

In the pharmaceutical industry, all activities must be documented. Records of production, equipment maintenance and laboratory testing are considered to be legally binding documents.

Employees must be numerate and literate—and this is a key criterion for staff selection at the shop-floor (operatives are tested at recruitment).

Documentation is the key in our industry and makes up the building blocks of our training modules.

3. Occupational health and safety legislation

We are legally and morally required to provide adequate safety training to our employees.

4. Industrial relations

Faulding took advantage of the initiatives of the late 1980s, i.e. award restructuring and the Structural Efficiency Principle, to set the scene for formalisation of training and reclassification of operator skills.

We formalised the notions of career paths for all shop-floor employees, and linked pay rates to demonstrable skills.

We have been training operators, formally, in-house, since 1985 and introduced competency-based training in 1989.

Our staff turnover is very low. Most of the pharmaceutical manufacturing activity in Australia takes place in Melbourne and Sydney, so we are not able to recruit appropriately trained operators. Therefore, once we have introduced new employees to our company and have invested in their training, we do not easily let them go.

There is a relatively small number of 'new hires'. Our research and development activity is targeted at high-technology products, requiring sophisticated equipment and relatively little labour. Most of the 'new hires' are scientific recruits into research and development or sales and marketing professionals.

Most of the shop-floor training requirement is on-going and developmental.

5. Good business practice

There is direct correlation between training and product quality:

- ❖ trained, skilled operators are able to troubleshoot and solve problems (at Salisbury we have continuous improvement and process improvement teams comprised primarily of operators)

- processes are more reproducible
- waste is minimised
- skilled operators are able to contribute to process development and scale up activities

6. Development of site 'culture'

We consider that the development of an appropriate culture is very important. We impart company knowledge, teaching new employees the company history and current operations, and show employees how to access various company benefits, e.g. a share plan, superannuation, company uniform, discount purchases, etc.

We also try to foster desirable attributes:

- attitude, honesty, initiative
- communication
- working in teams
- trying to create 'do-ers' and 'thinkers' and instilling the company attitude towards GMP, safety and industrial relations

In developing our culture we address both:

- skills training ('doing the job') and
- foundation skills training
  - company policies
  - procedures and systems

We have a diverse range of people who will have had front end training or will require ongoing training and development.

So, we approach training on two fronts:

- training for technical competence
- personal and professional skills development

At Salisbury, we have staff with an extremely diverse range of skills, occupations and prior education and learning. Here are some details. Tertiary and higher degree:

- science
- chemistry (pure and applied)
- engineering
- computing
- pharmacy
- accountancy
- psychology
- economics
- mathematics
- statistics
- medicine
- nursing

- business management
- legal
- human resources
- microbiology

Our training dollars are invested in skills training and development of operative and technical staff. Post-secondary and vocational:

- business
- occupational health and safety
- sales and marketing
- management
- trade: mechanical and electrical
- information technology
- accounting
- technical (laboratory)
- clerical
- English proficiency
- electronic
- medical terminology
- paralegal

Many long-term shop-floor employees would not have completed the equivalent of the current year 10. However, minimum entry level now (and for the past five years or so) is completion of year 12. We have several shop-floor operators who have completed Arts and Science degrees.

All site employees are trained in:

- code of good manufacturing practice
- occupational health and safety
- fire safety
- evacuation
- electrical safety
- crisis management

Staff in designated areas receive training in:

- chemical safety
- chemical spills
- emergency shut down
- equipment tag out
- use of hand tools

For production operators, we have 26 competency-based modules. These modules:

- specifically address processes and equipment
- are all prepared in house

- are delivered by workplace trainers

In addition, we have general education modules which are:

- also prepared in house
- usually delivered by managers or technical staff
- available to all staff to enhance and refresh basic understanding

Some of the courses are:

- pH meters
- titrations
- basic emulsion theory
- Faulding coating technology
- basic statistics
- staff supervision
- staff management
- problem solving/decision making
- project management
- performance appraisal

We also encourage participation in external training. This training is either attended off-site or delivered on-site at Salisbury by external consultants, for example:

- fire wardens
- first aid
- breathing apparatus
- confined spaces
- MRP11—JIT (just in time)
- trade training (for operatives)
- management development (senior staff)
- higher degree (relevant qualifications) e.g. MBA
- personal and professional development (e.g. universities, TAFE, AIM [Australian Institute of Management] etc.)

Competency-based training

In 1989 we reviewed our systems and decided we had to focus on the way we approached the vocational education and training of our workforce because the staff wanted it and the business needed it.

We know that there is a lot of debate about competency-based training in the VET system.

Competency-based training (CBT) is the preferred means for the delivery of vocational training by both the Federal Government and unions and also for our company. It fits the regulatory nature of our business, i.e. the need to prove learning. CBT suits the way we work, particularly at operator level.

Our CBT system complements our other systems and initiatives as follows:

- enterprise agreement
- operator skill classification structure
- multi-skilling
- career development
- world class manufacturing
- best practice
- continuous improvement

Competencies are defined by both management and skilled shop-floor operators.

The competencies are clearly stated. The competency standards are clearly defined. We have a modular approach, with a number of learning activities.

Flexibility is very important—for both the individual and the company. Training is not delivered in classrooms, but rather in the workplace and on the job and must fit in with scheduled production and other activities.

We utilise a variety of self-instructional resources. The modules are self paced. Assessment is by demonstrated performance on the job.

For our operative staff, the CBT approach to training has been ideal.

It has been the only style of training we have been able to sell well to the operators. They have embraced it because it is transparent, fair and non-threatening and they are involved in creating it.

They can see why they need to train and the rewards they will reap along the way, i.e. increased skills, pay and career progression.

They don't have a classroom in which to fall asleep and the knowledge and skills acquired can be immediately used (and hence reinforced).

There are many benefits for both the company and the trainee associated with the flexibility afforded by the CBT approach.

To be successful, the CBT system relies heavily upon the integrity of the in-house documentation (as mentioned earlier, documentation is a key feature of the pharmaceutical industry). Standard operating procedures, operating instructions, batch records and company policies and procedures must be accurate and completely up to date.

Learners learn at different rates and by different styles. They also have various needs, interests, motivations, abilities and previously learned skills.

Details of workplace trainers (WPT) are that they:

- undergo training in house (by the training co-ordinator)
- are provided for each key trade and process
- act as a mentor, monitoring and coaching trainees
- plan operator training and career paths
- develop CBT modules and learning guides

- ❖ deliver training sessions as required
- ❖ maintain training records

Of course, not all operators are undergoing training at any one time. This is dependent upon individual needs and the company plan.

Training activities are planned, taking into account the current production schedule and the plans for future product, technology and site development.

We have a training co-ordinator (now called a workplace development co-ordinator) whose role is to:

- ❖ support factory managers
- ❖ facilitate and co-ordinate all training activities
- ❖ train the workplace trainers
- ❖ coach, mentor and encourage the workplace trainers
- ❖ record all training outcomes in the training data base and document all operator reclassifications
- ❖ issue certificates of achievement
- ❖ advise on modules requiring development or revision
- ❖ investigate and introduce new training methodologies, e.g. the action-learning approach to the development of the latest set of modules

The responsibility for training and development of staff and operators resides with the individual key area and departmental managers.

General education related to basic skills and functions is often delivered by the area managers and senior staff—for example, basic chemistry sessions to provide a knowledge base for the operators will be delivered by laboratory scientists.

All this training is actually the in-house component of the national standards and curricula for pharmaceutical operative training.

All our training is aligned to meet the needs of regulatory and statutory authorities and our own business and training needs at Salisbury.

There may be some sharing of resources between the four manufacturing sites in Australia. However, the factories will continue to be managed as independent business units.

We will continue to have a small, highly specialised workforce with low turnover. We will require the ability to call in and effectively use casuals for overflow work.

We will have quite specialised equipment and production processes with concern for security and confidentiality of our intellectual property and know how.

We will have just-in-time training, with very little classroom delivery. There will be tailored career paths and training and development plans for operatives.

We would share the training of operatives, probably with TAFE, but this training would not be completely out-sourced.

Our operators will be required to have better mechanical and technical skills—combining elements, as related to the manufacturing industry, of:

- trade
- technical
- first line supervision

All staff will need to be computer literate and operators will all be program logic controller (or PLC) literate.

How would we use the VET system?

We would use the VET system firstly for advice on current and future trends in training, providing the most up-to-date information which will meet our needs and help us provide the best education and training experiences for staff and the company.

We would also use them as training consultants to provide:

- skills audits
- training needs analyses
- skills matrices
- development of learning resources
- distance learning
- assessment processes
- training our trainers

We would be interested in tailoring whole courses or elements of courses to our specific needs, and also in cross-disciplinary teaching teams.

For example, our employees need to have high levels of mechanical skill in an environment which also requires high-level hygienic work practices and superior documentation and reporting skills.

Mechanical skill comes from engineering programs, hygiene is usually learned from a food-industry program and documentation very often comes from general education or quality assurance.

Perhaps VET providers could put together such teams for us? However, we are not interested in a collection of individuals delivering the program—we want a team approach.

Our people are our competitive advantage. We are not a training provider. It would be ideal, for us, if VET had experts with the ability and understanding to put together programs to meet the diverse needs of companies such as Faulding.

These experts should be flexible and have an appreciation of the environment in which Australian businesses are trying to compete—both nationally and globally.

We would also appreciate advice on how we can obtain information on funding that we might be able to access, or on the availability of new, innovative courses which might meet some of our needs.

Faulding as a customer

In your current structure, we are not an attractive future customer.

We have very tight criteria for the implementation of new processes.

Our training is mainly ongoing, up-skilling, retraining and refresher training. Group size is small and much training is individually based and tailored. Faulding needs to train to preserve and improve the quality of what we do and because of regulatory requirements.

We can either free up our own training dollars by obtaining external assistance *or* we can free up our own dollars to spend with VET.

However, we can free up our training dollars only for products which we need and which complement the training we already provide.

The product (i.e. the training) must be flexible and creative in the ways it is delivered, for example, classroom-style training does not suit our production operations and many operators work shift hours.

We would appreciate a value-added service around training, for example, audits, assessments, analyses and advice from VET experts on trends and industry practices.

VET providers would be sensitive to our industrial relations and workplace initiatives and respect the confidentiality of our processes, as they work with us to build the skill base of our workforce.

We cannot stress enough the importance of having a well-skilled, motivated workforce.

This is best achieved through superior training, but not through training made to preconceived formulas.

Conclusion

At Salisbury, we spend a lot of dollars on training. Our training dollar is in constant competition with other areas of expenditure e.g.: research projects, new equipment investments etc. and training dollars come out of the total budget for the factory.

The company expects to see a return on any investment, whether it be on plant and equipment or on the training of our people.

And so it is with training—we like to see results and know that the investment is justified.

Training is not our core business, rather it supports our core business and is the key to developing a superior workforce. We need the best training advice that we can get.

And so, to free our training dollar, we need innovative, flexible, relevant programs which will assist our company to hone the skills of our workforce as the company strives to succeed in a highly competitive, demanding and rapidly changing business environment.

Improving responsiveness of supply systems

Nigel Smart
General Manager, Strategic Planning and Research, Office of Training and Further Education, Victoria

Increasing the responsiveness of training delivery is discussed. Steps with the potential to improve the supply system are explored. The responsiveness of the vocational education and training (VET) supply system, with particular reference to Victorian policy initiatives, is discussed. A model for government influence on the training market, the relations between suppliers and demand for VET services is outlined. At least six powerful forces are pushing the system to change and are keys to increase the responsiveness of the system to its clients: global markets; youth unemployment; demands of industry/enterprises; national framework; and flexible delivery. All training systems are going through substantial change. Making the supply side of training delivery more responsive to clients most effectively meets the challenges of change.

Introduction

THE NEED TO increase the responsiveness of training delivery has been a key plank of both State and Commonwealth government policy over several years. Much has been written on the subject and many initiatives taken. A review of the proceedings of many of the recent conferences on vocational education and training (VET) identifies a plethora of papers on the subject, many of which advocate the key role to be played by markets and competition in achieving this responsiveness.

This paper will not provide a review of the previous work but will investigate steps which have the potential to improve the supply system, and will discuss some of the policy initiatives being developed in Victoria to enhance supply system responsiveness in that State.

The paper is developed around three linked elements:

- some thoughts on the responsiveness of the VET supply system, with particular reference to the Victorian system
- a model for government influence over the training market and the relations between suppliers and the demand for VET services

- some examples of Victoria's approach to developing a more responsive supply system

Some thoughts on the responsiveness of the VET supply system

Is the system responsive?

There is a wide distribution of views about the responsiveness of the VET systems. Attitudes seem to vary tremendously and market research often presents results which seem paradoxical. Surveys have been problematic and often have methodological problems, as they focus on employers that are users of the VET system and do not necessarily address the views of employers who are *not* using the VET system, or else they use inadequate sampling techniques. The following table reflects some of the views and survey results that have been recently presented.

Table 1: Responsiveness of the VET system

75% of employers were satisfied that skills acquired are relevant to their current needs. Employer Satisfaction Survey 1995
Over 80% of students reported that they had achieved their main reason for doing their course. Graduate Destination Survey 1995
'...In general employers and students expressed satisfaction with VET.' (Moreland Group 1997)
'The current TAFE arrangements often reflect supply side rigidity.' Dr David Kemp
'Employers believe that there is very little capacity to influence key aspects of training provision...' (Coopers & Lybrand 1996)
49% of employers were satisfied with the flexibility of course timetables. Employer Satisfaction Survey 1995

In general the research seems to suggest that as far as students are concerned, VET is meeting their needs for undertaking vocational education and training in most cases. It does suggest that the training could be improved by increasing access to work experience which utilises the training delivered. For employers using the VET system it also seems that the system is considered to be providing valuable training in most cases. Employers do see, however, the need for some substantial improvements in the service if the training is to more fully meet their needs. There remain, however, sizeable numbers of students and employers not satisfied with the services delivered.

More extensive market research on both student attitudes and employer attitudes is essential. This market research needs to discriminate between employer attitudes across State/Territory boundaries, across industries and enterprises, and across individual providers.

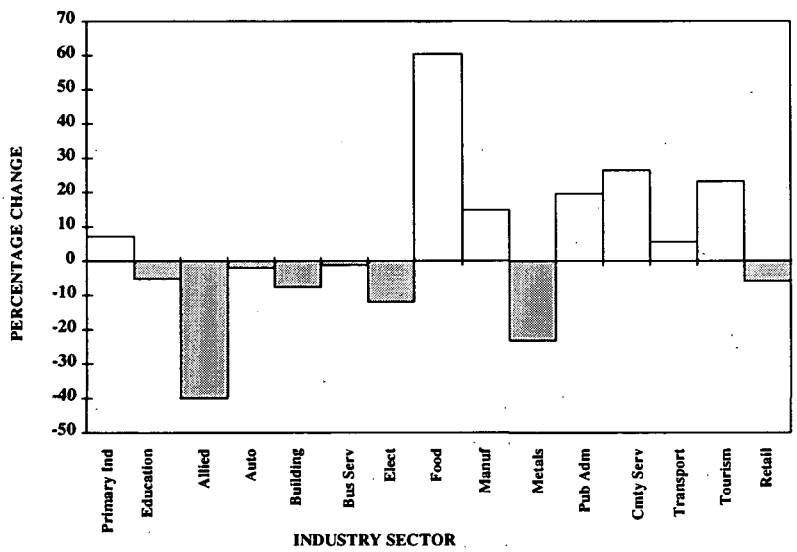
The Victorian system has been responsive

The next point I would like to make, and I can speak only from my understanding of Victoria here, is that Technical and Further Education (TAFE) and the VET system have become more responsive over the last several years.

There may still be a way to go for a fully satisfactory level of customer satisfaction but it is important to recognise that the system *has* changed, and changed significantly, from where it was several years ago. To demonstrate some of these shifts I have selected a few examples of major change in the delivery of VET in Victoria.

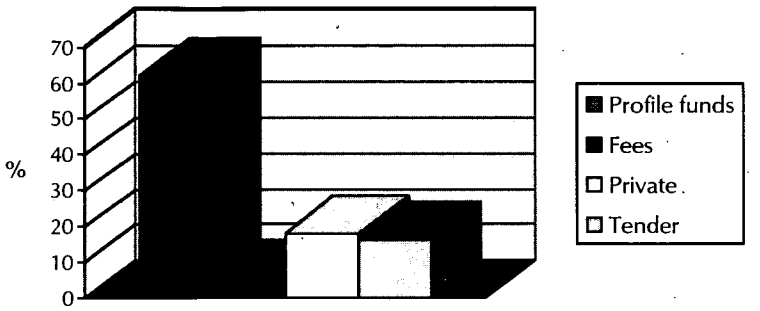
The first example reflects the shift in government-funded delivery of VET courses over the period 1993–1996. The following chart (Figure 1) shows the changes in delivery for each of the industry sectors relative to the overall growth during that period. It shows clearly a significant shift in resources away from the allied, electrical and metals industry groups towards food, public administration, community services and tourism. In the case of the food sector, delivery has increased by 60 per cent over the system average in that time. These changes reflect changes in industry demand and employment needs. They do not reflect a system restricted to minor variations in historical patterns of funding.

Figure 1: Relative changes by industry sector—Victoria 1993–1996



The second example (Figure 2) shows the projected distribution of funding sources for TAFE institutes in Victoria in 1998. In this year it is anticipated that somewhere between 60 per cent to 65 per cent of all TAFE current income will come from the standard profile funding. The remaining income will come from funding from private service delivery, competitive tendering for government services, new apprenticeship arrangements and fees. This is a far cry from the situation just a few years ago when virtually all funds were from profile funding, with a small fee component.

Figure 2: Recurrent funding of TAFE institutes (estimated) 1998



Powerful forces for further change

There are at least six powerful forces which are pushing the system to change even more and which are the key forces for increasing the responsiveness of the system to its clients. It could be argued that the changes that have already been made in Victoria and Australia have gone a long way to meeting client needs. It is the existence of these powerful forces for change which suggest that VET systems will remain under pressure for some time to continue to improve the service it can deliver to employers and to students. The six forces are identified in the following table.

Table 2: Six powerful forces for change

- Global markets
- Youth unemployment
- Demands of industry/enterprises
- National framework
- Flexible delivery
- Value for money

Each of these forces for change are discussed in more detail.

The globalisation of industry

A great deal has been written on this subject but it is worth repeating that the environment in which industry operates is increasingly competitive as barriers to national markets fall and industry all around the world is hungry, even avaricious, for growth. For Australian firms to compete effectively, the quality of the skills of the people in the enterprises is critical. Elementary economics tells us that growth is critical to maintaining living standards.

Youth unemployment

The education, training and employment systems are not meeting the needs of this important group. Training systems *must* be made relevant to all young people to maximise their chances of engaging in the workforce productively and effectively.

Demands of industry

The demands of industry include:

- delivery of effective training to small- and medium-sized businesses
- delivery of customised training
- delivery of training more focussed on meeting enterprise needs
- a greater role for industry in the development of the training agenda

Once, it might have been acceptable to say to clients, 'This is what we deliver. Take it, or leave it.' Just as industry has had to develop greater responsiveness to survive, so too will training providers. Once clients, and particularly enterprises, may have seen training as something external to them, and something that they had little power to influence. This is no longer the case.

The need for a national framework

The differences between States and Territories which cause unproductive effort and inefficient practices need changing. National frameworks which ensure that training in one State/Territory is recognised in another and which enable national industries to develop consistent practices are essential if industry is to operate efficiently. The capacity of a national industry to develop partnerships with single training providers, or a small group of training providers, which are not constrained to deliver their services within an individual State or Territory, is essential.

Flexible delivery

The convergence of computing and communications technologies, together with the rapid increase in the power and distribution of computers, has the potential to revolutionise training delivery. We can be sure about the potential that this convergence will have in opening up a huge range of opportunities, as well as threats. If the VET systems do not respond effectively they risk being marginalised by either overseas competitors or private providers unencumbered by redundant capital stock.

Value for money

The short halcyon period of growth in government funding appears to be already at an end. As governments themselves come under increasing pressure to cut costs and deregulate, so too will government funding for training come under pressure. There will be continual demands to improve efficiency and productivity.

A model for government influence over the training market

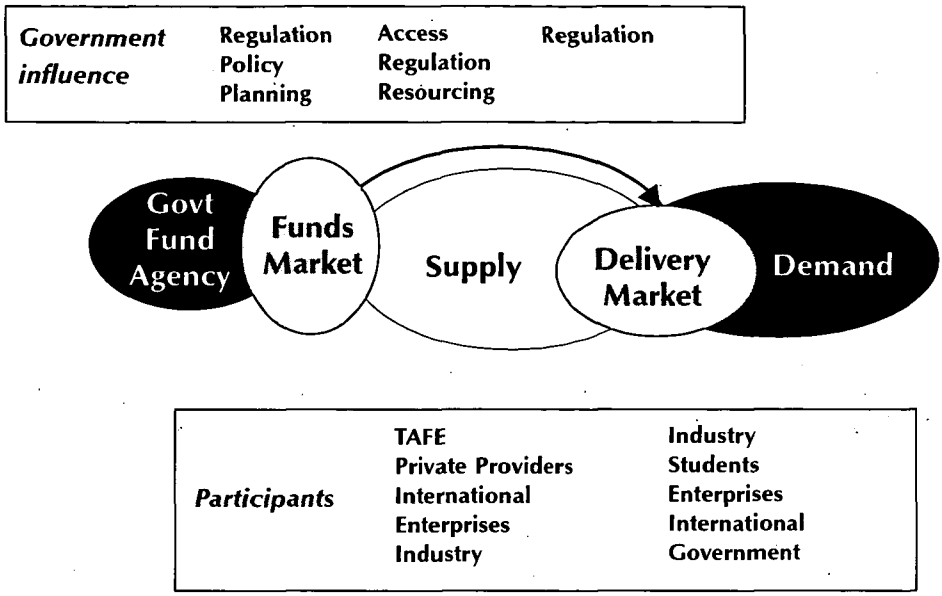
The VET system is complex. It needs to be responsive to many interested parties, including:

- national government
- State/Territory governments
- industry groups
- enterprises
- students
- unions

The key is to identify *what* the demands are, and to find an effective balance for the sometimes conflicting nature of the demands. In Victoria, we have recognised the difficulty of achieving this through centralised structures and have moved through to the development of a system better able to respond directly to the various needs as they are identified. This has involved increased competition between providers, reducing barriers to entry, making training-delivery systems more transparent and accessible, and moving more towards effective relations between providers and clients.

The following diagram (Figure 3) represents a model of the VET market. It shows it as having, in fact, two separate elements. The first is the market that exists between the funding agency and the service suppliers, be they public or private. The second market is the market that exists between the service suppliers and the receivers of training services. Government influences the operation of these two markets and the relative importance of these markets through its regulatory, resourcing and planning policies. In Victoria, the objective has been to change the emphasis from the funds market to the delivery market, to increase the focus on the relationship between the supplier and client, and to empower the client. This approach has been taken because if the supplier is doing its job properly, it is in a much better position to know what those needing training want than a central agency. This is not to say that governments should not influence the broad direction or potential elements of training delivery, but reflects the view that in most instances it is better for the provider and client to determine mutually what is required.

Figure 3: A model of the VET market



Let us now look at ways in which governments can influence markets, supply and demand in order to increase supply system responsiveness.

Influencing both the funds and delivery markets

Governments can influence the way the markets operate through a range of initiatives and approaches. They include:

- redefining the interface between supply and demand by empowering clients
- promoting competitive practices through National Competition Policy
- removing regulatory impediments (many regulations define interfaces in ways no longer effective) by delegation, regulation review or abolition
- modifying of resourcing strategies through competitive tendering or user choice
- using strategic and profile planning to inform rather than control

Each of these elements can be used to either restrain or enhance the interaction between supply and demand.

Influencing supply

Governments possess a range of strategies that can be used to influence the supply side of the market. They include:

- changing the management and organisation culture by making providers more autonomous yet accountable, and changing bureaucratic attitudes and practices within government administration and institutes
- expanding devolution and moving decision making closer to the point of delivery

- enhancing competitive arrangements by increasing the size of the funding 'cake' mwhich is open to tender and can open up the market to both private and public providers
- reviewing VET structures and developing and supporting structures which are best able to meet government policy objectives and the demands of clients
- improving quality through promoting best practice, either through exhortation or by channelling funds to those areas where best practice is achieved
- encouraging flexible delivery
- separating owner, purchaser and provider and so ensuring greater transparency in the use of taxpayers' funds and greater efficiency in the use of those funds

The supply side has been the area where governments have traditionally exercised greatest control. The challenge for VET systems is to relinquish that control, to enable a more customer-focussed operation to develop, while ensuring that taxpayers' funds are spent effectively and government industry policies are properly implemented.

Influencing demand

It is in the area of influencing demand that governments have the least control and must rely more on informing and promoting the values of VET. The ways in which governments can influence demand include:

- developing the awareness of training value; we tend to assume that training is a good thing and that employers and students take the same view; as recent Australian Bureau of Statistics (ABS) surveys have discovered, there are many small and medium-sized enterprises that do not see training as making a significant contribution to their operations
- informing clients of training opportunities; recent surveys suggest that many employers are not aware of what training is available; the marketing undertaken by TAFE institutes and VET systems could be greatly enhanced
- understanding client needs; as indicated earlier in this paper, it is clear that there is a wide variety of views of what the clients' needs are; there is a clear need for VET systems to better understand their markets, and the structures of their markets, and not treat enterprises and students as homogenous wholes
- assisting in access to training; VET systems can support the brokering that can bring training providers, enterprises and students together; they can assist in the marketing which shows enterprises how to go about obtaining training for their employees and getting the most effective training
- empowering clients; VET systems can increase the ability of clients to negotiate the form and content of the training they receive so that it better meets their individual needs
- extending client influence over funding; this can be achieved by moving from direct profile purchasers to a wider application of user choice or market selection

In my view, it is in this area of influencing demand that possibly the least work has been done within the Victorian VET system. It is also, possibly, the area which has the greatest potential. If successful in this area, VET systems could develop a changed

view within industry—especially small- and medium-sized enterprises—of the value of training, and obtain greater commitment from these enterprises to the value of their own training.

Some examples of Victoria's approach to developing a more responsive supply system

I shall now move on to outline some of the strategies that Victoria is adopting to develop more responsive supply systems, and to facilitate the development of an effective client-oriented system.

Victoria has already moved significantly to expand competitive and market influences in its supply systems. It has:

- increased autonomy for TAFE institutes
- made institutes the employers of their own staff
- established an effective purchaser/provider relationship between the Office of Training and Further Education (OTFE) and providers
- tendered an increasing amount of government-funded delivery to both public and private providers
- expanded private provider access

In Victoria we are continuing to investigate ways of improving the responsiveness of the systems, and I shall now talk about six of these.

The Ministerial Review of the provision of TAFE in the Melbourne metropolitan area

This review is looking at the ways in which TAFE institutes can best be positioned to meet the challenges ahead. It is focussing on metropolitan provision but the very nature of the questions it will have to answer means that its recommendations are likely to impact on the whole VET system in Victoria. It is providing an opportunity to look at:

- the strategies being adopted by OTFE and institutes in the context of the pressures for change I have referred to earlier
- whether the structures that currently exist are most appropriate, given that they have grown largely to meet historical needs
- how the system can co-operate effectively to meet both government and client needs
- how the efficiency of the system can be improved to meet the continuing demands to reduce costs and improve quality and responsiveness
- how the national agenda is impacting on institutes, and strategies for maximising the benefits

National Competition Policy

National Competition Policy is now fully operational in all TAFE institutes in Victoria. Because of the independence of TAFE institutes and the structure for TAFE that has been developed in Victoria, the National Competition Policy could have a substantial impact on Victorian operations.

The National Competition Code, which effectively applies Part IV of the *Trade Practices Act* to business operations, has been deemed to apply to all TAFE institutes. This has limited the scope for co-operation between TAFE institutes. While they can still co-operate in joint ventures or in strategic alliances, all institutes need to ensure that these arrangements do not conflict with the National Competition Code. A similar situation exists for universities, and there may be value in seeking some form of exemption from the ACCC to enable effective co-operation, which improves efficiency and the effective use of taxpayers' funds, to be adopted.

Competitive neutrality principles also apply to TAFE institutes in Victoria. In any commercial activities, including the competition for funds put out to tender by OTFE, competitive neutrality pricing principles must be adopted by TAFE institutes. In this way, the pricing arrangements of both the public and private providers are brought more evenly into balance and a more effective competitive environment established. They ensure that the full cost of public delivery is identified in any commercial or tendering arrangement. Should a private provider consider that this has not been done by a public provider, they have the opportunity to access an independent complaints mechanism.

This initiative has given institutes the opportunity to look at their policies and practices and enhance their efficiency and improve the way they do business.

Deregulation proposals

Victoria is currently in the midst of a review of the legislation and regulation that relates to VET. In part, this review arises from the demands of National Competition Policy but it is largely driven by the wish to make the Victorian system more efficient and more responsive to the needs of clients. A discussion paper identifying potential legislative and regulatory change has been prepared and distributed widely. Key features of this discussion paper include:

- adoption of a single set of regulations for apprenticeships and traineeships, thereby removing any differentiation between the two
- a simplified and more extensively delegated accreditation system, which covers both VET and ACFE
- streamlined certification with the ceasing by OTFE of providing a central certificate on the completion of trades training
- establishing the State Training Board as an approving authority under the Commonwealth Workplace Relations legislation
- enabling the provision of part-time apprenticeships

The emphasis in these proposals has been to enable local providers to respond to the needs of their clients. It is in this way that we see a more responsive and effective system being developed.

Review of resourcing strategies

As most of you would be aware, Victoria has had a purchaser/provider model based on a pricing model for some time. This approach has enabled OTFE to buy student contact hours from individual providers, subject to a performance agreement being entered into by both parties. With the shift to a more client-oriented system, and the move away from activity-based delivery systems based on student contact hours, to output- or outcome-based systems based on competencies, there is a need to reconsider the best ways of allocating and distributing government funds. OTFE is currently about to undertake a review of its funding processes. This review will have the following elements:

- an investigation of ways of extending the existing purchaser/provider model, to improve its effectiveness:
  - focus on outcomes/outputs
  - application to training packages and competency based training
  - alternative tendering strategies
- investigation of what needs to be resourced:
  - delivery
  - training levels
  - assessment
- investigate how the supply/demand market can be enhanced and clients empowered, for example:
  - review the role of the funder/supplier market
  - investigate means by which taxation or government subsidies can be used to support or enhance training delivery
  - consider scope for greater use of entitlements, giving clients more control over the funds that are used to support their training
  - investigate opportunities for matching government and industry or enterprise funding

This project has real potential to affect the way Victorian Government funds and supports training delivery in the twenty-first century.

The Virtual Campus

As mentioned previously, flexible delivery has the potential to greatly influence both the way training is delivered and the access of clients to training. On-line training, while it is limited to particular aspects of training, has the potential to enable clients in remote areas to access levels of training that have hitherto been impossible. It also has the potential to deliver training at the workplace and at home, at times and locations that are convenient to clients.

The Virtual Campus, which is being developed in Victoria, will provide an electronic platform which can be used by all providers. It has the following features:

- training can be delivered on demand
- customised training
- linked to traditional or non-computer based training
- it is simple and smart, i.e., it does not require either the trainer or trainee to have extensive computer skills
- it supports multiple-mode communications
- it enables on-line enrolment

Conclusion

These initiatives are a few of the many initiatives that are under way in Victoria. I am aware that in other States and Territories ranges of initiatives are also being undertaken. I have tried to identify in my list some of those initiatives in Victoria which may be different or of interest to people, both in Victoria and in other States and Territories.

All training systems are going through—and have been going through—periods of substantial change. It is, in my view, by making the supply side of training delivery more responsive to clients that the challenges of change can be most effectively met.

Developing the policy

Joy Selby Smith and Chris Selby Smith
Joy Selby Smith, Principal of Joy Selby Smith Pty Ltd
Chris Selby Smith, Professor, Monash University

The focus is on the user choice policy, looking at the complexity of policy development generally; the development of user choice policy; and important longer-term aspects of policy development process. The development and implementation of national policies in vocational education and training (VET) involve juggling broad policy directions with differences among States and Territories. Interactions and feedback occur between policy-making phases. In policy development, participants may concede ground initially, but renew resistance later. Full implementation of user choice for off-the-job training for apprentices and trainees in 1998 was agreed by all ministers in 1996, but that agreement no longer holds. Finally, there are doubts about the role of evaluation, the final stage in public policy making. User choice will be reconsidered in 1999 after an evaluation based, at most, on 15 months' operation of the new arrangements.

Introduction

THE ORGANISERS OF this session 'user choice and beyond', have asked me to speak on the topic 'developing the policy'. How did we get to where we are?

Put simply, '[user choice] is about training decisions at the point of demand rather than supply' (ANTA 1995, p. 1). At its July 1996 meeting the Australian National Training Authority (ANTA) Ministerial Council:

> *agreed to progressive implementation of user choice during 1997 and to full implementation of user choice for off-the-job training for apprentices and trainees from 1 January 1998*

and

> *agreed that ANTA after consultation with Industry and State/Territory and Commonwealth Ministers, would provide for MINCO [Ministerial Council] in September 1996 a report setting out:*
>
> - *a statement of user choice policy*
> - *details of administrative arrangements required to support the policy*
> - *issues that need to be resolved to achieve full implementation from 1 January 1998.*
>
> (Joy Selby Smith et al. 1996, p. 1)

Our involvement was primarily with the development of the statement on user choice policy.

It should also be noted that, following the May 1996 MINCO meeting, work was set in hand to develop the 'New Apprenticeships'[1] arrangements. This work was initially carried out by an Industry Reference Group, chaired by Stella Axarlis, an ANTA Board member. The Industry Reference Group also reported to ministers in September 1996. Further work was then undertaken by ANTA, the outcome being a detailed policy framework for the implementation of New Apprenticeships, incorporating user choice. The ANTA Board reported on this work to MINCO in May 1997 (ANTA 1997). MINCO's decisions are given in *The report of the ANTA board on the implementation of New Apprenticeships including user choice* (ANTA 1997).

This paper, in three parts:

- comments on the complexity of policy development generally
- describes the development of user choice policy from the perspective of our involvement
- considers four aspects of the user choice policy development process which are likely to be important in the longer term (that is, the 'beyond' part of the topic)

Policy development: A complex process

The basis of government is jugglery. If it works and lasts it becomes policy.

(Lewis 1996, p. 155)

This is not a new idea. The quote is from the vizier (the Max Moore-Wilton, or, if you prefer, the Sir Humphrey Appleby) of the caliph of Baghdad in the 9th century. Nevertheless jugglery can be an appropriate term to describe the interactions which are at the heart of current public policy making.

Extending this jugglery metaphor further it can be argued that three elements characterise policy development: the formal policy process, the distribution of power among stakeholders and the assumptive worlds of the key players (C Selby Smith et al. 1992, vol. 2, p. 15). Jugglery—interaction—occurs within and between these three elements. It is how these interactions are played out that determines policy outcomes.

Even in the simplest case, an initiative from one minister and department, with sole responsibility for policy development and implementation, and involving one level of government only, there can be a range of players (the functional department, Finance, Premier and Cabinet, etc. and external stakeholders) and their interactions need not be straight forward.

In vocational education and training (VET), these interactions are more complex. At least four factors contribute to this complexity. First, the ANTA agreement makes for complicated patterns of interaction in the development of VET policy, including for user choice. ANTA—the ANTA board—is neither a State/Territory nor a Commonwealth body. It provides advice to a Ministerial Council which includes all relevant State, Territory and Commonwealth Ministers.[2] The balance of power and

influence between these parties is not necessarily settled and the boundaries between 'operational responsibilities' and 'national policy' can be contentious. VET remains contested territory.

Secondly, we should not overlook that there are interactions between VET policy processes and the broader policy approaches and stances of each of the parties to the ANTA agreement. These patterns can, indeed do, vary between the States and Territories. For example, a State or Territory may decide to support administrative rather than market reforms; to go slow on micro-economic reform rather than pursue reform actively; or to take different approaches to public-sector financial and management arrangements. These discussions tend to be 'whole of government' rather than VET-specific. That these particular interactions exist and vary between jurisdictions became very clear in our consultations with central departments in the States and Territories.

Thirdly, there are complex patterns of interaction in terms of the power relationships of the key VET stakeholders. In particular, over the period when user choice policy was being developed, business was assuming a more powerful position. Already a businessman chaired and other business people were members of the ANTA Board and their numbers increased. The Liberal Party pre-election platform (Liberal Party of Australia 1996) indicated that 'we will ensure that industry plays a central role in driving the national training agenda and that training more closely reflects industry needs' (p. 11) and that a Liberal government would replace the existing arrangements 'with an industry and enterprise driven training system' (p.16). The Commonwealth Ministers' offices were apparently receiving informal advice from industry representatives, and one can assume that there was regular contact between them.

Of course, patterns of interaction between the key stakeholders can change comparatively quickly. Even during the period when user choice policy was being developed an industry spokesman made the comment that business was now becoming only one among many, rather than the major source of advice to the government on training issues. Overall, business had become a much more important source of advice to government on training issues, compared to unions, than at the beginning of the user choice policy process (which commenced prior to the election of the Howard government).

Finally, there are differences in the assumptive worlds—the experiences, values and beliefs—of the key participants in the VET decision-making processes which affects the interactions between them.

For example, one world view sees training as an end in itself, while another sees training as a contribution to the enhanced competitiveness of enterprises and the development of individuals. In this regard there is a substantial difference between the assumptive world of the industry partners, including enterprises, trainees and unions, and the assumptive world of the educators, especially among public providers (perhaps less so among the private providers and the industry trainers). Another world view still focuses on Technical and Further Education (TAFE) rather

than VET. There are also personal differences, which in this relatively small policy-making community can influence significantly the patterns of interaction and have important practical consequences for VET.

An important implication of this policy 'jugglery', at least from the perspective of this paper, is that although we were relatively closely involved in the development of user choice policy, at least for outsiders, nevertheless we know only part of the story. Indeed, can any one—however closely involved in policy development, however senior or however central to one aspect of the process—really know the *full* story?[3]

Major stages in the development of user choice policy

The full story would encompass what decisions were taken (or not taken) and also, the reasons why decisions were taken (or not taken) by the many players involved in the user choice decision-making process. Notwithstanding, the main outcomes at various stages in the user choice policy development are known. Indeed, in many respects the ANTA processes are quite transparent. For example, as noted above, the May 1997 MINCO decisions are already published and are widely available (ANTA 1997).

Of course, the full policy cycle has not yet been completed. Palmer and Short (1989) identify five stages in policy development:

- problem identification and agenda setting
- policy formulation
- adoption
- policy implementation
- program and policy evaluation

In this paper we focus on the first three stages since user choice in New Apprenticeships is yet to be fully implemented.

'User buys' and 'user choice'

User choice grew out of concerns about the progress of the national training reform agenda. In September 1994 MINCO had before it 'proposals for the more effective implementation of training reforms' (ANTA 1994). A previous report to MINCO had noted that while there was 'broad support' for the training reform agenda, industry in particular had expressed concerns about its complexity. ANTA was asked to address this 'problem' and the Allen Consulting Group (ACG) was engaged to investigate it.

An important element of the training reform agenda had been the development of a training market. At the time, moves to open up the training market had concentrated on the supply side. There had been some demand side measures, however. Commenting on them, ACG argued that:

> *... they seem to be strongly centralist in their approach, aggregating demand up from the enterprise level ... [This strategy] does little, however, to encourage a more direct and market*

responsive relationship between the provider of training and the purchaser client—enterprise or individuals. (ACG 1994, p. 39)

ACG reported that the 'lack of responsiveness, flexibility and relevance' was a 'recurring theme' in their discussions with industry (p. 39). Its advice, to move towards a market-based or choice system, was therefore, not unexpected. ACG labelled its proposal 'user buys'. Unlike earlier market-based formulations, choice under user buys was enterprise-focussed, rather than centred on individuals.[4]

ANTA accepted ACG's proposal in broad terms, but put forward a variation of the 'User Buys' concept known as 'user choice'. ANTA argued that the funds, rather than being paid to employers, should be passed directly from the relevant training authority to the provider, upon receiving notification of the employer's choice. The significant difference between 'User Buys' and 'user choice' thus lay in the placement of resources (Harmsworth 1995).

ANTA proposed, and MINCO accepted, that 'a series of "user choice" pilots in which firms—or Group Training Companies on behalf of firms—choose the provider of the off-the-job training for apprentices and trainees should be undertaken in all States and Territories and across industry sectors in 1995 ... [and] in Aboriginal and Torres Strait Islander communities' (ANTA 1994, p. 32).

In the event, it was not until November 1995 that MINCO agreed to the funding of the user choice pilots from national project moneys and most of the pilots did not commence until mid-1996. The pilot projects were to be evaluated and the report of the evaluation was to be ready for MINCO's consideration in November 1996. We were awarded the evaluation consultancy in late April 1996: Our involvement with user choice policy development grew out of this consultancy.[5]

A change in the policy context

In the period between advertising the consultancy and its commencement there was a major change in the political context: the election of the Howard government. In the lead-up to the election the Liberals had announced that they would adopt a new approach to training: they would link training more closely with employment. The new government would achieve this goal, *inter alia*, by 'focussing on the development of direct relationships between enterprises and individuals on the one hand and training providers on the other' (Liberal Party of Australia 1996, p.16). The proposed Modern Australian Apprenticeship and Traineeship System (MAATS) thus involved a continuation of the 'user choice' initiatives already under way.

This major change in context led ANTA to give user choice a much higher priority, however; and they asked that much greater emphasis be given in the consultancy to policy issues and concerns associated with the implementation of user choice and less to the evaluation of the pilot projects. ANTA requested us to undertake a round of consultations with stakeholders, particularly State and Territory training authorities and peak industry bodies, as part of the process of refining the policy issues. The views of these parties were taken into account in finalising our brief and subsequent report, 'Implementing user choice: policy issues', presented to ANTA in August 1996.[6]

The identification of key policy issues

'The objective of user choice is to increase the responsiveness of the vocational education and training system to the needs of clients through the encouragement of a direct and market relationship between individual providers and clients' (ANTA 1997, Attachment A). It is an initiative intended to strengthen the demand side of the training market. We identified a number of demand side issues as important for the effective and sustainable implementation of user choice. These issues included:

- who are the users (or clients) of the training system—employers, employees or both
- what action should be taken if an employer does not provide a good training environment
- the distribution of the benefits and costs of training among employers, employees and governments
- the training needs of small business
- VET in schools
- access and equity issues

We were also of the view that the purpose of user choice would be circumscribed if significant monopoly elements remained on the supply side of the training market. Work had been undertaken previously on the impact of the proposed Hilmer reforms on VET (Joy Selby Smith 1995) and it was seen that the Hilmer methodology had application in this case: that methodology provided a framework for identifying possible sources of monopoly power in the training market. Arguably, this approach brought onto the table a range of issues not previously considered in relation to user choice implementation; for example, the need to maintain the momentum of structural reform, costing and pricing, and third party access.

There was also seen to be need for agreement among interested parties as to the parameters of user choice. We argued that a common focus was required in relation to:

- an understanding of the user choice concept including its objectives
- a commitment to a strong public training system
- accepting that commitment, the importance of maintaining and enhancing the overall VET system
- whether the training market is national in scope, or limited by State and Territory boundaries

Our reports provided input into the preparation of the *Report to the ANTA Ministerial Council on the implementation of user choice* (which included a statement of user choice policy) prepared in the ANTA office.

Ministers endorsed the report at the September 1996 MINCO meeting. MINCO also agreed that States and Territories would implement user choice for off-the-job training for apprenticeships and traineeships in accordance with the Policy Statement contained in the report. The Policy Statement included a statement of objectives of user choice, a definition of user-choice principles and the key features of user choice in

operation. Also included in the report was a statement of the administrative arrangements for implementing the key features of user choice.

The ANTA report also listed a number of key issues, identified in our consultancy, that needed to be resolved. These issues included:

- costing and pricing
- competitive tendering
- cost shifting
- small business
- access and equity
- third-party access
- separation of roles
- resourcing user choice
- operation of a national training market
- thin markets
- certain transitional arrangements

Work on these issues was undertaken by various groups within the ANTA structure and by outsiders. We undertook work on the third-party access and separation of purchaser-provider roles issues and reported to ANTA in March 1997. These matters were considered by MINCO in May 1997 (ANTA 1997).

The May 1997 MINCO meeting marked a culmination in the policy formulation stage. The resolutions adopted by the Ministerial Council provide a policy framework for New Apprenticeships arrangements (including user choice) (ANTA 1997).

> *Within this policy framework, State and Territory governments will proceed to implement New Apprenticeships arrangements, putting in place legislative changes appropriate to each jurisdiction and reviewing regulatory processes to streamline the system ...*
>
> (ANTA 1997, p. ii)

The resolutions of the May MINCO brought together the work on user choice with that on other aspects of New Apprenticeships: this integration had been a feature of the policy development process since the September MINCO.

It is also noted that the ANTA Board document to MINCO included a revised Statement of user choice. We understand the revisions principally relate to changes in the administrative arrangements and reflect *inter alia* the desire on the part of the States and Territories for a significantly reduced national role in the implementation of user choice.

The Ministerial Resolutions note that 'New South Wales reserved its position on user choice' (ANTA 1997, p. v).

Evaluation of the 1996 pilot projects

The national evaluation of the 1996 user choice Pilot Project did take place, albeit on a more limited basis than originally intended. The evaluation was undertaken in two stages: at the initiation phase of the pilots, in mid-1996, and when the outcomes of the

pilots were known. The interim report forwarded to ANTA in July 1996 included the results of a survey of users (employers) involved in the 50 pilot projects that had been approved at June 1996 (Joy Selby Smith et al. 1996b).

The final report of the evaluation was completed in April 1997. The findings of the latter evaluation were based on information gained primarily from a second survey of the users associated with the pilots and detailed study of the 10 selected pilots, supplemented by visits to a number of other pilot projects and widespread consultation.

The report, to be published by ANTA, includes findings about the operation of user choice at the local, project level in relation to: outcomes, aspects of the training process; and the ease or difficulty in negotiating and administering training (compared to previous training arrangements, if any). Other findings relevant to the operation of user choice at the local level were also included. These findings do not appear to have had any significant impact on the user choice policy development process: the policy cart had moved on before the evaluation findings became available. However, they may have some influence in the longer term, or effects at the level of individual projects. It was disappointing to learn that many of these projects were not to be funded, at least as user-choice projects, in 1997 despite the good results achieved and despite the commitment of ministers to the partial implementation of user choice in 1997.

Beyond user choice

At the beginning of this paper we noted that interactions between disparate elements—jugglery—characterise much of the policy development process: generally, and in VET. In this final section four aspects of jugglery which have implications for VET policy-making are discussed.

First, the development and implementation of national policies in VET involve juggling the broad policy directions with the detailed differences among the States and Territories. The training systems in the various jurisdictions reflect significant differences in the culture, history, structural arrangements and jurisdiction-wide priorities in each. These differences are often overlooked (not only in VET, of course) in discussions until Federal-State negotiations are well under way. Even if the direction of change is agreed, the processes, power relationships and assumptive worlds can differ markedly among State and Territory governments.

Secondly, interactions and feedback can occur between the various phases of policy making. Policy making is sometimes characterised as a linear process, moving over time from one stage to another, sequentially, and without overlap, interaction or feedback between the various stages. This view of policy making is too simple, as the user choice case shows. In particular, where the full implications of policy change for the adoption phase become clear only after a time, the final formulation of the policy can differ significantly in intent from its initial formulation.

Thirdly, there is a view that policy development involves a contest of ideas which subsequently is resolved, the resolution being the basis for the final policy formulation, adoption and implementation. A contest of ideas in policy development does not guarantee an agreed basis for implementation.

Rather, it may be, as in the case of user choice, that powerful participants in the policy development process appear to concede ground initially, but regroup subsequently and renew their resistance at a later stage. That is, thesis and anti-thesis need not necessarily lead to synthesis. This will be a particular problem if a national initiative is opposed by a substantial minority or even a majority (when aggregated across States and Territories). In the user choice case full implementation of user choice for off-the-job training for apprentices and trainees from 1 January 1998 was agreed by all ministers in July 1996. That agreement no longer holds.

Finally, doubts have been expressed about the role of evaluation, formally the final stage in public policy making—program evaluation has a mixed reputation in Australia. We note that MINCO has agreed to reconsider user choice in 1999 on the basis of an evaluation which is to commence on 31 July 1997. A first report is due August 1998 and a second report by May 1999 (ANTA 1997, attachment A, p. 20). This means that reconsideration of user choice will be based, at most, on 15 months operation of the new arrangements.

Endnotes

1 Originally referred to as the Modern Australian Apprenticeship and Traineeship System (MAATS).

2 ANTA was established in 1992 following an agreement by Heads of Government to develop a national system of vocational education and training in co-operation with State and Territory governments, the Commonwealth Government and industry. State training authorities are accountable to State ministers and parliaments for the operational responsibilities of their agencies and accountable to the Ministerial Council on matters of national policy.

3 This comment brings to mind the Ryoan-ji garden in Kyoto where the 15 rocks are so carefully placed among the raked gravel that they cannot all be seen from any one position, however hard the viewer tries.

4 Calls for individuals (students, parents and employers) to be able to exercise their own choices in relation to publicly funded education and training are not new. More general arguments on the rights and roles of individuals, based in philosophy and political economy, have a long history. The modern literature advocating approaches which place education and training decisions, in particular, directly in the hands of users is usually traced to the early post-ware (WWII) period to Friedman and Hayek (see for example Marginson 1993).

5 The consultancy was awarded to Joy Selby Smith Pty Ltd in Melbourne. The team who worked on the consultancy were Joy Selby Smith, Chris Selby Smith and Fran Ferrier of the Monash–ACER Centre for the Economics of Education and Training.

6 A slightly modified version of this report has been published, see Joy Selby Smith et al. 1996a.

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The impact on providers

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This paper accepts the gains that have been made already through increased competition in the training market, and through user choice. These gains have been manifest through greater institutional responsiveness to customer needs; through greater emphasis being placed on quality delivery and outcomes; and through price competitiveness.

Having accepted those gains, the paper focusses on some of the negative effects that user choice and competition have brought for providers, and some of the dangers that are present for providers and for the nation's education and training systems.

Introduction

In 1991 the Commonwealth of Australia identified a new vocational education and training (VET) system as being needed. The new system would need to ensure national consistency; to encourage youth to continue along the education and training pathway; to integrate general and vocational education; to underpin competency standards; to allow for credit transfer and encourage articulation; to enable work and life experiences to be appropriately recognised; to encourage the acquisition of new skills and knowledge across the workplace; and to be one which would effectively remove the barriers to further education and training. Above all, the new system would need to be flexible and responsive to the needs of industry.

In December 1991, when several of the country's reforms were well under way, the key components of the reform packages were summarised in *Skills training for the 21st century: An inquiry into skills training*, with industry's increasing responsibility for training being summarised as follows:

> *Industry will increasingly become responsible for the provision of off-the-job training. This will result in TAFE losing its monopoly in providing certified training.*
>
> (Commonwealth of Australia 1991, p. vii)

The new VET system, which came into effect on 1 January 1994, involved the appointment of a Council of Ministers and the formation of the Australian National

Training Authority (ANTA). To achieve national reform, the system encouraged the implementation of seven interrelated components, namely:

- national competency standards, which, developed by industry, would specify the desired elements of competency and their related performance criteria
- course development, which would involve the formal granting of approval by recognition bodies for courses and programs being offered
- training delivery, where registered public and private providers could deliver accredited courses and recognised programs
- assessment, where an individual's level of competency would be measured against prescribed performance criteria
- certification, which would provide formal recognition for competency achievement and enable the awarding of a credentialled outcome or a statement of attainment by a training authority, a registered training provider or an assessment body
- monitoring and verification, the quality assurance processes which would ensure the defined national competency standards were met
- review, which would relate to the need for systematic reviews to ensure relevance to the changing demands of industry

Then, in late 1996 came the endorsement of the major features of a new National Training Framework by the Ministers of Vocational Education and Training, a framework 'designed to make the regulation of Australia's national training arrangements simpler and more flexible' (ANTA 1997a, p. 1), and considered as being 'the next step forward for Australia's Vocational Education and Training (VET) system' (p. 2).

An important component of the framework is the introduction of training packages, which are designed to 'integrate nationally recognised and endorsed competency standards, assessment guidelines and qualifications' (ANTA 1997a, p. 11). Another important component is its role in underpinning government initiatives to implement new apprenticeship and traineeship arrangements which encourage clients to choose a training package; to negotiate a training program and to enter into a training agreement, with the new processes carrying the nomenclature, user choice.

In 1996 the Howard government introduced the Modern Australian Apprenticeship and Traineeship System (MAATS), designed to offer a modernised approach to apprenticeship and traineeship arrangements.

What is user choice? To cite ANTA, 'user choice is one of a number of reforms to the VET system being pursued through implementation of MAATS'. More explicitly, user choice applies 'to structured training arrangements under a signed training agreement between the employer and the employee', with the employees being 'apprentices, trainees and individuals seeking work-based qualifications under formal contracts of training' (ANTA 1996, p. 3).

Operating in the national training market and not being restricted by State or Territory boundaries, user choice is designed to reflect the client's choice of training provider through the provision of public funds directly to the training provider. To

encourage a 'genuine market relationship' to exist between the client and the training provider, ANTA has identified three essential elements, and these, in summary, are:

- significantly greater market power to individual clients to negotiate with individual registered training providers, both public and private, about the off-the-job component of structured entry-level training
- increased responsiveness on the supply side of the training market, to enhance the capacity of individual VET providers and respond to the expressed needs of clients
- user choice outcomes are compatible with public expenditure constraints and efficient use of resources (ANTA 1996, p. 4)

It is important to note that all of the above elements must be satisfied in order to demonstrate a genuine market relationship between the training provider and the client, or, if agreed, a 'broker' acting on behalf of the employer and the employee, who are defined for user choice as 'acting jointly'.

It is within this context I wish to make the following comments as they relate to the effects of competition and 'user choice' on Technical and Further Education (TAFE) providers in the training market.

What is user choice based on?

User choice is based on a view that a free market produces rational service distribution and price competitiveness. These factors combine to increase market choice and market access. It is also assumed that consumers are reasonably adept at making the correct purchasing decisions.

The bases of user choice can be described as:

- a view that rational provision will come from a free market
- a view that education and training can be evaluated as economic outcomes only
- a view that customers know their own needs well
- a view that customers can distinguish effectively between education and training products
- a view of government as customer rather than service provider

Members of the audience will have differing views on each of these views and time does not permit detailed discussion on them today. I would contend that each of the above should be challenged before massive changes are made through market intervention by our governments in introducing user choice. Let me now give my view on how competition and 'user choice' has developed in my state and the effects on providers.

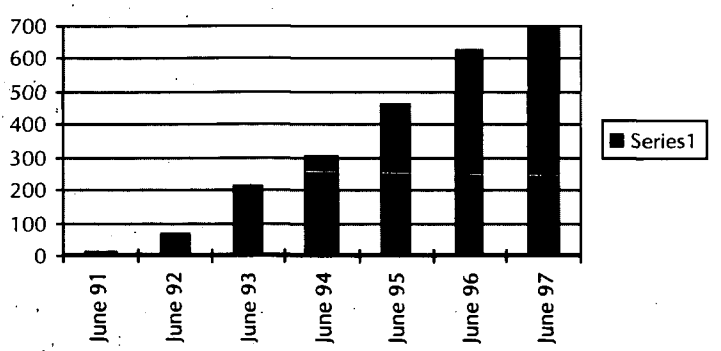
Some background to the local training market

The following histogram shows the increase in the number of private providers in Victoria between 1991 and 1997.

To indicate the growth pattern in Victoria, recent statistics provided by the Office of Training and Further Education (OTFE) reveal the figures to be: June 1991, 9 registered

private providers; June 1992, 61; June 1993, 220; June 1994, 298; June 1995, 450; June, 1996, 630; May 1997, 702 registered private providers, which may be graphically illustrated as:

Figure 1: Increase of number of private providers in Victoria between 1991 and 1997



Source: Office of Training and Further Education, Melbourne, May 1997.

In the April edition of *Training Facts*, the Office of Training and Further Education identified that:

> *Private providers have tendered successfully for government funding, winning $11.4 million for Priority Education and Training Places in 1997.* (OTFE 1997, p. 3)

If the registrations continue to increase at the present level, by June 2000 there will be in excess of 1000 registered private providers in Victoria.

In my own regional environment of Geelong, there are now 42 training providers advertising their services in a regional population of approximately 250 000 people. It is not all growth in terms of private providers.

Australian Bureau of Statistics (ABS) figures indicate that the fortunes of private providers are quite variable, and the following table shows some of the factors that affect those fortunes.

Table 1: Factors that affect private providers

	Minor decrease in training activity %	Major decrease in training activity %	*Total decrease in training activity* %	No decrease in training activity %
Lack of investment capital	29.2	17.0	***46.2***	53.9
Competition from TAFEs or universities	25.4	12.4	***37.8***	62.2
Costs of difficulties with accreditation processes	20.0	12.4	***32.4***	67.6
Shortage of experienced or qualified trainers	20.7	6.2	***26.9***	73.1
Lack of national accreditation standards	17.7	6.6	***24.3***	75.7
Lack of credit transfer/course articulation	16.5	6.6	***23.1***	76.9

Source: Australian Bureau of Statistics, Commonwealth of Australia, *Commercial Training Providers Australia* 1996, p. 7

Competition: Benefits

Already we have seen gains from competition and user choice by:

- greater institution responsiveness to customers
- more competitive pricing so delivery innovation
- cultural change
- decrease in costs
- productivity gains
- more diverse programs, services and products
- expansion outside regional boundaries

Competition: Downside

Competition brings with it many gains and, already, we have seen training providers become more customer responsive, more quality conscious and innovative in the way that training is delivered to customers. However, there are some negative effects, with institutions duplicating services already available elsewhere. A better response would be to increase the quality and responsiveness of the original provider, rather than waste resources filling the gap.

Market forces do not always result in rational service provision. Market failure is easy to find, and the current concern about the poor availability of medical services in rural areas is but one example.

Some of the negative features of increased competition are:

- growth in Geelong region to 42 private providers
- competition from other TAFE institutes
- competition from university sector
- Gordon has to go out of region to grow business
- a need to find government dollars to support industry in fulfilling its training objectives

How has user choice been implemented?

Governments which have previously been charged with a responsibility to service the community now see themselves as consumers of that service on behalf of the community. Accordingly, there is a strong and understandable requirement for price reduction won partially through competition. Consumers, though, have no specific interest in the investment and reinvestment to ensure that service quality is maintained.

Some of the ways in which user choice has been implemented comprise:

- government seeing itself as a consumer, not a provider
- growth only through incremental funding
- a recurrent funding formula for government to determine its 'price'
- not a real competitive price; resource allocation model
- development of private provider market
- increase in funding through tendering

Business driven or business funded

In addition we have seen a shift in the minds of policy makers and resource allocators as to the primary 'customers'. Traditionally, educational institutes and particularly the teaching professionals have seen their students as the primary customer. Of recent times the shift has been to see the customer as the person and entity 'who pays', with the government placing the emphasis heavily on employment outcomes. Consequently industry, employer groups and large enterprises are now the major influencers of policy and resource distribution. Local community needs are becoming less influential, as are broad educational needs. This has meant a trend towards:

- agenda being driven by business
- predominantly business 'bureaucrats' in control
- business having a responsibility to invest in 'its people'
- training solely enterprise-based and paid for by the enterprise
- a transfer of costs from the private sector to the public sector
- small to medium business person being 'potentially lost'

In *NSW Training Agenda* May 1997, it was written, and I quote:

> *Shifting decisions about funding from the State Training Agency to employers and individual apprentices and trainees has the potential to create new conflicts of interest. There are concerns that where an enterprise or a group training company is acting as an employer and is also a registered training organisation, the interests of individual apprentices and trainees may become secondary. There is also a concern that large employers could significantly restrict choice for smaller employers if they chose to deliver their own in-house training.* (*NSW Training Agenda* May 1997)

How user choice costs providers

However, all this comes at a cost. In order to maintain market share in a highly competitive environment, providers need to spend valuable resources on marketing, on tendering and submission writing, and on developing new management functions and processes to deal with a competitive environment.

Some of these costs will be incurred through:

- more vigorous and expensive marketing
- ISO 9001 accreditation necessary to compete
- tender and submission development
- international marketing is expanded
- financial analysis and monitoring is more sophisticated and time consuming
- need to develop Enterprise Agreements
- enterprise 'relationship' managers appointed
- *each* institute will have industry T&D (training and development) liaison officers
- developments will be protected to give 'competitive edge'
- brokers and intermediaries

Typical tender costs

A specific example of how it costs us at the Gordon relates to the additional burden of 'winning the business'. This means we have additional costs relating to tender submissions. A typical tender involves:

- researching the requirement
- identifying partners
- negotiating with partners
- writing the tender
- word processing and printing
- attractively binding the tender
- setting up financial management
- setting up project management
- monitoring and reporting

The question needs to be asked—have these additional costs 'added value' to the 'user'?

While competition and tendering for growth has assisted the 'culture change' process within the institutes, at which point does it change from being a positive change stimulant to having a negative impact?

Reduction in support infrastructure

Australia's universities and TAFE institutes have a proud reputation in the provision of infrastructure to support teaching and learning. In order for us to maintain price competitiveness in an open market, these 'overheads' have to be reduced. Public providers have had to reduce their commitment to library services, counselling, professional development and curriculum development.

Some of the reductions in support infrastructure are:

- support services have been reduced
- increase in overheads has meant reduction in resources for teaching and training
- building stock is poorly maintained
- workload on all staff has dramatically increased
- curriculum development has lessened
- innovative programs are now paid for only as 'investments'
- professional development is narrowly focussed and poorly resourced

What is user choice likely to lead to?

Unfortunately, market forces applied to a 'public service' also produce distortions, as we have seen in the provision of medical services, and as small communities have experienced with their banks and post offices. We are also seeing a survival approach being taken by resource-starved institutions, rather than re-investment in a rich public education and training provision.

Some of the results which may occur if not managed properly are:

- 'cream skimming' of popular programs and services by private providers
- little reinvestment in low-volume education products
- institutions being 'provider' only, with no other contribution to society
- domination of market by large corporate and government customers
- a movement of talent away from public education institutions
- a decrease in confidence in the quality, integrity and portability of qualifications

What should user choice really mean?

We need to acknowledge that competition has brought with it many benefits for customers and for providers. Some of these benefits are manifest in:

- choice by customers of program
- choice by customers of provider
- choice by customer of delivery arrangements
- choice by customer of price
- increase in the number of customers
- better customer service by providers

Is there a better way?

User choice is not the only way that education providers can be made more responsive. It is arguable that the major benefits of a competitive training market have already been achieved and that we need now to take care that we don't destroy the resource we have built.

Perhaps strategies that are more innovative need to be adopted as our 'industry' matures:

- increased partnerships
- increased co-operation
- shared responsibility
- shared investment innovation and product development
- shared investment in people development
- large enterprise providing leadership

While not opposed to user choice, careful consideration and planning should be undertaken *before* there is wholesale introduction on a large scale which may lead to irreversible damage to what is a high-quality system.

What do our other consumers (i.e. students) want?

Many of our TAFE institutes Australia-wide have introduced quality initiatives ranging from projects to ISO accreditation and institute self-assessment. A key to any of these approaches is to know what our customers want and how they see our performance.

Currently, there are a number of us involved in using a similar technique to gain feedback from our 'other consumers', namely the students. They have indicated they want:

- quality teaching
- quality learning materials
- responsive teaching

- quality assurance, accreditation
- credentials
- affordable
- accessible

Business education or education business

The country's adoption of the competency paradigm and approaches which are consistent with economic rationalism have led to States and Territories implementing competitive tendering for the supply side of VET.

Competitive tendering, which encourages competition between public and private providers, is designed to improve the allocation of resources while simultaneously enhancing the quality and efficiency of training provision. In contrast to more traditional approaches, user choice will employ competitive tendering practices to allocate funding on the basis of the client's (employer and employee) choice.

From January 1998 user choice will apply to all new apprenticeships and traineeships, and either wholly or in part to those where transitional arrangements are in place.

From the perspective of TAFE, user choice raises the need for a more pro-active approach to vocational education and training, an approach which will ensure that TAFE offers quality and value for money, while continuing to work hand-in-hand with industry and while continuing to lead in the vocational field, albeit in a more competitive environment.

User choice also raises a number of issues and questions:

- are we in education for business purposes?
- are we in business for education purposes?
- who is the real customer or user?
- complex issue—no simple answers/solutions
- Australian VET model is envied worldwide
- are we in danger of attacking the 'core' elements?

To develop efficient processes for competitive tendering, change to our traditional operations will be necessary, and this will include not only administrative change, but also cultural change. We will need to become more entrepreneurial and more willing to work in partnership with both the public and private sectors, and we will need to embrace new technologies and new learning strategies to ensure that we are in a strong position to accept, and respond to, the future challenges that may come our way. However, we must never forget the 15 000 students who choose to come to the Gordon.

VET training for IT

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An analysis of the 1995 data on vocational education and training (VET) in information technology, provided by States and Territories in Australia, is provided by the National Centre for Vocational Education Research (NCVER). Data concerning course details; enrolments, module hours enrolled; client details and analysis are outlined. One hundred and twenty courses make up the IT set in VET for 1995: New South Wales (31), Victoria (28), Queensland (7), Western Australia (23), South Australia (10), Tasmania (5), Northern Territory (9) and the Australian Capital Territory (7). These courses represent almost 46 000 enrolments, 3.9 per cent of the relevant VET enrolments in Australia in 1995. IT activity ranges from a low of 2.6 per cent in New South Wales to a high of 12.4 per cent in the Australian Capital Territory. The high level in the Australian Capital Territory is not surprising given the client base profile but activity in Western Australia, South Australia, Tasmania and Northern Territory are all more than double the New South Wales level. This State and Territory variation poses a number of questions not easily answered. Training activity by State/Territory and qualification, the gender balance, previous education and age profile of training clients are discussed. There is a greater proportion of males in IT courses in comparison to VET clients. Females undertake IT training at a distinctly later age than males, and are more likely to do shorter courses. IT training clients have a slightly stronger middle range age profile than overall VET clients, suggesting scope for increasing clients taking up IT training immediately after school. IT students have a strong profile in terms of year 12 completion at school and more have completed prior education than in broader VET. Further research should be done.

Background

Data source

EVERY YEAR THE States and Territories in Australia provide data on vocational education and training (VET) activity to a central collection site. The data is provided according to specifications under the Australian Vocational Education and Training Management Information Statistical Standard (AVETMISS). Course curriculum, course enrolments, module enrolments linked to courses and client (student) details are components of the collection.

The data for this study is drawn from data reported by State and Territory authorities during 1996 and represents activity during the 1995 calendar year. Data for 1996 activity is now available.

Course details

In identifying courses delivering information technology training we have used:

- nominal course curriculum hours
- the field of study identified for the course
- the qualification awarded on successful completion of the course (for example, certificate, diploma, Australian Qualifications Framework [AQF] diploma)
- stream of study (for example 'complete trade courses' or 'para-professional/ technician')

Course enrolments

Course enrolments represent the numbers of individuals who were enrolled in courses selected as being in the IT area during 1995. It slightly overstates the number of individuals, or clients, studying in the area because a small number enrol for more than one course.

Module hours enrolled

Module hours enrolled represent the total of the nominal hours for all modules linked to the relevant courses which clients were actually studying in 1995. Module hours enrolled represent the activity undertaken in 1995 and provide a different picture from course enrolments because the courses identified vary in length and because some of them may extend over more than one year.

Client details

For individual clients enrolled in the courses identified, data on gender, age range, highest school level and prior education have been analysed.

Analysis

Overview of the data investigated

Using a combination of key words in course titles and field of study codes, all VET courses in the national 1995 data were checked for possible inclusion as information technology courses. This search produced 185 courses across all States and Territories. Of these 65 were eliminated on the basis of the full title, the number of nominal hours involved, the qualification category and so on.

The resulting 120 courses make up the IT set in VET for 1995. They are grouped on the basis of the State or Territory in which they are provided and the number of courses for each are New South Wales (31), Victoria (28), Queensland (7), Western Australia (23), South Australia (10), Tasmania (5), Northern Territory (9), the Australian Capital Territory (7).

The courses range in length from 80 to 1548 curriculum hours, with the majority being nearer the upper limit and therefore representing study which is undertaken over a number of years. The courses are linked to ten different qualifications. Some of those qualifications are based on the RATE (Register of Awards in Tertiary Education) system and others on the AQF system which is progressively replacing it. Providers and State/Territory authorities are taking individual approaches to converting to the new system and the 1995 data shows significant differences in the extent of conversion completed. For the IT set of courses 27 per cent of enrolments nationally were in courses leading to AQF qualifications.

The 120 courses in the IT set represent almost 46 000 enrolments, 3.9 per cent of the relevant VET enrolments in Australia in 1995. The hours studied in these courses during 1995 total 10.4 million, 4.0 per cent of the 262 million hours for relevant VET courses.

The data show IT activity ranges from a low of 2.6 per cent in New South Wales to a high of 12.4 per cent in the Australian Capital Territory. The high level in the Australian Capital Territory is not surprising given the profile of the potential client base but activity in Western Australia, South Australia, Tasmania and the Northern Territory are all more than double the New South Wales level. This poses a number of questions which are discussed in the final part of this report.

Information technology training activity by State/Territory and qualification

In order to better understand the qualification and course relationship the average length for all courses in the IT set resulting in each of the ten qualification categories were calculated, as were the number of enrolments for each State and Territory by qualification and by the nominal course hours.

More than one in three enrolments are in associate diploma courses and the group—certificate not elsewhere classified, AQF Certificate IV, Advanced Certificate Other and Associate Diploma—makes up over three-quarters of the enrolments. This implies that clients are studying courses at a level which potentially impacts on their employment and remuneration.

There are significant differences in the typical course lengths in which enrolments occur in individual States and Territories. New South Wales, Western Australia and Northern Territory are biased toward shorter course lengths while Victoria, Queensland, South Australia, Tasmania and the Australian Capital Territory are biased toward longer course lengths.

Module enrolment hours for each State and Territory by qualification and by the nominal course hours range were also noted. As would be expected from the enrolments, a high percentage of the module hours studied in 1995 were in associate diploma courses (44 per cent) and the group of four qualifications listed above accounted for over 86 per cent of hours studied.

Gender balance in information technology training

The data show the total course enrolments and the total module hours for the IT set nationally, separated by client gender. Females represent 41 per cent of the enrolments but only 31 per cent of the course hours. This compares with an overall female participation in VET of 47 per cent of enrolments for courses excluding those in stream 1000—recreational, leisure and personal enrichment.

The 41/31 ratio suggests that, on average, either females are enrolling in shorter courses or are studying on more of a part-time basis than males.

Both explanations seem to be valid. In four of the five qualifications with the lowest average length, females outnumber males. In the five with the highest average length, males outnumber females. Looking at single qualifications, for nine of the ten qualifications in the set, females make up a higher percentage of enrolments than course hours. The overall conclusion is that there is a significant gender bias in the IT area.

There is a significant variation in the proportion of female course enrolments ranging from 29 per cent in the ACT to 61 per cent in the NT. The three States/Territories showing the highest proportion of female participation are those which also show a bias towards shorter courses. It is not immediately clear which is the cause and which is the effect.

Some further understanding of gender variation is provided in the next section of the analysis focussing on age profiles.

Age profile of information technology training clients

The data show the total course enrolments and the total module hours for the IT set nationally, separated into client age range and qualification category, and how the age profile compares with the overall VET sector.

The figures show that IT is more strongly represented in the 20–49 year-old age group than in the younger and older age ranges. The lower take-up of IT courses by older clients is not unexpected. It also appears that vocational education and training study in IT is more frequently seen as a later or developmental career choice than as a starting point for the 15–19-year-old age group.

The data show the age profile for course enrolments separated by gender on a national basis. The females become much more strongly represented among those enrolled in IT courses in the mid-age range, growing from 29 per cent of the 15–19-year-old range to 52 per cent of the 40–49-year-old age range.

The lower representation of females in the lower age ranges is consistent with national data which shows that males continue to dominate traineeships and apprenticeships even in new industry areas.

The data provide age profiles of IT students for each State and Territory. Most have a fairly consistent age distribution. Principal differences occur in Queensland, which has a relatively larger group from the 15–19 age range, and the Northern Territory, which has lower than average numbers in ages up to 24 years. This higher age peak in Northern Territory is consistent with the bias toward female clients.

Previous education of information technology training clients

Two data fields are available to investigate the previous education of clients. The first is the highest school level completed and the second is prior educational involvement (other than school). Data is also collected on whether the prior educational level was completed or not completed.

Previous education has been investigated on a client basis rather than a course enrolment basis. There are 44 431 clients compared with 45 867 enrolments showing that there is a minimal level of multiple enrolments.

Highest school-level data was reported for 80 per cent of clients and, of these, 59 per cent report completion of year 12. By comparison, 46 per cent of VET clients in general who report this data (where stream 1000 courses are excluded) report completion of year 12. The data show those clients enrolled in IT courses on a national basis by age range and gender and the comparison of males and females who completed year 12 based only on those IT clients where the highest school level is known.

The data shows much higher year 12 completion rates for younger IT clients consistent with the increasing trend toward higher year 12 retention rates in Australia at least until 1995. Males in IT training show a consistently higher level of year 12 completion except in the 60–64 year old age range.

The figures show the number of IT clients who report involvement with each of seven categories of prior education together with the numbers reporting completion of that education. They are broken down on a State and Territory basis. Each client may report involvement in more than one category of prior education. Nationally 40 per cent of IT clients report involvement in prior education with 26 per cent reporting completion of at least one category. By comparison, 17 per cent of VET clients in general (where stream 1000 courses are excluded) report completion of at least one category of prior education.

The data provide national prior education data for IT clients broken down on the basis of gender and shows the distribution of prior education categories completed by female and male clients as a percentage of all female and male IT clients.

The proportion of female clients overall who have completed some form of prior education is very similar to that for males. Females have a higher proportion of the categories 'other certificate' and 'degree or postgraduate diploma' while males have a higher proportion of 'trade certificate' and 'advanced or technical certificate'.

Summary

State and Territory variation

The differences in the proportion of IT training compared to VET generally across States and Territories is curious and it raises the question of whether it is caused by different classification practices. It is not easy to see, however, where relevant courses might have escaped the search conducted. Biases towards longer or shorter courses do not correlate with the variations in IT enrolments and hours. While there are some variations in age profiles for IT training clients between the States and Territories these do not, in general, show any obvious explanation for the overall IT levels. The one exception to this is in the Northern Territory where IT clients show a distinctly older age bias.

Age, gender and previous educational issues

There is a greater proportion of males in IT courses in comparison to VET clients in general. Females are making the choice to undertake IT training at a distinctly later age than males and are more likely to undertake courses of shorter duration.

IT training clients have an age profile which is slightly stronger in the middle range than overall VET clients. This suggests that there may be scope for increasing the number of clients taking up IT training immediately after school.

IT students in general have a strong profile in terms of year 12 completion at school and more have completed some form of prior education than in the broader VET sector.

Further investigation

Further research, perhaps through surveys of IT graduates (both VET and higher education), employers and training providers should investigate:

- the extent to which vocational education and training is seen by employers as a legitimate pathway into the IT industry, especially in comparison with higher education
- the reason that IT training is a strong 'later career' choice, especially for females
- the extent to which those clients who enrol in IT courses go on to complete all parts of the course
- the extent to which those undertaking IT training in the VET sector find work which utilises and rewards their study
- the nature and content of IT training and the extent to which it is being delivered through incorporation into other courses
- barriers to traineeships in the IT sector especially for potential female students

Recognising IT skills

Denis Street
Vice President, Australian Computer Society

The Australian Computer Society (ACS) is the recognised association for IT professionals, with a membership of over 15 000. The ACS has just completed a restructure to make the society more relevant to people in the industry. Using the newly developed Australian Core Body of Knowledge—defined last year by the ACS—as a measuring stick, there will be a Professional Division of Fellows and Members, and tightened entry requirements for professional membership. Entry to the Associate grade has been broadened. A brief outline of entry requirements for membership grades, recent changes, and discussion of frameworks for assessment of skills and knowledge are given. A system of course accreditation and refereed experience is used.

Introduction

THE AUSTRALIAN COMPUTER SOCIETY (ACS) is the recognised association for IT professionals, attracting a large and active membership from all levels of the IT industry. Its membership currently stands at over 15 000.

The ACS has just completed a major re-engineering activity aimed at making the society more relevant to the growing number of people working in the industry at both professional and associate levels. It is the most significant restructure in the 30-year history of the society.

Under the new structure the ACS has introduced a new Professional Division consisting of Fellows and Members for those who have attained full professional status. While preserving the rights and privileges of existing members, the society has tightened entry requirements for professional membership, using the newly developed Australian Core Body of Knowledge—defined last year by the ACS—as the measuring stick.

At the same time, changes to the grade of Associate will allow it to provide recognition for the growing number of people working at associate level in the IT industry.

This paper will briefly outline entry requirements for membership grades, the changes that have been made recently, and discuss the frameworks that we have in place for the recognition and assessment of the associated skills and knowledge. Detailed membership requirements will not be addressed as they are beyond the scope of the paper.

The IT professional

Many words have been written on the topic of professionals and professionalism in the IT industry. Comparisons have usually been made with the more traditional professions of medicine, law, engineering, and accounting. Although these models do have some relevance to the IT industry, the society, in its examination of the question, found that there were sufficient differences to justify the development of a different and distinct model of professionalism for the IT industry. This was especially so when discussing membership requirements and professional membership in particular.

While a complete model has not yet been developed, the society has been able to identify a number of industry-specific features that would be part of any new model; these were related to the:

- ever-pervasive nature of the technology
- increasing availability of relatively easy to use high-capability packages
- lack of a legislative framework
- ready availability of knowledge via a proliferation of training courses

These features all suggest that the IT model of professionalism would have a heavy emphasis on the more qualitative aspects of standards of conduct, ethics, professional development, and the definition and possession of a recognised common core body of knowledge. The society has used these factors as the basis for its review of membership requirements and associated skill assessment.

Membership principles

A number of principles were adopted in the development of the new membership structure, and these are outlined below.

The ACS should be an inclusive society, i.e. the membership of the society should be broadly based and embrace those working in the wide range of job categories that comprise the IT industry. This principle is fundamental to the achievement of the ACS Vision.

The society must ensure that professional recognition is granted only to those who genuinely possess the body of knowledge required of an IT professional. Entry to the Professional Division must therefore be strictly limited to those applicants who can objectively demonstrate that they possess this body of knowledge. Attention to this principle is critical to the maintenance of professional status by the society.

Despite the broad membership base of the society, there must be a clear differentiation between the professional and other grades in the society. This is necessary to ensure that the professional status of the society is maintained in the eyes of the industry and the community at large.

An articulation path containing a formal and/or objective assessment process should be available for those members who wish to upgrade and transfer into the professional grades of the society, or to transfer to higher professional levels.

Grades of membership

By applying these principles the following new structure has been developed, that now recognises six grades of membership:

- Fellow—must be a professional member of the society and have made a distinguished contribution to IT in Australia.
- Member—must be able to demonstrate possession of the Core Body of Knowledge by completing a professional level course or equivalent plus have at least four years relevant professional experience.
- Associate—must have completed a professional-level course and have less than four years relevant professional experience, or have completed an associate level course or equivalent and have completed at least two years relevant industry experience.
- Provisional Associate—must have completed an Associate level course and have less than two years relevant industry experience.
- Student—must be enrolled as a full-time student on a course of study accredited at either professional or associate level.

The fundamental changes

While the names of the grades are still the same as previously, a number of fundamental changes have been made to the entry requirements for many of the grades.

The body of knowledge

The first change relates to the entry requirement for the professional grade of Member. Prior to the change, entry to this grade was generally based on the accreditation level of the applicant's qualification coupled with the number of relevant years of professional experience. For those familiar with ACS accreditation levels, the level awarded, Level 1, 2, or 3, was based on the amount of computing content in any particular course of study. Implicit in this approach was an informal understanding of the level of knowledge required of an IT professional.

The ACS Task Force examining membership requirements found that this informal approach was no longer appropriate for the evolving needs of both the IT profession and the community in general. It therefore set about the difficult and complex task of formalising and defining what has become the Australian Core Body of Knowledge,

which in simple terms prescribes the core knowledge required of an IT professional. It has also become the core knowledge that the community can expect an IT professional to possess.

The core body of knowledge is set at the level of a first bachelor degree, not unlike the previous Level 1 accreditation. It has also been set to ensure a breadth of knowledge. It also does not prescribe a particular curriculum or syllabus. Rather it is a set of topics that must be covered but in a way determined by the particular training institution. The current core body of knowledge can be found on the ACS home page at http:\\www.acs.org.au

It is the possession of this core body of knowledge that has become the principal requirement for entry to the Professional Division. This core body of knowledge has also become the central element of future course accreditation at the professional level. Coupled with relevant experience the possession of this core body of knowledge can be equated with professional competency.

The nexus with the grade of Associate

The second change relates to the nexus between the Associate grade and the Professional Member. Under the previous structure an Associate could progress to Member by simply completing the required number of years of relevant experience. This nexus has been broken. Progression to Member now requires the Associate member to demonstrate possession of the core body of knowledge before upgrading will be approved. A number of relevant years of professional experience is still required in addition to an upgraded level of knowledge. The breaking of this nexus is an important part of the overall strategy on increasing the standard for entry to the professional division and complying with the principle of differentiation mentioned earlier.

The grade of Affiliate

The third major change is that the grade of Affiliate has been closed off and the society is no longer accepting new members into that grade. This means that entry to the society now requires all applicants to demonstrate possession of a level of knowledge at either the professional or associate level. The expectation is that most applicants who would have applied for Affiliate grade in the past would be able to satisfy the new requirements for entry to the grade of Associate. Existing Affiliates will retain their present rights and privileges.

Skill assessment

The society has a well-developed framework for the assessment of the skills and knowledge of applicants and those members seeking upgrading to a higher grade of membership. This framework is based on a view that the two major components of competency in the workplace are an appropriate combination of skills gained through education and training, and relevant experience.

The professional division

For entry to the professional division, possession of the core body of knowledge is assessed in one of two ways: by the completion of a course of study accredited at professional level, or via the recognition of prior learning, a formal process in which an applicant is required to demonstrate the gaining of that core body of knowledge via other means. Assessment via the completion of an accredited course occurs in the vast majority of cases. The second component of this competency assessment for professional membership is the completion of four years of refereed relevant experience.

It should also be mentioned at this point that the society works with the Federal Government and is the authority for the assessment of professional qualifications for those persons seeking recognition of such qualifications as part of their application for immigration.

The Associate grades

The basic requirement for entry to the Associate grade is possession of only a part or subset of the professional body of knowledge. This is assessed in one of four ways:

- completion of a course of study accredited at professional level but without the relevant professional experience—the view of the society is that competence requires both knowledge and experience
- completion of a course of study accredited at Associate level together with the completion of two years of refereed industry experience
- completion of the ACS examination together with two years' relevant industry experience—the ACS examination has been enhanced by introducing elective subjects, recognising the broader scope of the industry
- demonstrating equivalent knowledge via recognition of prior learning, a formal process in which an applicant is required to demonstrate the gaining of knowledge via other means

Upgrading to Member

Upgrading from Associate to the professional grade of Member requires the applicant to demonstrate possession of the professional body of knowledge. This increased level of knowledge is assessed by the applicant either completing a course of study accredited at professional level or by demonstrating equivalent knowledge via the process of recognition of prior learning. Other articulation pathways are currently being examined but the primary requirement is that the applicant demonstrate possession of the professional body of knowledge. Experience alone is no longer sufficient.

Course accreditation

The Society has an Australia-wide network of course accreditation panels as our primary method of assessing the depth and breadth of computing content for both

Professional and Associate level courses. The method of operation is for the panel to conduct both an examination of curriculum documents and a site visit. The guidelines for the accreditation committees are currently being updated to reflect the new arrangements.

Professional-level accreditation

The criteria for professional accreditation will be incorporation of the body of knowledge into a three-year degree course. The core body of knowledge is not prescriptive in the sense that it does not specify a particular curriculum structure or content. The basic requirement is that the required topic material be covered somewhere in the course, although some material must be covered at third-year level. Because the new approach is fundamentally different a program is being developed for all courses to be re-accredited as soon as practicable. Existing course accreditations will remain in effect during this transition period, which will also include a period for any necessary re-adjustments.

Associate-level accreditation

The minimum level for entry to the associate grades (Associate and Provisional Associate) is the ACS examination or its equivalent, not unlike the previous level 3 accreditation. In terms of the Australian Qualifications Framework (AQF), the level is consistent with AQF Level 5. As for professional accreditation, a program is being developed for all courses to be re-accredited as soon as practicable. Existing course accreditations will remain in effect during this transition period, which will also include a period for any necessary re-adjustments.

The removal of the direct nexus between the grade of Associate and the Professional Division is expected to lead to a wider range of courses being accredited at both Technical and Further Education (TAFE) and private training providers.

The IT industry

The changes that have been made to entry requirements have not been made in isolation. The ACS, like all organisations, exists in the context of its environment and there has been considerable consultation over a number of years with representatives from both academia and industry. In fact, it is the ACS objective of becoming more relevant to the industry that largely underpins the new membership structure.

As part of the work of the Task Force, the ACS has developed a view of the IT industry that focusses on job categories or streams, and the skills and knowledge required for competent performance in those jobs. Nine broadly-based job streams have been identified that are relevant to the present and future needs of the IT industry:

- systems development
- operations
- supplies support

- specialist support
- consultancy
- education and training
- research and development
- IT equipment design and manufacturing
- management

Within each of these job streams many different activities have been identified. However, from the point of view of recognition and skill assessment, all of these activities were found to fit into two quite distinct skill levels: professional level and technician level.

The ACS Task Force also found that there was a good alignment between its findings and the developing AQF competency framework.

It found that the professional-level functions and the application of the core body of knowledge to be generally consistent with the AQF levels 7 and 8. The ACS is keen to further investigate the development of competency-based standards at this professional level.

The technician-level functions were found to be generally consistent with AQF levels 1 to 6. These technician-level functions are clearly appropriate for competency-based assessment and they form the basis of the associate membership of the society. At the moment the minimum entry level is set at AQF level 5, the level of the current ACS examination.

The society is pleased to be involved with and to support the current competency-based standards work being undertaken by the IT ITAB and ANTA for the IT industry. Although this work is currently being undertaken at levels 1 to 4, the society supports its development and encourages extension into higher levels. Such competency-based standards have an important part to play in the IT industry, both as evidence of competency on the part of the individual and the employer, and as a possible structured pathway to Associate membership of the society.

Summary

The Australian Computer Society, as the recognised society for IT professionals, has recently completed a wide ranging re-engineering and re-defining of its membership structure to better position the society for the industry needs of today and into the next century. An Australian Core Body of Knowledge has been developed that will form the basis of recognition at the professional level, and for entry to the Professional Division of the society. At the same time entry to the Associate grade has been broadened to reflect the more diverse range of functions performed at the technician level within the industry.

Associated with these and previous structures is the need for the society to have in place systems to enable the relevant skills and knowledge to be assessed and recognised. These mechanisms are based on a system of course accreditation and

refereed experience. A formal process of recognising prior learning is also in operation for those applicants who do not have formal qualifications. By these mechanisms the society is confident that it is well positioned to meet the present and future needs of the IT industry, and at the same time provide recognition to individual competencies.

Changing demands on training

Brian Bowker
Resource Development Manager, SALMAT Computing Services,
New South Wales

In the computing industry change is a way of life. We embrace change because we need to help our customers reach their business goals, because we want to keep ahead of our competitors, because obsolescence is built into the tools we use and often just because we love it.

Change at the rate we consider normal brings with it an insatiable appetite for training. A day when we learn nothing new is considered a day wasted. Our employers cater to this appetite for learning by providing formal training sourced from external providers, by providing formal training sourced from within the companies we work for, by providing informal training and by relying on us to track down and learn things that we need to do our jobs.

This paper focusses on the externally sourced training for SALMAT Computing Services during the past financial year and our plans for the next 12 months. It describes how we spend our training dollar and who profits from our expenditure.

Our records show that nearly half the external training received by our employees was related to software and hardware. There is a small trend towards more training in soft skills which has been driven by our quality system and we are looking toward computer-based training to supply more of our training needs.

Within the mix there is great volatility. Although the percentage of our training dollar spent on technical training is unlikely to change dramatically, the particular courses are subject to constant change. The requirement for courses relating to performance, quality and management is more stable.

SALMAT Computing Services

SALMAT IS ONE of Australia's largest privately owned companies. We employ over 1300 full-time staff and around 10 000 part-time staff. We are Australia's largest marketing services company. Our clients use our services to communicate with their customers using a range of technologies including: direct mail, laser printing, letterbox delivery, data scanning and database marketing.

Computing Services is one of a number of discrete business units within SALMAT. We provide IT-related services to the direct-marketing industry. Our clients range from telecommunications companies and financial institutions to government, major retailers and service providers. In New South Wales we employ nearly 100 people in a range of technical and support services.

Computing Services provides data manipulation services to clients of SALMAT. We use a range of technologies to ensure our clients can accurately target their markets using direct mail. Items delivered using our services include: direct mail advertising, statements and magazines.

Using criteria provided by the client, it is often possible to reduce the number of unnecessary mail items delivered and hence reduce both overall costs and wastage of resources.

We employ a System/390 IBM mainframe, mid-range Unix machines and about 100 personal computers. Our New South Wales office is linked into a SALMAT network that enables us to process data on behalf of clients in all States of Australia as well as South-East Asia. We also manage computing facilities on behalf of our clients.

Training in Computing Services

Last year our budget for externally sourced training was about 2 per cent of our total payroll; this year it will be increased to 2.4 per cent. In addition to externally sourced training, considerable training is provided by trainers employed by SALMAT.

In return for our investment, we expect training that is:

- leading edge in terms of its content
- timely (we want it now)
- flexible in terms of its delivery
- comprehensive in terms of its subject matter
- cost-effective
- easily absorbed and retained

This year we will spend more on soft skills training, more on management training and we will pay more attention to training that will help us meet tomorrow's challenges while maintaining our core competencies.

The resource development manager is responsible for:

- the development of a Quality Management System that is certified to AS/NZS ISO9001:1994
- the development through training and career planning of our workforce
- the development and maintenance of documentation standards

New hire education and training

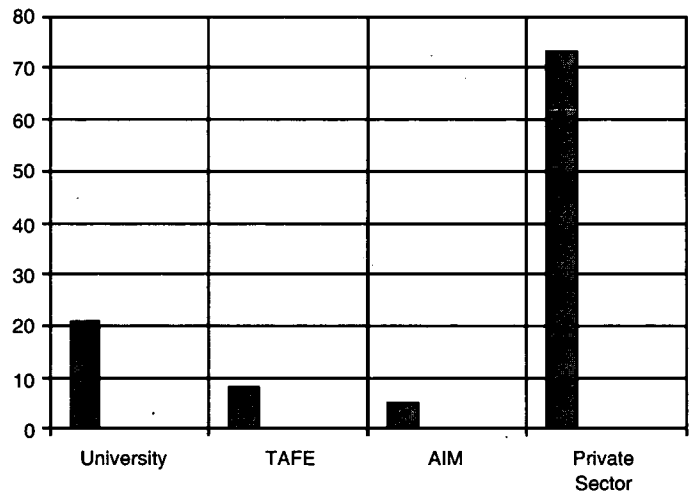
Experience rather than training is the critical factor in hiring new staff for Computing Services. We do, however, recruit a small number of staff who are entering the workforce

for the first time. Details of past experience and training are collected as part of the recruitment process and after induction these records are added to the employee's training file.

Induction training and some initial job-specific training are conducted during the first month of employment. After three months the new employee's performance is assessed and a detailed training plan is developed. This plan is then reviewed at three-monthly intervals.

From these records we are able to show where current staff gained training prior to joining SALMAT Computing Services. A little over a quarter graduated from a university, about 10 per cent reported some contact with TAFE but almost all our employees received some vocational training from the private sector prior to joining SALMAT.

Figure 1: Place where current staff gained training prior to joining SALMAT



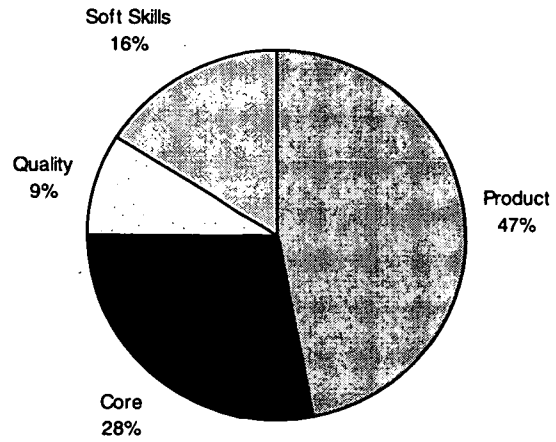
Training requirements

In order to determine our training requirements, we conduct an on-going needs analysis to identify and monitor staff training. Managers meet their staff annually to assess performance and prepare a career/training plan for the next year. Every three months the training plan is reviewed by both the manager and staff member to ensure training needs are being met. The results of these activities are captured in a training database.

In mid-1996, Computing Services began the development of a competency-based matrix with the intention of identifying competencies required to run the business as well as developing responses to identified gaps in training. We received considerable help and encouragement from Terry Walker of Intrain Services who translated the theory of CBT into practical activities that delivered rapid results. Without this insight, we would never have considered a competency-based approach to our training needs. There is, however, considerable work to be done before we have a satisfactory definition of the competencies required to run our business.

At the time of writing, we have identified 64 course topics that we will be addressing in the coming year. Figure 2 categorises the courses we have identified for the next financial year and illustrates our training emphasis.

Figure 2: Training emphasis of SALMAT for next financial year



Key to Figure 2:

Product: Courses specific to software products such as Oracle, Powerbuilder, Cobol and so on.
Core: Courses for underlying technical skills such as programming and database design.
Quality: Courses in QA techniques.
Soft skills: Courses in communication, team building, motivation and so on.

Changes in focus of training

In the software industry, today's buzzword is tomorrow's ancient history. CNE, CNA and multimedia are old hat as we struggle with the implications of the Y2K problem. Industries are being spawned to deal with a situation that some commentators would have us believe is the greatest catastrophe faced by the planet since the destruction of the dinosaurs. Some changes in focus that may also be noticed before the end of the millennium are described below.

Mainframe to open systems

Earlier this month, SALMAT Computing Services became one of three sites in Australia running IBM's System 390. This enables us to run MVS and UNIX simultaneously on the same mainframe and we expect to see the merging of our mid-range and mainframe systems. Consequently, we expect to see a shift in emphasis of our technical training. We are planning to undertake more training based in the open systems environment and less training specifically related to our mainframe technology.

It seems to me that TAFE could provide courses that would help the transformation from technocrat to manager. These courses would fill the gap between the seminar and the MBA and provide a one- or two-semester bridge for the new or potential manager.

'How to do it' courses instead of 'how to use it' courses

The current crop of software courses are designed around the premise that people need to be shown which buttons to push. This is often true, but this approach does nothing to improve productivity. There are thousands of people using word processors as typewriters and spreadsheets as simple ledgers. Used this way, computers are not a significant improvement over older, less sophisticated technologies.

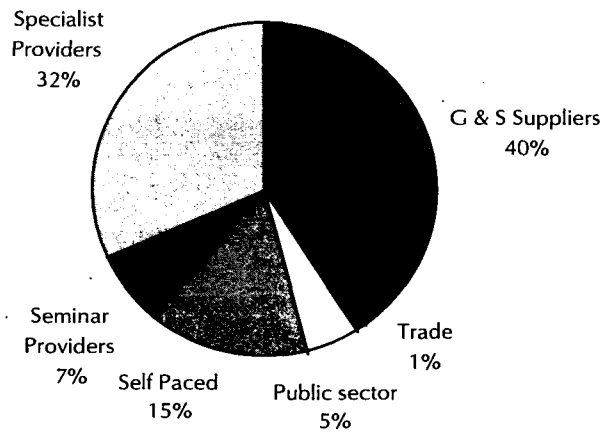
To gain the benefits of the now not-so-new technologies, the old paradigm has to be broken. We need more software courses designed to show business how to get the promised benefits from the technology rather than which buttons to press.

Just to take one example, Microsoft Word has a bewildering array of options. For each member of staff to learn and then apply them individually is counter-productive. However, Microsoft Word has a number of tools to facilitate standardisation within a site. Use of these tools can increase productivity, improve the quality of the output and reduce training requirements. Few businesses currently use these tools effectively. The right kind of training would improve the value of these tools immeasurably.

Who pays and who profits?

Figure 3 shows that only about 5 per cent of our current training is conducted by the public sector. Organisations that sell us goods and services that require us to undergo training in order to use their products account for 40 per cent of our training budget. Specialist training companies which provide only one or two highly-targeted courses account for 32 per cent. Professional seminar providers such as MTE and Fred Prior account for 7 per cent. The balance is spent on computer-based self-study materials.

Figure 3: Expenditure by provider type



LAN to WAN

Until recently, much of our work was delivered by courier using magnetic media. Increasingly, we have direct links into our clients' premises and receive work electronically. As we begin to rely more on this method of communication and our business expands into South-East Asia, we will require more training in WAN technologies. We will, of course, maintain our existing LAN skills base but the level of training required to do this is likely to decrease.

Proprietary OS to UNIX O/S

The trend away from proprietary operating systems to the UNIX environment can only be accelerated by the introduction of technology such as System 390. We expect UNIX to be even more important in our environment and thus training in UNIX will intensify.

Soft skills

Analysis of data gathered as a result of the introduction of our Quality System has shown us that problems, when they occur, are more often traced to deficiencies in soft skills than a lack of technical skill.

Over the past year there has been an increase in training in soft skills such as communication, teamwork, management, problem-solving, motivation and so on. Prior to this our training budget was largely spent on technical training.

Self-paced training

Self-paced, computer-based training packages were introduced into Computing Services during 1996. This has proved an excellent innovation. Our technically sophisticated workforce has taken to computer-based training enthusiastically. It is flexible and cost-effective. We expect to increase our reliance on computer-based and other packaged training over the next financial year.

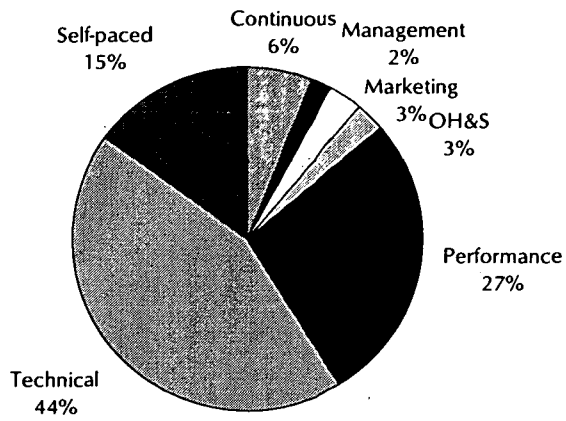
Training provider opportunities

From my perspective as a purchaser of training services, there are a couple of gaps in the training that is currently available. Technical and Further Education (TAFE) providers may be able to help bridge these gaps.

Turning technocrats into managers

Managers in our industry are typically chosen from people who have demonstrated excellent technical skills. Management skill or potential is rarely a major factor in their selection. Unfortunately, technical excellence is no guarantee of management success, nor does the technical environment adequately prepare people for a management role. Seminar providers have recognised this gap but a one-day talkfest cannot hope to build the required skills.

Figure 4: Areas of training for 1996–1997



In the 1996–1997 financial year, nearly half of the training budget was spent on training in technical areas relating to computer software and hardware. Training designed to improve performance such as team building and communication training accounted for 27 per cent of the budget. Management, marketing and occupational health and safety (OH&S) together accounted for 8 per cent, while quality-related courses accounted for 6 per cent. Self-paced training was mostly either performance or technical training and it accounted for 15 per cent of the budget.

Students and trainees in VET

The Honourable Dorothy Kotz
State Minister for Employment, Training and Further Education, South Australia

Reforms to the Australian training system are considered from the student's perspective. The impact on job opportunities for young people has been profound and not always expected. Some see young people as victims because of the collapse of the full-time youth labour market, leaving young people with no choice other than to remain in education or training; and because of decisions made about the training agenda with little consultation with young people. Declining year 12 retention rates and poor school-leaver participation in vocational education and training (VET) has been a response. However, enrolment rates in VET have soared in areas of perceived job vacancies, suggesting that students respond to labour market trends. Governments do need to encourage students into non-traditional or emerging areas of likely future growth. To help arrest declining year 12 rates, VET has been introduced into schools, in South Australia with the VISA program (VET in South Australian Certificate of Education (SACE) Arrangements), to provide accredited training to school students with full articulation to post-school training and to count their vocational education and training towards their SACE. School leavers will have greater choice of training options through New Apprenticeships. The number of adult learners wanting vocationally specific training has increased. The growth of private providers and competitive tendering for training dollars has been seen to increase the financial burden on students and trainees but competition should drive down the cost of training to the individual—especially for employers contributing. As well, with a choice of training providers, students and trainees can use their purchasing power to keep the price low. Governments will continue to provide funding for training programs, but expect to get better value. New pilot programs to test user choice in South Australia in the automotive engineering, hairdressing and electrical areas have allowed users to choose the best available training product from private training providers or Technical and Further Education (TAFE) institutes. The South Australian Government will continue to fund courses in areas with no economic advantage for a private provider. Public sector traineeships will be continued. A link between training programs and employment outcomes is needed; young people need real training for real jobs. The new VET arrangements will provide students and trainees with the flexibility to get the training they need.

I WOULD LIKE to thank the National Centre for Vocational Education Research (NCVER) for the opportunity to address the national conference. I am particularly pleased to be speaking today, when the conference is focussing on the market for vocational education and training (VET) from the perspective of students and trainees.

We have heard, so far, about the importance of VET in the Australian and international market place. We have heard what industry and enterprise expect VET to deliver. But all of this remains on a theoretical plane without consideration of the students and trainees who are to do the training.

I do not intend to dwell on the reforms made to the provision of Australian vocational education and training over the past decade or so. These reforms have been well articulated over the past two days. It is worthwhile, however, looking at these reforms from the student's perspective.

The re-formation of the Australian training system has required vision, commitment and faith that the outcomes will in fact produce a stronger Australian economy, and future employment for all those who seek it.

The response has involved the restructuring of industry, education sectors at the secondary and post-compulsory levels, and a complete re-thinking on how we are to train our workforce to serve industries and enterprises, many of which have not yet been invented.

Governments, industry and the community have grappled with some extremely complex issues, and have, on the whole, shown a national determination to make the reforms work.

The impact on job opportunities for young people has been profound and not always expected. Some commentators have argued that young people's wishes and desires have been sacrificed for a greater economic goal. They see young people as victims in the process, largely because:

- the collapse of the full-time youth labour market left young people with no other choice than to remain in education or training in order to compete with an expanding (especially female) adult domestic workforce, while watching their traditional employment base decline through international competition and through the introduction of new technologies
- decisions about the nature and form of the training agenda have been made from the top down with little, if any, consultation with young people

I suggest that young people have not been powerless in the debate. Increasingly we have seen them voting with their feet, as indicated by declining year 12 retention rates and poor school leaver participation in VET. I will expand on this later.

The problem for students and trainees has been *what is driving the system?* Has the demand for graduates come from job vacancies in particular enterprises or have we been training people in the hope that a ready supply of graduates will create jobs? I would suggest that it is a mixture of both.

The development of the State training profiles has enabled States to determine where to put their training effort to better match projected skills shortages and to supply industry with trained personnel.

Enrolment rates in VET and higher education courses have soared in areas of perceived job vacancies, and that suggests to me that students are very responsive to labour market trends.

On the other hand, governments have a responsibility to encourage students into non-traditional or emerging areas where it is likely growth will occur in the future.

In South Australia, the government has targeted a variety of engineering trades, based around the automotive industry, defence electronics, water management, information technology and telecommunications, and industries based around tourism, including wine, food processing and aquaculture.

Some of these industries might not have the glamour of the TV legal shows, but at least we can optimistically say there will be jobs for those who successfully train.

Successive governments at the State/Territory and National level have had to grapple with a declining youth labour market. As the State Employment Minister, it gives me no joy to see the unemployment rates for 15- to 19-year-olds stubbornly staying unacceptably high.

Providing programs in education and training which will lead to jobs is what responsible government is about.

But, then again, forcing young people to participate in spurious training schemes is not the answer. Young people need real training for real jobs.

I believe the direction currently being undertaken in VET will give young people the start they need to build a secure future.

But VET is not only about training for jobs. Certainly, a key component is vocational training, that is, learning the skills necessary to work in a particular occupation.

VET is also vocational education. Think about a plumber needing to know how to cut and stick pipes but also needing to know how to read, calculate accounts and anticipate trends in the building industry.

A VET sector determined solely on the immediate needs of industry will produce an inflexible cohort of finely-tuned factory fodder. To focus VET simply on a narrow band of vocational skills ignores its other primary function of education.

I am aware that other speakers today will expand on this point, especially the funding implications for the VET sector, which flow from referring to students and trainees as 'clients' or 'products' of training.

Simply put, in a totally market-driven VET sector, anything which is not a measurable 'product' becomes a sign of inefficiency, and any training, education or service without a direct employment outcome becomes a cost to be cut.

Such a narrow perspective ignores the myriad of courses provided through Adult Community Education for example, or student services provided through Technical

and Further Education (TAFE) institutes, without which many students and trainees would find it impossible to complete their vocational courses.

In an interview with the NCVER's *Australian Training Review* earlier this year, I spoke about the need to separate government support for programs which were basically 'training for training's sake' and those which led to employment outcomes.

Some training programs have been offered in the past as a means to reduce unemployment statistics. While this helps governments look as though they are doing something, they do little for the trainee or the community who must foot the bill.

While I will continue to argue for training to have an employment outcome, I recognise the importance of those courses and educational areas which support the learner to stay with and complete their course.

It is counter-productive to provide vocational training to someone who, for various reasons, has other needs which preclude them from studying.

This is a very different argument from providing a range of unstructured and unfocussed courses with little discernible benefit other than keeping the unemployment figures down.

I have been using the words 'students', 'trainees' and 'young people' as if they are synonymous. As we all know, they are not. Students and trainees in VET come from all ages and access VET for very different reasons.

There are three main cohorts of students and trainees accessing the VET sector. These are:

- students at school
- school leavers, and adults who are:
  - unemployed requiring retraining
  - employed and requiring reskilling or up-skilling
  - newly retrenched or at risk of retrenchment
  - embarking on a new career
  - broadening their employment interests

The big shift in focus recently has been the introduction of VET in schools programs. It has been necessary to review the relevance to non-academic students of a secondary curriculum which has been largely tailored for entrance to higher education.

In South Australia, with assistance from the Australian National Training Authority (ANTA), we have set up the VISA program (which stands for VET in SACE Arrangements) as an exciting initiative to provide accredited training to school students with full articulation to post-school training.

VISA enables students to count their vocational education and training towards their South Australian Certificate of Education, gained over years 11 and 12 as well as recognition and certification for successful VET modules.

VISA not only provides work-relevant training and valuable work experience, but a pathway into further training—if desired. It is a flexible, co-operative program

involving TAFE institutes, government and independent schools, ITABs (industry training advisory bodies) and private industry.

One of the examples in this State is the Holden-Schools' Project, involving Holden as the registered training provider of the Vehicle Industry Certificate, and the Para Institute of TAFE as the registered provider of the vocational education curriculum, in conjunction with participating schools from the northern suburbs of Adelaide.

A Senior Training Consultant from Holden has said of this program:

> *The students become so involved with their work that they really feel a sense of achievement. It's a wonderful opportunity for students from our local secondary schools to gain confidence and better communication skills in an adult environment.*

For students, the outcomes of this program include:

- the opportunity to gain South Australian Certificate of Education units, while at the same time
- gaining recognition and certification for successful VET modules
- gaining recognition and certification for a Vehicle Industry Certificate module, and
- the opportunity to take part in structured work placement in industry

All this is in an area with some of the highest rates of youth unemployment in the country.

VET is not about failure in the academic stream, it is about a positive choice for those who prefer a vocational or practical learning environment.

The more successful a person is in general education, the more likely that student will achieve in VET.

The Holden example demonstrates the value of building confidence and self-esteem through workplace recognition, which in turn encourages students to understand the benefit of succeeding in their general education at school.

Introducing VET into schools provides a reason to remain in school for those not willing or able to proceed to higher education. As previously mentioned, year 12 retention rates have dropped nationally over the past two to three years. Making part of the high school curriculum more relevant and focussed on vocational outcomes provides more flexibility for students without penalising their further study options.

School leavers will have greater choice of training options through New Apprenticeships. Training packages which target particular skills will make the system more efficient for students and trainees.

Hopefully, under the new system, the student who once said of a TAFE course, 'I didn't like it much, but at least it was short!' may now say, 'I liked it a lot—and it didn't need to be longer.'

While New Apprenticeships will assist employers by providing flexible modules to suit their enterprise, students will also be able to take advantage of this flexibility and target their training to particular employers.

Over recent years, the number of adult learners in VET has increased significantly. We now have almost as many people making the transition from higher education to VET as are moving the other way.

A soon-to-be-published NCVER report completed at the end of last year showed the main reason for this transition was to gain vocationally-specific training.

The value of VET as a legitimate player in lifelong learning has been recognised by such adults. It is a pity some teachers and parents of high school students view VET as a residual for those who have no other options.

VET is an essential pathway for many people in the transition to work, and the improvements currently being made to the system should encourage even greater access by people in all life stages and situations.

The new arrangements also present a challenge for governments and VET providers to be cognisant of the needs of students from disadvantaged groups.

Golding and Volkoff, in a paper to the NCVER/Centre for the Economics of Education and Training *Different drums* conference earlier this year argued:

> *... if society is to recognise the inability of some Australians to equitably access, pay for or achieve vocational outcomes from a fully metamorphosed VET, there will be a need for specific social justice principles and programs consequential to and complementary with the efficiency objective of the National Competition Policy as well as complementary to the expressed needs of its very diverse clients.*

In a more competitive training environment it is easy to assume that those with less social and economic wealth might miss out.

It is a role of government to ensure that everyone is given the opportunity to participate, and providing additional support to enable those who need it to compete is one way of achieving fairness in the system.

As we have heard, the establishment of the broader VET sector was prompted by a number of major economic and social considerations which, in paraphrase, included the need for government to keep Australian industry economically viable in a competitive world market and for industry to have access to the skills necessary to enable enterprises to develop new products and markets.

In this context, many authors have suggested that training is seen as a cost to both government and industry.

Although industry reaps the benefit of a skilled workforce, it is also prepared to pay wages commensurate with those skills. It is argued that as there is a great deal of personal gain for the worker, the individual student or trainee should bear some of the cost of training.

This argument has been used with some validity in the higher education area, and has been the basis for the introduction of the Higher Education Contribution Scheme (HECS).

For graduates of VET where the returns in wages for the training investment are not as high as that from higher education, an argument has been made to put the majority of training costs more appropriately onto government and industry.

The opening up of the training market with the growth of private providers and more recently, competitive tendering for training dollars, is seen by some to increase the financial burden on students and trainees.

This need not be so. Firstly, competition has been introduced to drive down the cost of training to the individual—especially for employers who are contributing to the cost of training for their workers.

Secondly, with a greater choice of training providers, students and trainees can use their purchasing power to keep the price low. Governments will continue to provide funding for training programs, only now we expect to get better value for taxpayers' money.

I was pleased to announce recently funding for pilot programs to test the application of user choice in South Australia and, in particular, the development and testing of the required administrative systems that will need to be in place from the 1st of January 1998 when user choice will be applied more generally. The pilot programs will be in the automotive engineering, hairdressing and electrical areas and have allowed users to choose the best available training product from private training providers or TAFE institutes.

I have made it clear that this process should help focus the outcomes of training on providing ongoing jobs for the trainees. The program will be carefully monitored to ensure there is minimal adverse impact in high priority training areas and in regional and isolated locations.

While increased competition practices should reduce the overall cost of training to students, the South Australian Government will not allow competition to disadvantage those in isolated parts of the State.

We will continue to provide funding for courses in areas where there is no economic advantage for a private provider to be involved. And we will continue to provide public sector traineeships, such as the 500 we have recently announced for regional South Australia.

Paternalism has no place in a modern VET system. We cannot on one hand ask people to contribute significant amounts of resources for training, and then tell them how and what they will learn.

Students and trainees have a right to expect the very best from our VET system. For them to contract to train, by giving their time and money, they have to have confidence in the system's capacity to deliver (all at a competitive cost):

- skills necessary for them to compete in the labour market
- up-to-date, relevant curriculum

- adult learning and flexible delivery methodologies
- a visible pathway to work

If all of these or some of these are not perceived to exist in a chosen course by a potential student or trainee, then they will look elsewhere for a better training product.

It is likely that young people have made the choice not to continue to study or engage in a training program because they fail to see the value in doing so.

It might be a marketing issue, but more likely, they are asking themselves, 'training for what?'. Is the training on offer going to increase their job opportunities, or is it going to involve them in a continuous process of learning which leads nowhere?

And so to conclude, let me reiterate there needs to be a visible link between training programs and employment outcomes. Young people need real training for real jobs.

The new VET arrangements will provide students and trainees with the flexibility they require to get the training they need, which will help them attain meaningful work and a secure economic and social future.

Refocussing market reform

Damon Anderson
Research Fellow, Centre for the Economics of Education and Training

Reports criticising supply-side market reforms in the Australian vocational education and training (VET) sector for failing to increase provider responsiveness to client needs argue that a direct relationship between providers and clients, who hold the balance of power, is needed to do so. Market theory reforms say that providers become more responsive to clients who are able to make training decisions and that failing to respond to this market demand will result in commercial oblivion. Therefore VET reform has shifted to the demand side of the training market. Current market reform uses user choice to empower clients by giving employers, together with their employees, the power to choose training provision. There is a lack of clarity and agreement about who are the major clients in VET and the National Centre for Vocational Education Research (NCVER) suggests that a clear and agreed definition is required before decisions can be made. The prioritisation of enterprise clients over student clients is justified on the grounds that both their needs are converging but evidence suggests that they are not. Definitions and discussions of the principal clients and the end-users of VET are provided. Training market reform policy giving precedence to the needs of industry and to the needs of enterprises/employers as the principal clients of VET providers, can be neither sustained nor justified. Industry, and increasingly enterprises, control policy, resource and curriculum priorities in the publicly-funded VET sector, while students are denied a voice. Individual students in VET number around 1.35 million, 90 per cent of whom are adults, yet they are denied their entitlement to influence national VET reform. Some of the major consequences of current policy for students are identified, and ways to enhance the potential effectiveness of demand-side reform outlined. Individual students are the major clients and their reasons for taking VET courses do not always relate to employment outcomes. The multiplicity of post-course destinations among VET graduates and the variable commitment of employers to workforce training suggest that individual students should be viewed as the main end-users of VET skills and competencies. Because of the misconception of who the are clients in official policy, students have responsibilities and obligations as consumers in the training market, but no associated rights and powers. In a user pays environment, students must subsidise their own VET, with declining support from employers. Responsiveness to client needs means acknowledging the central role of students as the direct consumers of VET.

Introduction

KEY REPORTS SUCH as *Successful reform* by the Allen Consulting Group (ACG 1994a) have criticised supply-side market reforms in the Australian vocational education and training (VET) sector because they have failed to increase provider responsiveness to client needs. Such reports argue that in order to increase responsiveness, it is necessary to establish direct relationships between providers and clients in which the balance of power is exercised by clients. According to the market theory from which such propositions derive, if clients are empowered to make training decisions, then providers will necessarily be forced to become more responsive and directly accountable to their clients. Providers who fail to respond to market demand will lose custom and sink into commercial oblivion.

As a consequence of such criticism, the focus of national VET reform has now shifted to the demand side of the training market with the aim of promoting 'a more direct and market-responsive relationship' between clients and providers. As the Australian National Training Authority (ANTA) indicates, 'at the heart of reform in vocational education and training is the need to give the clients more control over training delivery outcomes ... The demands of clients will ... increasingly drive improvements in the provision of training' (ANTA 1996, p. 7).

The main thrust of current market reforms is user choice which aims to empower clients by giving employers, in conjunction with their employees (apprentices/trainees), the power to choose when, where, what and how training is delivered, and by whom.

In spite of the strong emphasis given to developing direct relationships between clients and providers and empowering clients, there has been considerable ambiguity in official policy statements and disagreement throughout the VET sector over the question of who are the major clients in the training market (Anderson 1996a; NCVER 1997b; Ryan 1995). The lack of clarity and agreement over who are the major clients in VET has significant policy ramifications. The National Centre for Vocational Education Research (NCVER) suggests that while strategies to empower clients are the key to strengthening client focus and provider responsiveness, 'a clear and agreed definition is required before decisions can be made about who to empower and how best to achieve the desired outcomes' (NCVER 1997b, p. 7). Moreover, Selby Smith et al. (1996) have noted that considerable disagreement exists among stakeholders over the issue of whether employers and/or employees are the key clients under the new user choice arrangements. They argue that 'the resolution of the difference of view ... is essential to the design of a training system based on User Choice' (Selby Smith et al. 1996, p. 9). In effect, the success of current training market reforms hinges to a large degree on who is empowered and whether or not they will be able to exercise effective control over training decisions.

As the national VET reform agenda has evolved over the past decade, official definitions of 'clients' have been progressively redefined and the relative priority attached to different clients' needs has altered. By 1994, ANTA had redefined clients and reordered their needs as follows: 'The reforms seek to deliver a more flexible,

nationally consistent training system which better meets the needs of its clients, *industry, enterprises and individuals*' (1994a, p. 2, my emphasis).

Elsewhere, ANTA stated that the national strategy for VET 'aims to ... accommodate the needs of *industry* as the *principal client*' (1994b, Foreword, my emphases).

More recently, ANTA has indicated that the needs of enterprise clients are to take precedence over those of individual students/employees: 'Fundamentally, enterprises are the key clients of the training market ... Individual students are ... the immediate clients of training providers' (ANTA 1996, p. 7).

The prioritisation of the needs of enterprise clients over those of student clients is justified on the grounds that the needs of individuals and enterprises are converging with the result that a 'high level of coincidence' now exists between their respective needs (ACG 1994a, p. 135). Moreover, it is argued that because enterprises (or by implication employers) are 'the end users of skills acquired through training', and because they 'are the ones that compete nationally and internationally and, at the end of the day, create jobs for individuals', VET providers should respond directly to their needs rather than those of individual students (ANTA 1996, p. 7).

Reflecting the new emphasis on empowering clients and the priority placed on enterprises as the key clients of the training market, user choice has been adopted as the key element of current training market reform. The aim of user choice is to enable employers, in conjunction with their employees (apprentices and trainees), to exert greater influence over training decisions and, indirectly, resource allocation. User choice has been restricted to the area of apprenticeships/traineeships on the grounds that 'it is the one in which the employer obligation to train is most apparent, and where the interests of the enterprise and the individual most obviously coincide' (ACG 1994a, p. 55).

The main purpose of this paper is to contribute to debate about whether individual students or industry/enterprises should be viewed as the major client in the training market. In doing so, official definitions which give precedence to industry and individual enterprises over students will be subject to critical analysis from a variety of perspectives. By way of conclusion, some of the major consequences of current policy settings for students are identified, and ways to enhance the potential effectiveness of demand-side reform will be outlined. The paper is based on work in progress and rather than reach definitive conclusions, it aims to raise some key policy questions for further consideration.

Definitions

According to *The Oxford English dictionary* (1970), a 'client' is 'a person who employs the services of a professional or business man in any branch of business' or, alternatively, a 'customer' who is defined as 'one who customarily purchases from a particular tradesman' and as 'a buyer, purchaser'. In effect, being a client implies that one is either *using* and/or *buying* goods and services. Using and buying are acts which

imply the existence of a *direct* exchange-based relationship between two parties, one of whom is producing and/or selling the said goods and services and the other who is purchasing and/or using them. The terms 'buyers' and 'purchasers' are interchangeable, as are 'users' and 'consumers'. In economic terms, a 'consumer' is 'one who uses up an article produced, thereby exhausting its exchangeable value' as 'opposed to *producer*'.

In VET, consumption could be said to take two forms: direct and indirect. Direct consumption refers to the use of programs and services produced by VET providers, by way of participation. Alternatively, consumption can occur indirectly in the sense that a third party, such as a government or an employer, purchases VET programs and services for direct consumption by students/employees. In such instances, both the subsidised student-as-user and the government or employer-as-purchaser are consumers of VET programs and services, although consumption is respectively direct and indirect. A full-fee student who both purchases and uses VET programs and services is simultaneously engaged in direct and indirect consumption. Given that domestic students in recurrently funded VET programs are generally required to pay partial fees, they are therefore both direct users *and* purchasers of programs and services, at least in a partial sense and in conjunction with government and/or their employers.

Who are the principal clients?

In view of these definitions, to what extent can it be said that industry is the 'principal client' of the national VET system, and that enterprises are the 'key clients of the training market' as opposed to individual students? In terms of *direct* usage or consumption of VET programs and services, individual students are unquestionably the principal clients of VET providers. In 1996, there were 1.35 million students enrolled in VET of whom 78 per cent were enrolled in vocational programs (NCVER 1997a). Regardless of who purchased the programs and services in question, individual students must necessarily be viewed as the 'front-line consumers' in the VET sector (Anderson 1995a). ANTA acknowledged this reality recently when it stated that 'individual students are ... the immediate clients of training providers' (ANTA 1996, p. 7).

In what sense, and to what extent, can industry, enterprises or employers be viewed as direct users or consumers of VET? The above definitions indicate that generic clients such as industry and enterprises do not qualify as direct users or consumers except in so far as employees participate in VET programs and services. This assumes of course that the particular definition of 'industry' and 'enterprises' in use is inclusive of employees. Recent policy statements are notably equivocal on this point although the general impression conveyed is that the term 'enterprises' is now used to refer exclusively to employers (e.g. Kemp 1996). The sole exceptions to the above rule are those instances where employers themselves participate in, for example, small business or management training programs. In such limited cases, employers qualify as direct users of VET programs and services.

Given that students, rather than industry/enterprises, are the direct users or consumers of VET programs and services, the question remains as to which of these two groups comprises the largest group of *indirect* consumers, that is, buyers or purchasers of VET. Financial contributions from Commonwealth and State Governments account for the lion's share of recurrent and capital revenue in the national VET system. In 1995, recurrent government appropriations accounted for $2.7 billion or 81 per cent of total revenue (excluding capital appropriations) whereas non-recurrent contributions accounted for $0.6 billion or 19 per cent (Australian Committee on Vocational Education and Training Statistics [ACVETS] 1996). Government, or more accurately the taxpaying community, is undoubtedly therefore the single largest purchaser or indirect consumer of VET in the public sector.

Students contribute to national VET revenue via tuition and non-academic fees and charges whereas industry/enterprises contribute primarily via fee-for-service activities. Revenue generated from both fee-for-service activities and student fees and charges falls under the category of non-recurrent contributions to national VET finances. In relative terms, fee-for-service activities produce roughly twice as much revenue as do student fees and charges. But in addition to revenue from industry training contracts, fee-for-service activities include funds allocated by competitive tender for government labour market programs (GLMPs).

Table 1: National VET revenue, 1993 ($million)

Recurrent	Non-recurrent		
	Fees and charges	**Fee-for-service activities**	
Government	Students	Industry	Government
2653	103	27 (est.)	250 (est.)

Sources: Estimates are based on data provided in: ACVETS 1995; National Board of Employment, Education and Training (NBEET) 1994; ACG 1994a, b.

Taking GLMP funding into account, and on the optimistic assumption that industry training contracts generated the bulk of non-GLMP income from fee-for-service activities, industry's contribution to national VET revenue (excluding capital appropriations) in 1993 amounted to an estimated $27 million, or roughly 1 per cent. Given that income from student fees and charges amounted to $103 million in 1993, or roughly 3 per cent of total revenue, this suggests that the financial contribution made by students was around four times higher than that made by industry. Table 1 contains estimates of the total financial contributions (excluding capital appropriations) made in 1993 by government, individuals and industry to the national VET system, primarily the public technical and further education (TAFE) sector.

Research which I conducted for the NCVER in 1992–93 found that student fees accounted for 13 per cent of TAFE college revenue, whereas industry fees accounted for 7 per cent (Anderson 1994). Regardless of the precise size of financial contributions, for which there are currently no authoritative data, it is clear that students are collectively

the largest non-government purchasers, and hence indirect consumers, of publicly provided VET.

Some concession must be made for the fact that a proportion of VET students have their fees paid by their employers. For instance, Dawe (1993) found that 8 per cent of VET students (primarily enrolled in TAFE) had their fees reimbursed by their employers. The Australian Bureau of Statistics (ABS) (1996b) found that 16 per cent of TAFE graduates had their fees paid by their employers during their final semester. These data do not therefore substantially alter the overall conclusion that individual students collectively make a much greater financial contribution to the public VET system than do enterprises or industry as a whole.

National VET financial data also show that income generated from student fees and charges is growing at a faster rate than industry investment in publicly provided VET programs and services. Burke (1996) found that between 1989–90 and 1993, national VET revenue from fee-for-service activities increased by 158 per cent whereas revenue from student fees and charges grew by 44 per cent. But most of the growth in fee-for-service income during this period can be attributed to substantial increases in GLMP funding. Since 1993, and in spite of the additional Commonwealth funds flowing to Working Nation programs, growth in income from student fees and charges has outstripped that from fee-for-service activities. Between 1993 and 1995, income from student fees and charges rose by 41 per cent compared to income from fee-for-service activities which grew by only 11 per cent during the same period (see Table 2).

Table 2: National VET revenue from non-government sources, 1993–95

	Fee-for-service (a)	Student fees and charges
Revenue in 1993	277 110	103 345
Revenue in 1994	303 489	121 926
Revenue in 1995	308 210	145 587
Percentage increase 1993–95	11	41

Note (a): Fee-for-service receipts include amounts for Commonwealth labour market programs and adult and community education (Stream 1000).

Source: ACVETS (1994, 1995, 1996) collection of financial data on vocational education and training.

A similar picture emerges from the commercial training sector in Australia. In 1994, 51 per cent of private training providers reported that the courses which generated most revenue were scheduled/public courses for individual fee-paying students. Courses for specific employers were identified by 43 per cent as the largest source of revenue and GLMPs were nominated by 7 per cent (ABS 1996a). My own research found that in 1992–93, private business colleges—a sub-sector of commercial training providers and the private sector equivalent to TAFE colleges—derived around 80 per cent of their revenue from individual student fees, 17 per cent from government sources, and none from industry clients (Anderson 1994). Without exception, such colleges identified individual fee-paying students as their principal clientele. Available data suggest therefore that fees and charges paid by students provide the single largest source of non-government revenue in both the public and private VET sectors.

It should be noted that industry invests a substantial amount in training provision, estimated by the ABS (1994) to be in the vicinity of $4.4 billion in 1993. However, as ACG (1994b) notes, most employer expenditure on training is directed to equipment suppliers and manufacturers, and private providers. As the vast bulk of industry-funded provision involves the delivery of non-accredited training, principally short courses, it does not therefore fall within the scope or influence of government VET policy.

In effect, students are not only the most numerous users or direct consumers of VET programs and services but also the largest group of non-government purchasers or indirect consumers in the public VET sector. As both the major users and purchasers, individual students satisfy the definitional criteria for designation as 'principal clients', at least within the context of the public VET sector. Moreover, in terms of direct and indirect consumption of publicly recognised VET programs and services, neither industry nor enterprises satisfy the necessary definitional criteria.

Aside from semantics and statistics, the logic of market theory suggests that individual consumers, of whom students are the most numerous, should be viewed as the principal clients in the VET sector. As noted earlier, market reforms to increase the responsiveness of providers to client needs are predicated on the assumption that a *direct* relationship exists between producers and consumers. In this regard, the Director of Holmesglen Institute of TAFE in Victoria has proposed a definition of clients based on the commercial market framework within which the institute operates:

> *Under its quality assurance registration (ISO 9001), Holmesglen defines its clients as individuals or organisations which* use *the education and training services provided by the Institute. Customers are defined as the individuals or organisations which* purchase *the education or training services of the Institute which can include full fee paying students, the Office of Training and Further Education, Department of Employment, Education, Training and Youth Affairs or business ...*
>
> (cited in Auditor General of Victoria 1996, p. 57, my emphases).

In other words, official government policy documents which define industry/enterprises as the principal or key clients do not reflect the commercial realities of the market environment within which VET providers currently operate. From a provider perspective, industry is considered to be neither a client nor a customer, and individual enterprises are viewed as only one of many potential clients and customers. The Auditor-General of Victoria noted in the same report that 'the Director at Holmesglen Institute ... voiced a strong opinion that, although recognising fee-for-service clients, those employers who recruited the Institute's graduates or had employees such as apprentices who undertook (VET) courses did not form part of the Institute's client base' (1996, p. 56). From a strict market economic and commercial perspective, therefore, a central premise on which user choice and the current market reform agenda are based appears to be flawed.

Are the needs of individuals and industry converging?

As noted earlier, the policy decision to give precedence to the needs of industry and enterprises as the 'principal' and 'key clients' of the training market presumes that the needs of individuals and industry/enterprises are converging. Available research evidence casts some doubt on this claim. Drawing on the same body of data that ACG (1994a) originally used to justify this claim, it can be demonstrated that although employment-related outcomes are sought by a significant majority of VET clients, they are by no means the only reason why individuals choose to undertake a VET course. Dawe (1993) found that: 15 per cent of VET clients undertook their courses 'for personal development'; 6 per cent did so 'to try to get into another course of study'; 5 per cent did so 'for interest or recreation'; and 3 per cent did so for 'other' reasons. In other words, Dawe's study suggests that around one in 10 students undertake study in VET for reasons unrelated to employment. Moreover, as reflected in Table 3, 'for personal development' was the third most common reason why students enrolled in TAFE.

Table 3: Main reasons for doing VET courses (per cent)

Main reasons for doing course	Dawe (1993)	ABS (1996b)
To get a job (or own business)	26	33
For a different career	12	11
To get a better job (or promotion)	12	13
Requirement of the job	12	12
To get extra skills for present job	16	11
For personal development	15	13
For interest	5	a/c
To get into another course of study	6	6
Other (not work-related)	3	2
Subtotal of reasons not work-related	m/r	21

Notes: a/c means already counted under 'for personal development' in ABS (1996b).
m/r means that multiple responses were allowed by Dawe (1993).

Similarly, the ABS (1996b) found that 13 per cent of TAFE graduates did their courses 'for interest or personal development', 6 per cent 'to get into another course of study', and 2 per cent for 'other' reasons. In total, 21 per cent of TAFE graduates undertook their courses for reasons unrelated to employment. Although the ABS data suggest that 80 per cent of TAFE graduates did their courses for employment-related reasons, only 23 per cent did their courses for reasons directly related to their existing employer (i.e. requirement of the job' and 'to get extra skills for present job'). In total, 57 per cent of TAFE graduates did their courses to enter a more satisfactory form of employment, including self-employment. In such cases, it cannot be taken for granted that the skills and competencies sought by students necessarily coincide with the particular requirements of enterprises and employers.

The findings of these studies suggest that the correspondence between the needs and objectives of individual students and those of industry/enterprises is not as simple and direct as is assumed in official policy settings. The degree of divergence between the goals and motives of students on the one hand, and the (assumed) skill requirements of industry/enterprises on the other hand, is significant enough to warrant further consideration of policy settings which subordinate individual needs to those of industry/enterprises. At the very least, it highlights the importance of recognising that students enrol in VET courses with diverse needs and aspirations, not all of which relate to employment outcomes, and not all of which can therefore be satisfied by developing and accrediting VET courses against industry or enterprise requirements.

An enterprise survey conducted by ACG (1994a) provides additional evidence to suggest that there is a significant gap between the needs of individual employees and their employers. ACG found that only half of the enterprises provided substantial training to new employees. Only 56 per cent of enterprises considered public recognition of training to be important from the enterprise perspective, whereas 82 per cent felt that it was important from an employee perspective. Based on enterprise responses, these findings suggest that the needs and interests of employers and employees with respect to VET qualifications do not coincide to the extent that is assumed in current policy settings.

Who are the end-users of VET?

As stated already, the second premise on which the claim that enterprises should be viewed as the 'key clients of the training market' is that they, or more precisely employers, are the 'end users of skills acquired through training' (ANTA 1996, p. 7). Brief reference should be made here to the problems associated with the imposition of the concepts and language of market economic theory on VET. To date, there has been considerable confusion in the policy literature over the definition of the 'product' in VET (Anderson 1996a, 1997a; NCVER 1997b). As a consequence, it has become 'increasingly unclear whether the product is the package of programs and services delivered by training providers to direct consumers (i.e. students) or the "value added" characteristics which result from participation in these programs and services (i.e. knowledge, skills, competencies and qualifications)' (Anderson 1996a, p. 52). Given that students are the principal direct and indirect consumers of VET programs and services, this suggests that current policy settings assume that the 'value-added' characteristics resulting from consumption of VET programs and services constitute the product for enterprises. By implication, graduates rather than the VET programs and services are the end-products that enterprises consume by way of employment.

Apart from the fundamental educational and ethical problems that such a definition poses, the assumption that the graduate is the product is logically inconsistent with both the concept and practice of marketing VET. As the Director of Holmesglen Institute of TAFE argues, 'comments about "employers" as clients (are) naive because ... they assume that the product of vocational education and training institutions is its

graduate student, not the programs and services of the institutions offered to the student or business' (cited in Auditor General of Victoria 1996, p. 57). Put simply, VET providers produce and market programs and services, not graduates, to fee-paying customers who primarily comprise individual students.

Conceptual imprecision and logical inconsistency are not the only grounds for questioning the foundation claim that enterprises/employers are the end-users of VET. Even assuming that enterprises/employers can be viewed as the end-users of the skills produced through training, empirical evidence about VET graduate outcomes casts some doubt on the extent to which enterprise/employer needs should determine learning objectives. The ABS found that, although unemployment among TAFE graduates fell by 6 per cent, 15 per cent of all TAFE graduates remained unemployed five months after course completion (ABS 1996b). Moreover, the fact that over one in 10 unemployed graduates had given up looking for work in a field related to their study only five months after graduation suggests that the labour market value and relevance of their VET qualifications were not only limited in the short-term, but also likely to diminish significantly over time.

Given that the majority of recognised VET courses had been accredited against national industry-determined competency standards at the time of the ABS survey, the persistence of unemployment among TAFE graduates presumably does not reflect a lack of responsiveness to enterprise/employer needs. Rather it is more probably a direct consequence of insufficient job opportunities. In this regard, a national employer satisfaction survey conducted by AGB McNair (1996) found that 79 per cent of employers considered that TAFE graduates had acquired skills relevant to current organisational needs, and 65 per cent were satisfied that the skills acquired were also relevant to their future organisational needs. Such satisfaction ratings, respectively 10 per cent and five per cent higher than those registered for VET courses delivered by private providers, suggest that TAFE is already responsive to enterprise/employer needs. Even ACG (1994a) found that over three-quarters of all enterprises which used TAFE-provided training for their employees were satisfied with the outcomes. Yet it continued to argue that publicly provided training lacks responsiveness to enterprise/employer needs.

Reflecting the general trends in labour force participation (Burke 1997), ABS (1996b) also found that of the total number of graduates who were employed five months after course completion, 25 per cent were employed on a part-time basis and 24 per cent were employed on a casual basis. Twenty per cent of all TAFE graduates reported that they were 'not in the labour force' five months after course completion. Regardless of the underlying reasons, these findings suggest that a significant proportion of TAFE students have a wide range of educational and social needs unrelated to work that should be addressed by VET providers—unless it is assumed that vocational education should be exclusively or even predominantly concerned with preparation for participation in paid employment. A proportion of VET graduates would also no doubt be intending to use their newly developed skills in unpaid employment at home and elsewhere, or alternatively in a voluntary capacity in the not-for-profit community sector.

In a context characterised by high levels of voluntary and involuntary unemployment, underemployment and non-participation in the labour force, it cannot be taken for granted that industry, or more especially individual enterprises, will necessarily be the end-users of the skills acquired through VET. Both logic and commonsense suggest that the prevailing model of VET which prioritises the needs of enterprises as end-users, most of whom reside in the private for-profit sector, is unlikely to adequately prepare students for diverse destinations and future roles and responsibilities beyond paid employment.

The logical conclusion arising from the above analysis is that students should be viewed as the principal end-users of VET skills and qualifications regardless of whether they are seeking an employment outcome or not. In turn, this suggests that it is inappropriate for enterprises/employers to be given exclusive, or even primary, control of VET policy and resource priorities. And it also suggests that it is inappropriate for providers to develop and customise VET programs and services in response to the specific requirements of industry and enterprises/employers without balancing such demands against the needs of individual students. Above all, it highlights the need for VET providers and the system as a whole to recognise and respond to the diverse needs, aspirations and destinations of students as end-users of the skills acquired through training, both as participants and non-participants in the labour market.

Other research, such as the paper by Burke (1998) in this volume, casts doubt on the likely effectiveness of market reform strategies which rely too heavily on enterprise demand. Burke suggests that at precisely the time when 'more people will *need* training' due to factors such as new technologies, work practices and increased competitiveness, it may be difficult to sustain participation in workforce training given current trends in employment/unemployment and employer expenditure on training. According to Burke, ABS data which show a reduction in real employer expenditure on training between 1993 and 1996 'provide some degree of confirmation of this fear'. Burke concludes that 'increased attention has to be given to sustaining *individual* demand for training by the growing numbers who are not in large firms or in full-time employment' (1998, my emphasis). In other words, VET providers may need to become more responsive to individual than enterprise clients if demand for VET qualifications is to be sustained in the current economic context.

Consequences for students

What are some of the key consequences for students of the way in which they have been framed in the national VET agenda? Students have been virtually excluded from formal processes of policy formation and denied an effective voice in the process of training market development. Reflecting the corporatist nature of the national VET policy agenda, industry bodies (employers, unions, private and public enterprises, industry training bodies) and government authorities accounted for 76 per cent of the 642 formal policy consultations undertaken during the period from 1989 to 1996[1]. The remaining 24 per cent of formal policy consultations involved: TAFE providers; private

providers and other education bodies; women's and community groups; TAFE teacher organisations; and individual experts.

During the entire eight-year period of the national training reform agenda between 1989 and 1996, TAFE students were invited to participate in formal policy consultations on only one occasion. In 1990, the Training Costs Review Committee asked the peak TAFE student body in Victoria, the Victorian TAFE Students' and Apprentices' Network (VTSAN), to attend a face-to-face interview to provide student feedback on its terms of reference (Deveson 1990). Even then, the policy review committee chose to ignore the advice of VTSAN that the removal of the Commonwealth embargo on TAFE tuition fees would have adverse access and equity implications. Subsequent research findings that increased fees and charges have depressed enrolments by women and disadvantaged groups in TAFE vindicate the advice tendered by students on this occasion (e.g. Golding & Volkoff 1997; Powles & Anderson 1996).

In effect, rather than view VET students as legitimate stakeholders in the process of training reform, government has instead chosen to treat them as passive 'consumers' of policy and resource priorities set by corporate interests. Even university students have been granted more opportunities to express their views about training reform than their VET counterparts. Both the Deveson report (1990) and the Employment and Skills Formation Council (ESFC 1991) consulted with the National Union of Students, in addition to which the ESFC consulted with the Council of Australian Post-graduate Student Associations in the development of the Australian Vocational Training System. Thus, VET students have been denied their basic democratic entitlement to participate in critical policy decisions which directly affect their education and work futures.

The exclusion of students from policy debate and formation at the national level has been repeated at both the state and provider levels in the VET sector. Research on student participation in the process of training reform reveals a widespread lack of formal mechanisms to facilitate and support student representation on decision-making structures or to solicit student views and concerns via consultation processes at all levels. A study commissioned in 1996 by the former Commonwealth Department of Employment, Education and Training (DEET) found that policies and practices for promoting student participation in decision making are generally under-developed and poorly implemented in the TAFE sector (Anderson & Hoare 1996). It concluded that 'the cumulative effect ... is that the co-ordination of, and provision for, student input into the national training reform agenda has not been achieved, and is unlikely to be achieved, until support is provided at all levels' (cited in Anderson 1997b).

Secondly, the multiple social and educational needs of students beyond acquiring skills for employment have been largely overlooked in a system which privileges national industry-determined and enterprise-specific competency standards as the sole reference points for curriculum development. In the national client satisfaction survey by Dawe (1993), 35 per cent of VET students indicated that their courses could be improved by including another subject, activity or service. Yet, to the best of my knowledge, this finding has never been acknowledged in subsequent reforms to VET courses and curriculum. Nor has any effort been made to identify precisely which

aspects of nationally recognised VET courses could be improved from a student perspective.

Other research suggests that students have been denied a role in curriculum planning, development and evaluation. The aforementioned DEET-commissioned study found that strategies to promote student participation in curriculum decisions are even more limited than those relating to policy formation (Anderson & Hoare 1996). Moreover, it concluded that the introduction of competency-based training has increased the control of industry/enterprises over curriculum content and assessment at the perceived expense of students and apprentices/trainees. As a consequence of its emphasis on developing an industry-driven training system, 'the reform agenda ... has propagated a curriculum development process which fails to recognise any role for student input to educational objectives and learning processes' (cited in Anderson 1997b in press). A large proportion of students surveyed for the DEET-commissioned study expressed a strong desire to exercise greater influence over decisions at all stages of curriculum development and program delivery.

The only market reform to date in which greater potential scope has been identified for individual students to exercise control over training decisions is user choice. But as noted earlier, user choice has been restricted to the area of apprenticeship and traineeship training. As a result, only indentured apprentices and trainees, who comprise around one in ten VET students enrolled in vocational programs (NCVER 1997a), are to be given greater influence over the content, location and delivery of their VET programs. And even then, as many analysts have noted (Anderson 1997a; NCVER 1997b), it remains unclear whether or how apprentices and trainees will enjoy parity with their employers in the exercise of their newfound market power. Available evidence suggests that they will neither exercise choice on an equitable basis with their employers nor, as a consequence, be able to hold their providers to account (Anderson 1997c).

Conclusion

The main conclusion arising from this paper is that official policy settings for training market reform, which give precedence to the needs of industry and enterprises/employers as the principal or key clients, can be neither sustained on logical and empirical grounds, nor justified in the light of market theory and practice. On each account, whether as users and direct consumers or as purchasers and indirect consumers of VET, individual students are collectively the major clients of VET providers. Moreover, available research suggests that the degree of coincidence between individual and industry/enterprise needs is not as great as is currently assumed in official policy. Individual students appear to undertake VET courses for a variety of reasons, not all of which relate to employment outcomes. Together with evidence about the multiplicity of post-course destinations among VET graduates and the variable commitment of employers to workforce training, such research suggests that individual students should be viewed as the main end-users of VET skills and competencies. Consequently, it is difficult to dispute the conclusion reached by Ryan

that 'overwhelmingly, the consumer in VET is the individual citizen; yet this most significant of the sector's clients is ignored by government policies purportedly fostering a "client-focussed culture"' (Ryan 1995, pp. 45–46).

One major consequence of the prevailing misconception of clients in official policy statements is that students have been given all the responsibilities and obligations associated with being consumers in the training market, but none of the associated rights and powers. In a user pays environment, students are now increasingly required to subsidise their own VET with little or no support from employers. Employer support for training and workforce development appears to be declining. And employers have now been effectively relieved of their financial obligations as 'users' since the demise of the Training Guarantee, in spite of the fact that they are among the principal private beneficiaries of workforce training. Industry, and increasingly enterprises, have been given control of policy, resource and curriculum priorities in the publicly funded VET sector, while students have been, and continue to be, denied a voice in the agenda-setting process.

Individual students in the VET sector number around 1.35 million, 90 per cent of whom are of adult age (NCVER 1997a). As such they are required to exercise all the political, social and civil rights and obligations associated with being an adult citizen beyond the narrow confines of the VET sector. It is therefore a curious anomaly that, in a modern social democratic nation such as Australia, individual students are being systematically denied their entitlement to influence the nature and directions of national VET reform.

Finally, official policy settings which aim to empower industry/enterprises as the key clients in the training market run counter to market theory and practice which suggest that direct relationships should be established between producers and consumers. If the desired goal of increased responsiveness to client needs is to be realised, the central role of students as the direct consumers of VET will therefore need to be acknowledged and steps taken to strengthen their control and influence over training decisions.

Endnote

1 These figures are based on consultation data provided in the following key reports: ESFC (1989); Deveson (1990); ESFC (1992); ACG (1994a); Taylor (1996). No consultation data were provided in Finn (1991) or Mayer (1992). The figure represents the total number of consultations by face-to-face interview or other means initiated by the relevant policy review committees. Informal consultations or written submissions initiated by interested parties have not been included.

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Marketing VET

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The marketing of vocational education became prominent in the late 1980s. At the institute level it could be improved by greater clarity about basic policy issues. Confusion exists about what products the vocational education and training (VET)sector is delivering to which markets and which products and market segments have priority. What are the most lucrative segments in institutional funding? Could the different segments end up cannibalising one another? What business do the staff, students and funding bodies believe VET is in? All have different perceptions. Is VET training for industry or for helping individuals realise their career goals? Should institutes compete with universities? The new 'training packages' threaten the basic product range. Technical and Further Education (TAFE) institutes should respond with branded products, subsidiary companies and 'centres of excellence' to differentiate themselves in the market place. If the new agenda threatens to commoditise products, TAFE institutes could seek dual accreditation from State recognition agencies and universities in Australia and abroad to maintain their marketing edge.

The rise of marketing since the 1980s: A personal view

MARKETING VOCATIONAL EDUCATION, or what we used to know universally as technical and further education (TAFE), came into greater prominence for many in the late 1980s. I, personally, had become involved in 1986 in the United Kingdom when I was seconded from my existing position to run a 'Marketing Code of Practice Project' for what were then 13 further education colleges and one polytechnic in Hertfordshire. This project ran in parallel with a great many more famous programs such as the national Responsive College Program (RCP) co-ordinated by the Further Education Staff College. From the 'Code of Practice' program I returned to my college to the first ever post at assistant principal level responsible for marketing.

As we used to say at that time—there was no such thing as no marketing—just good and bad marketing. We had always been marketing. We might not have described them as such but we had always had product, pricing, promotional and

positioning strategies. Indeed our positioning strategy in the 1960s and 1970s might easily have been characterised as that of a monopoly supplier of an in-demand service. Our pricing strategies were also very interesting. I would now describe them as price leadership—we tended to give our services away free or at very low cost. Thus prior to the mid-1980s in the British Further Education (FE) system and probably in Australia an urgent need for improved marketing structures in institutions was not particularly apparent. We managed, after all, a comparatively resource-rich and in-demand service.

The move to increased marketing was thus one response to the rapidly changing environment of the 1980s. In the 1980s in the UK there was a huge drop in the 16–20-year-old cohort. When I began at Stevenage College in 1983 we had 11 feeder secondary schools. When I left in 1988 we had seven. Baby boomers did not have babies at the same rate as their parents. The public sector was also being viewed very differently by the Thatcher government. Internationally, government was about to be re-invented as has been famously chronicled by Osborne and Gaebler (1993) among others. Funders were to be split from providers, steerers from rowers. The belief was that efficiency could be improved by the competitive tendering out of service delivery. As a result, governments in the UK and Australia actively encouraged alternate provision—a process about to reach a zenith in the Australian vocational education and training (VET) sector with the implementation of user choice. Thus initially marketing initiatives in both countries were concerned with:

- maintaining or improving existing student enrolment bases
- diversifying sources of funding

To meet these challenges there is no doubt that TAFE colleges, institutes and systems have improved their marketing capability in terms of both strategy and techniques.

Pejoratively one could say we have seen a rash of new logos, glossy brochures and contracts for marketing consultants. Yet I have no doubt that as a result of these marketing initiatives first TAFE systems and now institutes have:

- improved their promotional strategies
- vastly improved the quality of their promotional products such as brochures, newspaper advertisements etc.
- increased by several hundred per cent their income from 'fee for service' activities in Australia and overseas
- improved their knowledge of their clients
- probably most importantly of all become more customer-focussed

However, I believe, marketing at the institute level could be improved by greater clarity over a number of basic policy issues. Until we can clearly resolve these issues it is difficult to answer some fairly fundamental marketing strategy issues such as where Australian TAFE institutes should be positioning themselves in the many and various market segments of the education and training marketplace.

In other industries marketing strategy can be seen as a relatively simple exercise—as it could be said to have only two variables—products and markets. I suppose one contention of this paper is that there is still confusion over what products the VET sector is delivering to which markets and which products and market segments have priority. That we can ever resolve this confusion may be wishful thinking on my part as, after all, the challenge for the 1990s is living with ambiguity.

The issues are really basic. They include answering the questions:

- What business are we in?
- What business do funding bodies believe we are in?
- What business are we actually funded to be in?
- What business(es) do our students believe we are in?
- What business do our staff believe we are in?

I suppose these questions are prompted or highlighted by exposure to other systems. Superficially there are similarities between the Australian TAFE institutes and British further education colleges and between Australian TAFE institutes and American community colleges. Having spent almost 10 years in both the Australian TAFE system and the British FE system I sometimes wonder if the differences are more marked than the similarities. Australian TAFE institutes have not traditionally had an emphasis on two-year associate degree transfer programs, especially in the humanities, as have the American system. The British FE system has a large cohort of full-time students in the 16–19 year-old age group who enrol with them as an alternative to Years 11–12 in secondary school.

What business do funding bodies believe we are in?

The Commonwealth Government and the Australian National Training Authority (ANTA) emphasis for the VET sector appears to be initial training for people in employment. As TAFE institutes are classified as part of this sector, I assume this is intended to be a priority for us too. This is certainly the message one gets if one reads the special edition of the ANTA newsletter *Australian training* which reported the outcomes of the May 1997 Ministerial Council meeting.

This is entirely consistent with the ANTA objective of creating an industry-led system. Publicly-funded VET is to become the training arm of industry. One cannot help thinking under this model a publicly funded TAFE system only exists because of market failure—the failure of industry and individuals to appreciate the benefits of investing their own resources into their own vocational education and training.

Thus while ANTA sees us as the training arm of industry in an industry-led system, TAFE institutes have historically had some confusion over whether their primary customer is industry or individuals.

It is my observation that traditionally TAFE institutes and systems have seen industry along with government as the major stakeholders but individual students as

our primary customers. Certainly the majority of our systems is geared up to meet the needs of individuals. An example at a very basic systems level is that institutes still tend to enrol individuals in our programs not companies.

Research undertaken by Smith et. al. (1995) of Charles Sturt University for the Office of Training and Further Education in Victoria made the interesting observation that in many industries, apart from structured entry-level training, training was initiated by the employee rather than the employer.

The issue is further complicated by the definition of the client under ANTA's user choice funding model for apprenticeships and traineeships:

> *The client for user choice is defined as the employer and employee ... acting jointly. They may agree to authorise a broker to act on their behalf.*
>
> (The implementation of user choice
> Report to ANTA Ministerial Council, April 1997)

Under this model, TAFE staff will be faced with the challenge of designing training products and marketing strategies to meet the varying and possibly competing demands of employers, employees and perhaps one or more intermediaries. Of course this currently happens but, with the exception of commercial programs, it occurs primarily at a systemic level. Now, however, it will become part of the day-to-day work of teachers and other campus-based staff.

What business do our students believe we are in?

Customer satisfaction surveys undertaken in the North Coast Institute of TAFE confirm individuals place a very high premium on our courses being industry-relevant and our teachers having recent relevant industry experience. Recent national market research (KPMG 1993) indicates that the prime motivation for students enrolling in programs run by TAFE institutes is to undertake education and training programs that will make them more employable—in terms of obtaining or retaining their existing or a better job. Thus from the individuals' point of view TAFE institutes are in the jobs business (Western Australian Department of Training 1996). Interestingly, this was also the view of government when they were involved in the large-scale funding labour market programs—they wanted the students to get jobs to reduce the unemployment figures.

The Year 12 school leavers' choice: Students' perceptions of TAFE institutes and universities

Year 12 school students and their influencers/advisors, such as parents and school careers teachers, also see TAFE institutes as competing with universities as providers of tertiary programs. In their terms we do not do this particularly well, as TAFE is still seen, in many cases, as a place where the academically less able or more practical students go. Again this is related to job outcomes, though it would be interesting to know if universities or individual academics see themselves as primarily being in the jobs business. Universities are seen by potential students and their advisors as

providing training for the more prestigious and higher-paying careers. To an extent, the status of educational institutions reflects the status of the occupations they train for. Plumbers might earn more than medical practitioners, they might even have done as much for public health, but they still have a lesser status in many people's eyes. Improving the status of VET sector institutions is thus something more than merely conducting a glossy promotional campaign, it is about re-valuing the worth of different occupations.

It will be interesting to observe whether the status of universities changes if the number of university students continues to rise. I often accuse colleagues from the university sector of selling the benefits of an elite system, when in fact they are now a mass system. We all know examples of disappointed and disillusioned university graduates who thought that any degree would be a passport to a well-paying career. This has seen a flow-through into TAFE institutes where in some cases nearly 10 per cent of our students are university graduates. These graduates perceive the university courses to be of higher status but TAFE courses to be shorter, more practical and less expensive. As they are already university graduates, status is not an issue. In competition between universities a clear pecking order is emerging with universities such as Melbourne and New South Wales at the top and some of the newer regional universities nearer the bottom.

What business do staff believe we are in?

In my experience, teaching staff's primary focus is on their own individual students. Industry is important but it is a secondary customer unless you happen to be a training consultant or business development manager whose task is to sell 'fee for service' programs to commercial customers. Certainly in the North Coast Institute of TAFE most staff have a major concern with access and equity. When living and working in an area which includes a high percentage of socially disadvantaged people, equity is a major concern for the institute as a whole.

The marketing implications for these different perceptions

I have argued above that the Commonwealth and ANTA see TAFE institutes as part of an industry-led system with an emphasis on the initial training for those already in employment, albeit just in employment. VET is in the business of being the training arm of industry. Existing students within TAFE institutes see the primary purposes of the system as a means of securing a career either in terms of a new job or a better job. This better job might be with their existing employer or in many cases a new employer in a different industry. Many school leavers and their advisors view TAFE institutes as an alternative to university.

The essential difference is that many of our existing students are not currently working in the industry their courses are related to. They are aspirants rather than trainee practitioners. In the North Coast Institute of TAFE less than 50 per cent of our

total annual student contact hours (ASCH) is delivered to students who describe themselves on their enrolment forms as being in employment related to their courses. The rest are either unemployed seeking work or full-time students. Though this might be an extreme position reflecting a number of social trends on the North Coast of New South Wales, I do not believe it is atypical of many TAFE institutes.

What business are we funded to be in?

TAFE institutes are increasingly judged on their responsiveness and flexibility to industry needs as perceived by ANTA and a number of peak industry bodies. In most cases, however, their funding is ultimately dependent upon the number and type of students they enrol. I would argue that TAFE institutes would alter their profiles, or the market segments they targeted, if they were funded on the basis of industry satisfaction rather than enrolments or ASCH.

Anecdotally, when I lived in Western Sydney, I would often pass a large number of factories and office blocks. I wondered how many of the employees who worked in these locations were sent by line management or the training department for education and training programs at the local TAFE institute. I then wondered how many employees were attending TAFE of their own volition. All the evidence, both anecdotal from our own day-to-day experience and from the Charles Sturt University study, is that there are far more voluntary than directed students. However, if the course profile for the local institute was determined by the local employers, it might not be attractive to the voluntary students and then, under the present funding arrangements, enrolments and funding might drop.

In marketing terms, there is conflict over which segments we are being asked to target and prioritise and which segments help us maintain our funding. This can also affect our positioning in the marketplace. In practical terms, what appeals to one market segment might not appeal to another. Thus, though programs for the unemployed and the socially disadvantaged are part of government's legitimate social obligation and can be financially attractive for training providers to run, they can, regrettably, have a negative effect on the perceived positioning of TAFE institutes for some other customers, including some industrial customers.

In future, under a funder provider split, TAFE institutes may not be able to exert much influence over which programs they run. They will be seen solely as contracted providers for whatever the funders choose to contract them for. There is less choice for providers when the contractor is a government agency which decides and contracts for programs on behalf of industry and the community. When there are multiple contractors, both industry and individuals, who are funded by a government agency, the provider may have more autonomy over their marketing strategies. This may well be the case with user choice.

TAFE institutes are thus being forced to position themselves as mass, universal providers of a range of services to a diversified range of market segments. Niche markets are vulnerable to specialist private providers. I believe institutes will follow the university sector in establishing separate 'centres of excellence' or branded

subsidiaries to exploit these markets. In my own institute we have a number of these, including the National Fishing Industry Education Centre near Grafton and the Hastings Vocational Assessment Service at Port Macquarie.

Competitive advantage

In an age of user choice, contestable funding and the contracting out of service provision, identifying and developing an institution's competitive advantage is critical. The notion of competitive advantage is also related to product and service differentiation. I have some concerns, then, with the new Australian Recognition Framework. Mutual recognition of providers, automatic credit transfer and courses of study specified by competencies listed in training packages have their advantages for industry and individual students in making training more portable. They may also make it more difficult for training providers to differentiate themselves. If a student can complete 90 per cent of a course with one provider and then obtain automatic credit with another, it may not encourage all providers to invest in high-quality courseware and learning facilities. In extreme cases, training is in danger of becoming commoditised and undifferentiated. How long we will be able to market the differentiated benefits of our own credentials when a student may have acquired 90 per cent of that credential in learning environments we do not control, remains to be seen.

Of even greater concern for TAFE institutes is the potential threat to our basic product—the ability to offer certificates and diplomas—from training packages. The recent policy statements on this issue indicate credentials will be awarded against industry-defined competencies rather than learning outcomes as specified in conventional curriculum documents. If an industry training advisory body decides certain competencies can only be acquired or assessed on the job, in some circumstances it would be very difficult for a student to achieve an institutional pathway to a credential.

Conclusions

Different perceptions of which segments TAFE institutes should be prioritising makes all but generic marketing strategies difficult. Is our priority to be the training arm of industry concentrating on initial training for existing employees or a means to help individuals realise their career goals? Should institutes be positioning themselves to compete with the university sector? How will this affect our positioning, pricing and promotional strategies? What segments are the most lucrative in terms of existing institutional reward and funding systems? Is there a danger of the different segments cannibalising one another? The new agenda of 'training packages' threatens our basic product range. To respond to these challenges I believe TAFE institutes will establish branded products, subsidiary companies and 'centres of excellence' to differentiate themselves in the market place. If the new agenda threatens to commoditise our products I believe TAFE institutes might seek dual accreditation from State recognition agencies and universities in Australia and abroad to maintain their marketing edge.

As ever, we live in interesting if ambiguous times.

[The views represented in this paper are those of the author and do not represent the official position of the North Coast Institute of TAFE or the New South Wales TAFE Commission.]

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The Australian Recognition Framework

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Discussion focusses on the regulation of vocational education and training (VET) organisations within the new Australian Recognition Framework and whether it will improve the quality of delivery for clients. The student as a client and the role of government regulation in delivering responsive and high-quality vocational education and training to individual consumers are outlined. The paper discusses the reasons for a regulated VET system, describes the proposed changes to regulation under the new Australian Recognition Framework and identifies its potential impact on the delivery of education and training. It is concluded that the regulatory systems need to be monitored to ensure they are delivering the education and training quality that individual learners and industry need. Organisations must take responsibility for meeting client expectations.

Introduction

'Regulation can be understood broadly as any action to bring order to some activity.'

How will the approach to regulation of vocational education and training (VET) organisations within the new Australian Recognition Framework assure and improve the quality of delivery for clients?

This paper focusses on the student (or learner, trainee, apprentice, employee) as a client and on the role of government regulation in delivering responsive and high-quality vocational education and training to individual consumers.

The paper discusses the reasons for a regulated VET system, describes the proposed changes to regulation under the new Australian Recognition Framework and identifies potential impacts of the new requirements on the delivery of education and training.

Why regulate?

It is worth discussing the purpose of regulation. In the case of vocational education and training, regulation is designed primarily to ensure that the system delivers the

competencies that industry needs and to maintain the national credibility and portability of qualifications within the Australian Qualifications Framework (AQF). In addition, the community expects that individual clients of the VET system will be protected through regulatory measures.

In a general policy environment of increasing commercialisation, competition and de-regulation some would argue that market mechanisms could achieve the desired quality and responsiveness to clients without the need for government regulation. In particular, market-oriented champions of liberal economic theories tend to support deregulatory policies in the belief that market forces are more effective than government regulations in creating and maintaining high standards.

The presumption is that by strengthening demand-driven training provision, supplier responsiveness will automatically follow, delivering optimal outcomes to clients. However Australian governments, while supporting a more open and competitive training market, recognise that in areas such as education, regulation is necessary.

This is partly because experience shows that markets are imperfect and market forces can fail in delivering quality services and products. In the VET area, measures must be taken to minimise risk and increase certainty about achievement of longer-term goals, such as the creation of a well-educated, highly skilled and mobile workforce. It is unacceptable to wait for market failure before intervening.

This is not to dispute that increased competition may deliver benefits such as increased quality and flexibility of training provision, more innovation and responsiveness to client needs. But there are potential problems with some economists' theoretical positions about the way market forces operate. It cannot be assumed, for example, that people in market transactions have equal economic and political power. This is particularly relevant in the VET sector, where there is disagreement over who the principal clients are and debate over how much power the individual student/employee really has in exercising choice.

In the context of user choice and New Apprenticeships it is proposed that the employer and employee will act in concert. As yet there is insubstantial evidence about the ability of the employee to choose the content, timing, location and delivery methods of the training.

Unless clients have direct control over training decisions, sufficient information to make informed choices and the ability to negotiate with training providers, market solutions have limited effectiveness and regulation has an important role to play.

The new Australian Recognition Framework

Regulation does need continual monitoring and attention because ineffective or unnecessary regulation has a direct cost to taxpayers and providers. Regulation needs to be designed to be equitable in its impact on large and small training organisations.

The Taylor Review (1996) reflected widely held perceptions that regulation under the National Framework for the Recognition of Training (NFROT) was too complex,

bureaucratic and opaque. Ministers agreed that reform was required to streamline regulatory approaches, to enhance mutual recognition and to assure quality while allowing for fast, flexible responses to demand.

Figure 1: Key features of the national training framework

	Current arrangements	Under the national training framework
Quality assurance and recognition	❖ the emphasis is on detailed regulatory arrangements ❖ national, mutual recognition cannot be achieved effectively	❖ the emphasis is on quality assured providers and products with a minimum of detailed regulation ❖ streamlined national, mutual recognition is now possible
Provider registration	❖ a process applying mainly to private training organisations ❖ registration is linked to providing training programs	❖ a process applying to all providers ❖ registration covers a wide range of industry training products and services
Accreditation	❖ operated via a centralised process which is managed by State/Territory training authorities	❖ operated via a devolved/delegated process which is managed by State/Territory training authorities
Training package	❖ standards, curriculum and learning resources developed independently and by different agencies	❖ one integrated, industry managed process
Assessment and qualifications	❖ learning outcomes of courses provide benchmarks for assessment ❖ statements of attainment and qualifications are only issued at the completion of a training program	❖ industry/enterprise standards are benchmarks for assessment, both on and off the job ❖ a skills passport system records national recognition of competencies attained on and off the job ❖ issuance of AQF qualifications and statements of attainment
National training information system	❖ variable information collected on courses, standards and providers	❖ a single database for accurate information, including national training packages and registered training organisations

Source: Australian National Training Authority 1997

The National Training Framework is the response to the challenge to reform and improve regulatory arrangements. It does this by introducing training packages and the Australian Recognition Framework. The Australian Recognition Framework sets minimum national requirements for registration and enhances mutual recognition. It replaces NFROT with arrangements which are intended to simplify regulation, while maintaining quality.

These reforms aim to provide better constructed and managed regulation with minimum interference in the relation between client and training organisation, and fewer points of regulatory control.

Figure 1 indicates the impact of the changes.

A new emphasis on quality management systems and self-assessment encourages a pro-active business response to education and training. State and Territory Quality systems motivate training organisations to move beyond compliance with registration requirements to higher standards through quality improvement. Incentives include community recognition and self-management of delegated regulatory functions.

How will the new framework benefit the individual student?

Proposed features of the framework which will lead to improvements in quality of delivery are found in new principles, standards and evidence requirements for registration of training organisations.

These requirements include:

- strengthened commitment to access and equity principles
- enhanced focus on quality
- internal review processes
- codes of conduct governing educational services
- provision of accurate, adequate and relevant information and advice to clients
- client service standards
- appropriate human resources
- external audit and monitoring

The details of the national standards for registration are now available.

All registered training organisations will agree to be externally monitored and audited to ascertain compliance with the registration requirements and with mutual recognition, to evaluate national training packages and to evaluate the effectiveness of the regulatory requirements.

The South Australian experience

South Australia has been systematically reviewing registered providers during 1996 and 1997, with some interesting results. The process has supported continuous improvement and highlighted areas where current registration requirements need to be enhanced to meet clients' expectations.

Review panels which included industry nominees interviewed students as part of the audit process. Consistently students attributed satisfaction with courses to the quality of the human resources—co-ordinators, teachers and trainers of the organisation.

Our conclusion is that a competent teacher/trainer is arguably the single most important determinant of the quality and effectiveness of any vocational learning experience. Therefore the initial training and ongoing professional development of teachers and assessors are some of the most significant quality assurance mechanisms for the attention of the VET sector.

This may not be a popular proposition to those who wish to marginalise the role of the educator and describe the complex actions which facilitate human learning as mere 'training', a description which seems more relevant to dog obedience classes than to the acquisition of competencies for sophisticated modern workplaces.

Accompanying the introduction of competency-based VET has been a tendency to underestimate the skills and knowledge required to effectively teach and assess vocational and key competencies. Individual clients also see quality learning resources as important contributors to the learning experience.

These anecdotal findings tend to challenge one of the new myths, that inputs are irrelevant and that regulation should focus solely on 'outputs'. If we listen to the voices of the individual learners, regardless of where their learning is occurring, we will continue to maintain a concern with the capacity of registered training organisations to deliver training balanced with ongoing monitoring of the quality of the outcomes achieved.

In conclusion, we need to continually monitor our regulatory systems to ensure that they are delivering the education and training quality the individual learners, as well as industry, need. Organisations must take responsibility for identifying and meeting, even exceeding, client expectations, so that the VET sector delivers the well-qualified adaptable workforce Australia requires.

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Observations of school-industry programs

John Goodman
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An example of Maurice Wilson, who set out to climb Mount Everest against enormous odds, is compared with the task of those co-ordinating vocational education and training (VET) programs, one of the most demanding and complex to manage within the industry. Managers are tackling the causes of youth unemployment and the first step towards addressing this problem is best-practice school-industry programs. They are relevant to industry and expose young people to employers and employment. They cannot create jobs (a problem of the economy) but they can eliminate prejudice against employing young people. The Australian Student Traineeship Foundation (ASTF) backs quality or best-practice programs, by evaluating performance against criteria developed in partnership with the Australian Quality Council. It is about measuring outcomes—student and employers.

Introduction

IN THIS PAPER I will present my observations of School Industry Programs over the past three years as chairman of the Australian Student Traineeship Foundation (ASTF). John Hill's paper, which follows, outlines some of the practical things the ASTF is doing to help program co-ordinators carry out their roles effectively. Frank Hayes, who has established a very successful track record in program management in Mackay, has prepared a paper which outlines some interesting experiences at 'the coal face'.

I would also refer you to David Kemp's keynote address to this conference and the context in which he dealt with the school-to-work transition.

Maurice Wilson

How many of you have heard of a gentleman called Captain Maurice Wilson— an English 'adventurer' of the 1920s and 1930s? For many years now on my numerous plane trips I have taken to reading books on polar exploration and mountain climbing. Having visited Antarctica and the Himalayas I have a personal interest

in both these areas—hence my question—'Do you know who Maurice Wilson was?'

- Maurice Wilson set out to climb a mountain against enormous odds—and more importantly, that mountain was the then unclimbed Mt Everest.
- Wilson served in the First World War and at the age of 19 won the Military Cross for exceptional bravery at the battle of Ypres.
- Like many discharged serviceman from the war, he began to question his life and went through periods of depression.
- He travelled for a while and worked in New Zealand before returning to England where he became very ill and in danger of dying. After various unsuccessful treatments he finally turned to a faith healer. This was in 1932.
- His experience with this man resulted in him developing a deep belief in 'faith in himself' and the need for regular fasting to purge his body of impurities.
- His goal in life became the climbing of Mt Everest entirely on his own—success would prove his theory to the whole world.
- How could this be done? The British had already mounted several major unsuccessful expeditions in the 1920s and were in the process of organising another. The Kingdom of Nepal would not permit access through that country and the Dalai Lama had only reluctantly agreed to the official British Expedition of 1933.
- In the face of these obstacles Wilson came up with a solution—he would buy a plane and learn to fly, he would then fly solo some 5000 miles to Tibet (this is about the same time as Amelia Earhart and Jean Patten were flying) and crash land about 12 000 ft on to the lower slopes of Mt Everest. From there he would climb alone to the summit. He bought a 1930 Gypsy Moth, took flying lessons and despite a couple of crashes in the process, was rewarded with his licence to fly.
- Bureaucracy stepped in and he was prohibited to fly direct to Everest. Indeed governments and bureaucrats hindered him all the way to Northern India by refusing to refuel him or by impounding his plane.
- He finally arrived in Northern India where his plane was again impounded and he was prohibited from entering Nepalese territory.
- In his determination to succeed he persuaded two Sherpas to accompany him on a 300-mile journey, circumventing Nepal and taking him across the high wind-swept Tibetan plateau to the foothills of Everest.
- The route took them over 18 000 feet ridges and through passes some 17 000 feet above sea level.
- They experienced nights of 37°F frost, and because they were travelling very quickly they suffered (unbeknown to themselves), bad bouts of altitude sickness.
- The 300 miles were covered in 25 days—10 days less than the 1933 Everest Expedition had taken the year before over a similar distance, but simpler route.
- He was now at the Rongbuk Monastery and ready to climb the mountain.
- Wilson had no mountaineering experience. He was no more than a very fit trekker. He had no experience of ropes, crampons and ice axes. Some of the ice falls in the Rongbuk Glacier were higher than the Empire State Building. 1934 was a year of extremes—one or two perfect days followed by prolonged blizzards of unusual fury.

- Wilson's first attempt was unsuccessful—he had to retreat when weather conditions became too bad to continue. He had reached nearly 22 000 ft.
- His second attempt took him to 23 000 ft. He had been at high altitude for 17 days now and was clearly affected by the sickness which is often fatal. The weather was atrocious and on the morning of 31st May 1934, his two porters, who had been awaiting his return, reported him missing, presumed dead. His body was found in 1935 by the Eric Shipton Expedition.

What is the relevance of this true story to my subject, which is 'Co-ordinating vocational education and training (VET) programs'? Co-ordinating VET programs is *not* just another task within the education industry. It is one of the most demanding and complex management roles that exist within this industry.

Those who carry out this role effectively are at the cutting edge of tackling the causes of youth unemployment *(not* the symptoms but the causes).

- Their vision can be as ambitious as Wilson's.
- Their goals need to be as focussed.
- Their planning needs to be as flexible.
- The solutions they adopt need to be creative.
- Their determination can lead to great personal satisfaction and outstanding achievements.
- Like Wilson, they will be confronted by obstacles created by small-minded bureaucrats who cannot accept the success of others or fear damage to their own egos.
- They will experience the frustrations of knowing what can and should be done but seeing others in positions of power and authority fail to take action.
- Wilson suffered from unbelievably harsh climatic conditions.
- Co-ordinators have to understand and deal with the problems confronted by employers—industrially and economically.
- Wilson needed good weather to have had half a chance of success.
- Co-ordinators need to win and retain the total commitment and involvement of employers if VET in schools is to become an integral and permanent part of our education system and accessed by *all* young Australians.

I also suggest to you that the challenge of changing our education system for years 11 and 12 to meet today's needs is as formidable as this challenge that faced Wilson.

Our Governor-General, Sir William Deane, in a speech reported on the 11th of July, described youth unemployment as Australia's worst social problem, a national tragedy and one which is already having permanent, destructive consequences with respect to the self-confidence, self-respect and self-esteem of a significant proportion of a whole generation of young Australians.

We all know this to be true, we have heard it before, we have seen the results in our own families and those of our friends. What is being done?

I am absolutely convinced that best-practice school-industry programs are the first critical action step towards addressing this problem. The reason is both simple and obvious when you look at the characteristics that the ASTF argue should be enshrined in best-practice programs. Let me remind you of these.

- They form part of the curriculum for years 11 and 12.
- They include substantial learning and assessment in the workplace (20 days or equivalent per year).
- They combine training both on and off the job.
- They reflect local community and industry requirements.
- They receive school accreditation and industry recognition.
- The management of the program is shared through a joint industry, community and education group.

The fundamental characteristic is the ownership position taken by industry and the community—this is the demand side of the equation, as represented by employers, parents, community leaders etc., *not* the school-driven supply approach.

Because these programs are relevant to the needs of industry and the process provides for industry involvement and input into matters such as content, delivery, assessment and accreditation, they have credibility to employers. However, the real benefit in my experience has been the exposure of young people—their attitudes and aptitudes—to employers in a 'non-job commitment' situation.

Clearly we would like to see all work placements lead to employment offers, or further education or training experience. These programs cannot create jobs per se (that is a problem of the economy) but they can eliminate the prejudice against employing young people.

Let me quote from a recent report of the Industry in Education Foundation in the UK, titled *Towards employability*:

> *Too many of today's young people are poorly prepared for work. Lacking both the personal qualities and basic skills that many employers need, they threaten to become a wasted output from our education system.*
>
> *Nor is this problem confined only to the unemployed. There is also a disturbing number of young people who, even when they obtain jobs, are slow to adjust to the demands and commitments of working life and seem to be ill-equipped to master the flexibility and interactions involved.*
>
> *The consequences are very worrying. The cost to Britain exceeds £8 billion a year. This distorts lives. Most young people want to succeed but their lack of positive qualities can destroy employability. A lack of employability then destroys ambition, hope and self-esteem. And without exaggerating the point, in extreme cases, such failures are clearly a contributory cause of the high crime and social disorder rates among certain groups of young people. Increasingly, employers are turning to older workers—many of them on a part-time basis—to solve their problems. But that is no long-term solution for Britain. That is why Industry in Education commissioned this study—'Towards employability'.*

Having, hopefully, demonstrated the importance of those programs, let me briefly deal with their management.

- Almost any well-managed business can survive in an environment which is essentially receptive and not hostile and where the product or service provided is one of quality and valued by the user.
- Our education leaders have failed to create such an environment for school-industry programs. They failed to see or anticipate the need several decades ago when full employment was slowly becoming a dim recollection. They failed to see the changing needs of industry—both in terms of market forces, technology and workplace practices.
- This indifference by educators has alienated industry which has had its own problems to deal with in an increasingly competitive world.
- Clearly education and industry, which both have a long-term stake in the outcome, deserve criticism—but that won't solve the problem.
- Our education system must publicly acknowledge that vocational education and training while still at school is an essential part of our total education system—it is not something to be accessed by those with lower academic achievements. It is for *all*, whether destined to be doctor, lawyer, engineer, metal worker, technician or hospitality worker.
- It is a critical component of our education system where attitudes and aptitudes get sorted out and where career options can be thought through objectively, based on experience and knowledge. Because this is all possible, it must be properly resourced—both financially and with talented individuals. Our governments and education systems have not acquitted themselves well in this regard. The Commonwealth Government has, through the ASTF, provided funds to tackle the problem—but if every year 11 and 12 student were to participate in these programs it would amount to about $50 per head per annum. It is clearly a bigger funding job than that.
- What are the short-term options while this cultural change process grinds on? In my view it is to support winners and embarrass losers—somewhat simplistic and maybe unfair—but you have to start somewhere.

The ASTF has moved its focus towards backing quality or best-practice programs. It will do so by evaluating performance against criteria developed in partnership with the Australian Quality Council. It is about measuring outcomes —students' and employers'. This material will be made available to all schools and program co-ordinators within the next few months. John Hill will tell you more about the support resources that the ASTF provides to program co-ordinators.

This is actually my swan-song—tomorrow I stand down from chairman of the ASTF. It has been a challenging and fulfilling three-year activity. I know the ASTF has made a significant contribution to the cultural change that must occur in our schools. The number of students who now participate in school-industry programs would have probably quadrupled in the past three years. I believe in what is being done more fervently than ever—maybe, like Maurice Wilson, I won't make the mountain top, but I am sure some of you will.

Co-ordinating VET programs

John Hill
Manager, Program Development, Australian Student Traineeship Foundation

The Australian Student Traineeship Foundation (ASTF) has had a considerable impact on vocational education and training (VET) in schools as a catalyst and facilitator. The ASTF provides support to programs forging quality school-industry partnerships. Since 1994 ASTF has provided over $23m in grants to programs (1996-97 financial year over $12.8m in grants). The development of knowledge, skill and experience in managing programs at the local level, making the partnership work, was recognised as a greater need than curriculum or course development. Money was not seen as the answer unless program stakeholders had information and guidance, along with practical implementation tools. Support available includes training for co-ordinators; support for workplace supervisors; Voc Ed Co-ordinators Online (VECO); special focus networks, lighthouse mentor programs and partnership with the Australian Quality Council (AQC).

Introduction

THE ROAD TO successful quality structured school industry programs is littered with obstacles, however the Australian Student Traineeship Foundation (ASTF) has a range of practical support and assistance available.

Since its formation in August 1994 as part of the 'working nation' initiative the ASTF has had a considerable impact on the vocational education and training (VET) in schools landscape in its role as a catalyst and facilitator.

Student numbers

There has been an increase from 26 300 students in 1995 (7 per cent of cohort) to 45 200 in 1996 (12.1 per cent of cohort).

The ASTF funded students have grown from 2800 in 1995 to 18 000 in 1996 and, by July 1997, were over 30 000. ASTF programs were being run in 46 per cent of schools in 1995. This had increased to 62 per cent in 1996 with a further increase to 80 per cent anticipated in 1997.

Funding

Since 1994 ASTF has provided over $23m in grants to programs (1996–97 financial year over $12.8m in grants).

Our earliest contacts with programs and practitioners in December 1994 pointed to areas of need that would not be addressed by the simple injection of financial resources. The development of knowledge, skill and experience in managing programs at the local level, making the education industry partnership work, was recognised as a greater need than curriculum or course development. Money was not seen as the answer unless program stakeholders gained at the same time access to advice, information and guidance, along with practical implementation tools.

Our consultations and contact with co-ordinators of programs over the past three years continues to bear out the need for practical support for co-ordinators and program stakeholders.

The ASTF response was to create a specialist unit within the ASTF. The co-ordination support unit's brief is to develop resources and projects to support the successful implementation of quality structured workplace learning programs. This is generally achieved through providing resources and information networking and learning between practitioners' training and professional development.

As a practical change agent, the ASTF puts a priority on consultation and on responding to the needs of practitioners in the field. Our emphasis is on working in partnership at the local or regional level.

What support is available to programs?

Training for co-ordinators

A purpose-built package of professional development provides an opportunity for program co-ordinators to develop their management and planning skills, refine marketing and selling strategies and, most importantly, work with other local co-ordinators to create effective networks, share strategies and work towards ensuring the sustainability of local programs.

The role of co-ordinator has been recognised as an integral component of best-practice workplace learning initiatives. With a continued national emphasis on school-work transition encouraging more effective local links between schools and employers, program co-ordinators continue to play a crucial role in managing the interface to the advantage of all stakeholders.

The program is designed to meet the needs of co-ordinators, identified through both the developmental and pilot stages of the project. The workshop provides an opportunity for co-ordinators to:

- identify more clearly both their own and their program's vision and values, aims and objectives, strengths and weaknesses

- develop clear plans for promoting, administering and monitoring the quality of their programs
- more clearly define the role of co-ordination in relation to their own programs
- build and improve stakeholder relationships, networks and personal support systems

Skills and techniques covered in the program include:

- goal setting
- planning for the program
- marketing
- selling
- coaching and mentoring
- developing effective management committees
- project planning (including time management)
- program co-ordination
- monitoring quality
- networking

So far in 1997 some 400 co-ordinators coming from all States have been trained, and training for a further 300 is planned.

For the experienced co-ordinator (for whom burnout is recognised as a risk) innovation workshops are being planned. These workshops will recognise the special requirements of the experienced co-ordinator, challenge them, and direct their experience towards the support of the ASTF's quality initiative, and the support of other co-ordinators.

Support for workplace supervisors

Workplace supervisors play an essential role in ensuring successful work placements for students in school-industry programs. To ensure the quality of programs it is necessary to have all students supervised to a common standard. For this reason, the ASTF has funded a national program of training which validates supervisors' roles in the training of students.

It is essential that the supervision provided to students in the workplace can be guaranteed to be of high quality. In addition, industry needs to have the skills to be able to confidently participate in programs training students in the workplace.

Since 1994 more than 6000 workplace supervisors have completed the ASTF Workplace Trainer Category One course with accredited training providers.

The ASTF is not intended to be a permanent bureaucracy, and has been described as 'a traveller rather than a permanent resident of the vocational education and training landscape'. We look to drawing on the strengths and expertise of practitioners, recognising the contribution that effective networking makes to the sustainability of change.

Voc ed co-ordinators online (VECO)

The VECO project is a new approach to providing support and networking opportunities for co-ordinators of structured workplace learning programs. It is an initiative of the ASTF and is being conducted in partnership with Aussie Schoolhouse. The project uses a community building model to foster communication, sharing of resources, professional development and recognition of achievement through the use of Internet communications technologies, including Email and World Wide Web tools.

A key aspect of the VECO project which provides the main vehicle for communication and community building is the online discussion list, Voced-co-ord.

The VECO discussion list now has over 200 subscribers sharing information, ideas and resources across Australia. As an example, a program in the New England region of New South Wales recently requested information and resources for use with students with special needs. The responses came in from across the nation, and more than exceeded the expectations of the subscriber!

A new feature of the discussion list is the 'appearance' of online guests. The inaugural guest was Richard Sweet, whose expertise in the field of vocational education for school students made him particularly welcome. Richard posted several thought-provoking messages to the list on themes related to the benefits of workplace learning programs in schools—for the students, for the employers and for the co-ordinators. For each of Richard's postings there were several follow-up comments, questions and discussions from other members of the VECO community.

In response to demand from the users of VECO, a web site has been set up to post and find relevant program-developed resource information. This web site 'belongs' to co-ordinators, and is not a vehicle for dissemination of ASTF materials; rather it is to facilitate the sharing of resources between co-ordinators.

Special focus networks

To foster networks to stimulate discussion and problem solving with regard to the co-ordination of programs, co-ordinators are invited to participate in special focus networks.

A special interest group currently focusses on special education, and a second, looking at part-time paid traineeships, is well into the planning phase. The focus of future special interest groups will be determined by co-ordinators with suggestions from the ASTF staff. Networks may, for example, choose to explore issues such as the effective integration of small business in programs; Aboriginal and Torres Strait Islander business involvement; access of rural students to city enterprises; and encouraging student participation in programs etc.

The special focus may be of a regional nature so programs are geographically linked, or the special focus may involve programs that span the country. Some programs may participate in more than one focus group and there will be movement in and out of groups within the network.

Special focus networks are planned for longer-term duration as co-ordinators dip in and out to receive and to pass on support to colleagues. The starting point of a network, once the focus has been established, is a seminar of interested co-ordinators. Two co-ordinators will be appointed as network leaders who will take responsibility for 'managing' the network. Responsibilities of network members will be established at the seminar to ensure all participants and their programs benefit from being involved. The seminar program will include establishing the key issues that participants want to see addressed and discussion which results in specific action points for participants to follow up in their programs.

Ongoing communication in the network will be via all available, suitable means and may include a news sheet, email, phone etc. Maintaining communication will be the major role of the network leaders.

Lighthouse mentor program

A network of programs has been recognised to act as mentors in program development and consolidation for other programs. The lighthouse mentor programs represent a diversity of program models selected to extend and stimulate excellence in the operation of programs they link up with. The fundamental criteria for selection in the lighthouse mentor network is demonstrated best practice in the implementation of school workplace programs.

Lighthouse mentor visits by other programs will involve the co-ordinator plus at least one other person who can significantly assist in the growth or consolidation of the visiting program. This visit prerequisite recognises the importance of support and action by a strategically placed person in the sustainability of programs. Ideally the significant support will be representative of business and school i.e. two people plus the co-ordinator.

Following the visit, the lighthouse mentor program co-ordinator is available in an advisory capacity to the visiting program co-ordinator.

Invitations to visit, and the organisation of visits are managed by the ASTF. A visit report (action plan) is prepared following a visit, which identifies the key findings and views of the visiting program personnel, and which includes clear steps to be taken towards program development and excellence in the immediate and long-term operation of the program.

Australian Quality Council (AQC) 'Getting there'

Practitioners have frequently expressed concerns such as:

- what is a quality program?
- what is best practice?
- where do I go from here?

The ASTF looked to a partnership with the AQC to develop a practical tool for use in addressing these quality questions. The partnership with the AQC was sought given their recognition by industry as the leaders in the 'quality' field; their expertise in this

area was well recognised by our industry partners. It was important that any quality project be credible in the eyes of our industry partners.

The Quality Matrix was developed following extensive AQC consultation with over 70 programs. The matrix will be introduced to programs throughout the remainder of 1997. Its introduction will be supported by extensive training, again drawing upon the expertise and experience of the AQC.

The form and structure of the matrix will be familiar to many, particularly those familiar with the Australian Quality Awards, as it uses the seven focus areas used by the AQC for these awards.

The matrix will be a valuable tool for programs and management committees to use in the self-evaluation of the progress of a program, and for the peer review of a program, but is not limited to this use alone. A benchmarking exercise is under way whereby common standards are being established in consultation with practitioners, to allow programs to reliably benchmark their progress against the steps on the matrix.

Concluding comment

The ASFT seeks to provide a range of tools and strategies to support practitioners in their implementation of school industry partnerships. In providing this support we look to apply the same features which characterise successful programs:

- genuine partnerships with stakeholders
- consultation
- sharing
- sustainability

Through consistently considering these features the ASTF believes that it will continue to provide relevant and effective support to programs forging quality school-industry partnerships.

Workplace learning for students

Josie Misko
Research Fellow, National Centre for Vocational Education Research

Findings from a National Centre for Vocational Education Research (NCVER) study examining how year 11 and 12 students evaluated their experience in the workplace during vocational placement and work experience are examined. The overwhelming majority of students were positive, believing it helped them develop industry-specific practical skills and knowledge and understanding of occupations. They reported they had developed personal skills to better communicate with others, co-operate with workmates and take responsibility. There were also immediate employment benefits for students. Workplaces accepted students, as few mentioned a hostile work environment. However a group reported negative experiences, not having meaningful things to do or being bored. This needs attention. More work needs to be done to make students aware of emerging and growth industries such as hospitality, technology and tourism. Substantial numbers were not interested in traditional trades and students need to be attracted to them to prevent skills shortages. Vocational placements attracted few senior students and it is important to find out why.

Introduction

THIS PAPER OUTLINES findings from a recent National Centre for Vocational Education Research (NCVER) study examining the experience of students in workplaces and the benefits that are derived from this experience. It will only report on the component of the study which examined how students evaluate their experience in the workplace.

In November 1996 the ministers for vocational education and training (VET) endorsed a National Training Framework and the setting up of a committee to oversee the implementation of this framework. A major feature of the framework is the development of training packages. These packages, to be developed by industry and endorsed by the National Training Framework Committee (NTFC), comprise a set of competency standards, national qualifications and assessment guidelines which apply to a specific industry or to an industry sector. The packages may also include non-endorsed components such as learning, assessment and professional development materials.

Closely tied to the framework is the New Apprenticeships system. Its charter is to continue to be an industry-led system aimed at providing industry with the skills it requires. It favours the opening up of the training market where employers have much more choice in the ways that training is delivered and accessed. Like its predecessors, the new system supports a nationally consistent approach to training and a national framework for the recognition of skills and qualifications, the removal of barriers to training and the establishment of co-operative links between training providers and industry.

The new system proposes to modernise and update apprenticeships and will be introduced into areas which have improved prospects for employment and future growth. Areas such as hospitality, technology and tourism have been identified as those industries which display opportunities for growth. The New Apprenticeships system supports the introduction of school-based apprenticeships and traineeships and aims to increase relevant training provision for the 60 per cent of students who do not avail themselves of Technical and Further Education (TAFE) or university training. As well as improving the types of training opportunities available to students in schools, the new system also aims to increase the responsibility for schools to find jobs for students.

Schools have responded to the challenge posed by these national training reforms by increasing their focus on work-based learning in their curricula. They have introduced vocational courses into their curricula and strengthened existing courses and work experience programs aimed at increasing students' knowledge and experience of the workplace. (Some schools have even begun the task of piloting the new job placement programs.)

Workplace programs

Today there are two basic types of workplace programs. These are work experience programs and vocational placement programs. Work experience programs are those programs where students spend a limited amount of time in the workplace familiarising themselves with the world of work. Vocational placement programs on the other hand are essential components of formal vocational courses which carry credit towards qualifications.

Work experience programs

The great majority of students in years 10, 11 or 12 participate in work experience programs. A recent Australian Council for Education Research (ACER) study by Ainley and Fleming (1995) reports data from the ACER youth-in-transition studies to suggest that most students in government, Catholic and independent schools have participated in work experience programs with girls being more likely to participate in them than boys. Independent schools had lower levels of participation than schools in the other two sectors.

Programs offering students experience in the workplace have been criticised for not providing meaningful experience or for being too narrowly focussed on vocations so that

students do not learn the skills of adapting to a rapidly changing society (Cole 1981). However, a ministerial review of work experience programs in Victoria (Ministry of Education 1988) found that work experience programs had positive benefits for students. The programs allowed students to find out more about themselves and their places in the world of work as well as their need to continue their education. For some students the experience also developed their sense of self-awareness and self-confidence. Other researchers have also found that work experience has positive benefits for students and that students are generally satisfied with their experience in the programs (Eggleston 1992; Straton & Murray 1984; Evans & Poole 1992).

Vocational placement programs

Vocational placement programs are generally run in conjunction with the hospitality, retail, manufacturing, office, health and community services and construction industries. Only about a tenth of all students in years 11 and 12 are involved in vocational placements. A national survey conducted in 1995 for the Australian Student Traineeship Foundation (Ainley & Fleming 1995) and repeated in 1996 found that nearly half (46 per cent) of all schools offered what they termed school-industry programs in 1995 and almost two-thirds (62 per cent) provided such programs in 1996.

The first vocational placements offered under the new training agenda formed part of the Australian Vocational Training System (AVTS) pilot projects, which were first implemented in 1993. A government evaluation (DEET 1995) of these projects found employers to be generally in favour of providing vocational placements. Having students in these placements provided recruitment opportunities, and developed the supervisory skills of workers involved in training students. In addition, it allowed them to increase the company profile with their local communities and to fulfil their community service obligations in preparing students for the workforce.

The findings of the evaluation also showed that trainees were positive about their time in the workplace. Trainees appreciated the opportunity to hone industry-specific competencies and to experience the real world of work as well as to practise the skills they had already learnt in the classroom. Case studies of six Australian schools by Cummings and Carbine (1997) found that vocational placements were superior to other forms of experience for skill development. They concluded that having students in the workplace for extended periods of time allowed students to experience a broader range of tasks and develop closer relationships with co-workers.

Today the more traditional and less structured work experience programs co-exist with the more structured vocational placement programs. Studies have consistently found that students derive substantial benefits from vocational placements. Because the overwhelming majority are involved in the less structured work experience programs, however, it was also important to examine whether or not benefits are also derived from these programs.

Description of the study

This study was conducted in a sample of public and private schools in South Australia, Queensland and New South Wales and private schools in Victoria and Tasmania. A total of 2285 students in years 10, 11 and 12 who had completed work experience or vocational placements provided completed questionnaires. Students were asked to provide written responses to questions which asked them about their experience in these placement programs. These questions asked students to reflect on the training they had received prior to placements, the tasks they had performed during the placements and their evaluation of these in terms of expectations and outcomes.

Just over half of the students (52.3 per cent) were in year 10, with students in year 11 making up the next largest group (40.2 per cent). A small percentage of students were in year 12 (7.3 per cent). The remainder were in year 13. Well over half of the students (58.1 per cent) were female.

The occupations selected by students

A total of 310 different types of occupations in 35 different groupings were selected by students as occupations they wanted to learn more about during their work experience/ vocational placements. These groupings are presented in Table 1.

In addition, a small percentage (6 per cent) of the total group of students did not provide any information. The remainder reported that they had wanted the experience to help them increase their knowledge of work or develop personal and interpersonal skills.

From Table 1 it is evident that the largest occupational groupings are in health and community services, education, childcare, and hospitality. When we examine the specific occupations we find that the most favoured of the occupations regardless of major grouping is teaching, followed by childcare professional or childcare worker. The third most favoured occupation is lawyer/solicitor/barrister. The most favoured occupations selected by 30 or more students are presented in Table 2.

From Table 1 and 2 it is quite clear that few students are selecting the trades as a favoured occupation. Furthermore, if we examine the proportion of students selecting the trades as an occupation they want to learn about, this becomes especially clear. Here we find that less than 12.2 per cent of students are selecting the traditional trades as a career they would like to learn about. These data are presented in Table 3.

Table 1: Occupational areas of interest to students (n=2053)

Occupational groupings	No. of students	% of students
Health and community services	243	11.8
Education	171	8.3
Hospitality	164	8.0
Child-care	112	5.5
Animal health	89	4.3
Automotive	84	4.1
Law	81	3.9
Retail	80	3.9
Tourism, sport and recreation	79	3.8
Engineering	72	3.5
Science	63	3.1
Management, property, commerce	57	2.8
Agriculture, forestry, fishing	56	2.7
Building and construction	53	2.6
Clerical/secretarial	52	2.5
Computing/technology	52	2.5
Media	49	2.4
Design/illustration/decoration	49	2.4
Architecture, town planning, surveying, drafting	48	2.3
Hair and beauty	47	2.3
Accounting/bookkeeping	46	2.3
Entertainment	45	2.2
Marketing and public relations	38	1.9
Police, security and emergency services	38	1.9
Electrical/electronics	33	1.6
Miscellaneous	29	1.4
Aviation	26	1.3
Banking and finance	22	1.1
Horticulture/landscaping/greenkeeping	20	1.0
Photography	20	1.0
Military	10	0.5
Public administration	10	0.5
Floristry	9	0.4
Printing/publishing	6	0.3
	2053	**100.0**

Table 2: The most favoured occupations

Area	No. of students	% of students
Teacher (primary, music, art, PE, early childhood, special ed, drama)	171	8.3
Child-care worker	111	5.4
Lawyer/solicitor/barrister	75	3.7
Chefs/cook	61	3.0
Mechanic	57	2.8
Veterinary surgeon	58	2.8
Medical practitioner (doctor)	46	2.2
Accountant	45	2.2
Journalist	42	2.0
Physiotherapist and occupational therapist	40	2.0
Hairdresser	38	1.9
Nurse	38	1.9
Police officer	32	1.6
Architect	31	1.5

Table 3: Trades chosen by students in work experience/vocational placements (n=290)

Area	No. of students	Rank order
Chef	61	1
Mechanic	57	2
Hairdresser	38	3
Electrician	25	4
Carpenter and joiner	21	5
Panel beater/spray painter	9	6
Florist	9	6
Fitter and turner	9	6
Boilermaker	8	9
Diesel fitter	8	9
Green keeper	8	9
Plumber	6	12
Signwriter	5	13
Baker	5	13
Auto electrician	4	15
Welder	4	15
Furniture builder	3	17
Upholsterer	2	18
Boat builder	2	18
Roofer	1	20
Tiler	1	20
Instrument fitter	1	20
Printer	1	20
Aircraft mechanic	2	24
	290	

When students were asked whether or not they were planning to pursue the occupation they had experienced during the placement, over half (55.7 per cent) of the work experience students and a similar proportion (58.3 per cent) of vocational placement students replied that they were planning to do so.

What students did in the workplace

Students were asked to describe what they had learnt to do during their time in the workplace. Very few students (4.6 per cent) reported that they had either learnt nothing, nothing new or not much during their work experience/vocational placement. The single most frequently reported type of learning activity related to experiencing and gaining knowledge of particular trades or professions. Students felt that they had improved their understanding of the particular trade or profession either through experiencing events or accompanying workplace supervisors or other workers as they went about their daily tasks. This was particularly the case when students were learning about professions that required advanced training. Also highly reported was the development of interpersonal skills required for working with others and in teams.

When we combine learning of a similar nature however the findings show that by far the most reported type of learning related to technical skill development. That is students believed that work experience had taught them either basic or more complex industry-specific skills. A better view of this information is presented in Table 4.

Table 4: What students learn to do during work experience and vocational placements (n=2131)

Learning outcome	No. of cases
Improved knowledge and understanding: 32.1% of cases, 23.3% of responses	
Occupation and industry	303
Working environment	84
Business operations	75
Unsuitability of career choice	40
Suitability of career choice	33
Essential criteria for entry into occupation	29
Demands of working	29
Occupational health and safety	27
Work ethic	26
Appropriate business behaviour (taking orders, deportment, dress, confidence etc.)	26
Subject matter	13
	685

Learning outcome	No. of cases
Interpersonal and personal skill development: 33.5% of cases, 24.3% of responses	
Teamwork skills (working with others etc.)	203
Communication skills	182
Responsibility, initiative, leadership, confidence, patience, self-knowledge, problem solving	140
Customer service skills	135
Organisation and time management skills, accuracy	54
	714
Technical skill development: 53.2% of cases, 38.5% of responses	
Computer skills	179
General clerical skills (e.g. photocopying, filing, faxing, answering telephones)	171
Operating and servicing machinery and equipment skills	136
General hospitality skills (preparing rooms, servicing rooms, preparing tables, clearing tables etc.)	67
General retail skills (shelving etc.)	62
Automechanic and car painting skills	59
Welding, soldering, electrical, locksmithing skills	49
Specific hospitality skills (e.g. cooking, bartending, hotel management, butchery)	48
Design skills, drafting skills, architectural skills	40
Construction industry skills (building, plumbing, furniture making)	39
Writing skills (articles, advertisements, reports)	29
Basic medical procedures (e.g. x-ray, vet procedures, temperatures, dental assisting, preparing hot packs etc.)	29
Hairdressing, beautician skills	27
Accounting skills	23
Agricultural skills	22
Landscaping, nursery, gardening skills	20
Laboratory skills	19
Complex clerical skills (e.g. bookkeeping)	18
Complex retail skills (e.g. stock control etc.)	15
Research skills (including marine biology)	15
Travel industry skills	11
Aviation skills	10
Photographic skills	9
Fitting and turning skills	9
Surveying skills	8
Driving skills, boating skills	7
Pharmaceutical industry skills (locating medications etc.)	5
Fire fighting, policing skills	3
Printing skills	2
Fishing skills	2
	1133

Learning outcome	No. of cases
Training skills: 6.9% of cases, 5.0% of responses	
Teaching young children	85
Teaching, coaching skills	56
Training animals	6
	147
Caring skills: 8.1% of cases, 5.9% of responses	
Caring for young children	87
Caring for animals	38
Caring for patients	36
Caring for disabled	11
	172
Cleaning skills: 4.2% of cases, 3.0% of responses	
Cleaning, washing	**89**
	2940

There were few students who felt that they could have learnt the same skills at school. However vocational placement students were more likely to believe that this could be done than were work experience students.

The value of what students learn during work experience vocational placements

The overwhelming majority of students (89.4 per cent) felt that they had found the experience to be of value and of benefit in some way. In addition just over a fifth (20.4 per cent) qualified their reports with adjectives such as 'good', 'very good' 'valuable' 'extremely valuable', 'useful' or 'worthwhile'.

The most frequently reported value or benefit of what they had learnt in the workplace concerned their ability to improve their understanding of the occupation they had chosen and to decide whether this was or was not the occupation for them. Students also believed that their learning would help them to become more employable or to develop networks which would help them to get a job. Also highly reported was the value the experience would have for general use in later life. A comprehensive breakdown of these data is presented in Table 5.

Table 5: Students' perceptions of value of skills learned during work experience/vocational placements (n=1853)

Perceived benefit	No. of responses
Provision of employment-related benefits: 48.7% of cases, 38.0% of responses	
Provides benefits for future employment	156
Increases experience of working environment (real world)	82
Increases experience and knowledge	56
Provides assistance in obtaining jobs	52
Improves knowledge for use in school/TAFE courses	37
Provides head start over other candidates (obtaining jobs, developing contracts, obtaining references, working in the occupation and in occupation-related studies [e.g. medicine, biology])	81
Essential requirements for the job	27
Assists in preparation for workforce	34
Provides valuable or very valuable experience	378
	903
Improvement of knowledge and understanding: 28.1% of cases, 22.2% of responses	
Knowledge suitability or unsuitability of career choice	220
Understanding of occupation, organisation, industry and business	201
Understanding of expectations and requirements for the job	56
Understanding requirements for entry into the occupation	17
Understanding of hygiene, health and safety	10
Knowledge of own skills and abilities and potential to work	8
Helps decide further study options	8
	520
Improvement of technical expertise: 9.4% of cases, 7.4% of responses	
Develops specific industry skills	116
Develops ability to complete tasks effectively and efficiently	24
Develops computer skills	15
Develops practical skills	9
Develops ability to work with equipment	10
	174
Development of personal and interpersonal skills: 9.8% of cases, 7.7% of responses	
Develops teamwork and ability to get on with others	48
Develops communication skills	43
Develops confidence	32
Develops responsibility and initiative	24
Develops tolerance and patience with others	13
Develops confidence in interacting with others	11
Develops independence and ability to cope with pressure	10
	181

Perceived benefit	No. of responses
Preparation for future: 13.7% of cases, 10.8% of responses	
Increases skills and knowledge for future use	128
Increases ability to use skills and knowledge for personal use and in later life	125
	253
Other: 16.5% of cases, 13.0% of responses	
Unsure of benefits	51
Of some use if pursuing career in field	41
Of limited or no value	214
	306
	2337

School benefits derived from workplace learning

Students were asked to specify what, if any, benefits the work experience/vocational placement learning had provided for them back at school. Just less than three-quarters of the respondents provided a response to this question. Of these more than half (56.6 per cent) believed that what they had learnt in the workplace had no benefits for them back at school. In addition a small percentage of students reported that workplace learning was not relevant to what they did in school.

Table 6: School benefits derived from workplace learning (n=1644)

Perceived benefit	No. of students	% of cases	% of responses
Improvement in technical skills and ability to operate machinery and equipment	151	9.2	20.3
Improvement in ability to communicate	130	7.9	17.5
Increased knowledge and ability to succeed in school subjects	112	6.8	15.1
Increased independence, responsibility and maturity	70	4.3	9.4
Increased ability to make career and subject choices	45	2.7	6.1
Overall increase in knowledge and experience	45	2.7	6.1
Improved ability to work with others	48	2.9	6.5
Improved ability to organise and complete tasks on time	37	2.3	5.0
Improved confidence	35	2.1	4.7
Appreciation of work and school similarities and differences	22	1.3	3.0
Improved motivation to do well at school	17	1.0	2.3
Increased appreciation of, and respect for, workmates	14	0.9	1.9
Increased patience, tolerance, sensitivity and compassion when dealing with others	15	0.9	2.0
	741	**44.1**	**100.0**

However the most frequently reported school benefits were concerned with improved ability to perform technical skills and operate equipment. This was followed by improved ability to succeed in school subjects. The third most frequently reported benefit was improved communication skills and improved ability to get on with others. These data are presented in Table 6. The percentage of cases column in this table is based on the total number of students responding to the question. This includes those students who believed that they had derived no school benefits from attending work experience/vocational placements.

Expectations and outcomes

So far we have based student evaluations of the worth of work experience/vocational placements on their responses to questions asking them to report the value of what they had learnt in the workplace. Another way to gauge whether or not the experience was felt to have been worthwhile for students is to measure the extent to which they believed the experience met their expectations.

Students were first provided with a Likert rating scale asking them to rate the extent to which they agreed with statements about what they had hoped to gain from the experience in the workplace. These statements described improved understanding of skills required for the job, and increased awareness of their potential, and confidence in their abilities, and assistance in making decisions about occupations, and plans for future training. The findings showed that students generally agreed with these statements. There were very few cases where students gave neutral or negative ratings. These findings then confirmed the assumptions the researchers had about what the programs were meant to deliver.

When students were asked to reflect on whether in fact these expectations had been fulfilled, the overwhelming majority of students gave affirmative replies. Pearson-product moment correlation coefficients were computed between student ratings on expectations and outcomes. The findings showed strong positive relationships (ranging from between r=.49 and r=.70, probability =.000). This means that high ratings on one scale were associated with high ratings on the other scale and low ratings on one scale were associated with low ratings on the other. Although the differences between the average scores for each of the items for work experience students and vocational placement students were not substantial, there were three statistically significant differences between the perceptions of the two groups. These differences related to both expectations and outcomes. Here vocational placement students were more likely than work experience students to say that they had expected the experience to help them better understand their employment potential, and to decide which apprenticeships or traineeships to do in the future and that these expectations had been fulfilled. However, for deciding on which subjects to do next year the situation was reversed. Table 7 presents data on the percentage of students obtaining outcomes they had envisaged would be delivered by their experience in the workplace.

Table 7: Expectations and outcomes of work experience/vocational placements

Expectations	Number of students expecting to gain knowledge and experience	Number and percentage of students reporting outcomes											
		Strongly agree		Agree		Neutral		Disagree		Strongly disagree		No response	
		no.	%	no.	%	no.	%	no.	%	no.	%	no.	%
Work experience/ vocational placement allowed me to:													
1 Understand the work environment													
Work experience	1867	893	47.8	842	45.1	81	4.3	24	1.3	4	0.2	23	1.2
Voc. placement	219	114	52.1	89	40.6	13	5.9	2	0.9	1	0.4	-	-
	2086												
2 Find out if it's the job I really want													
Work experience	1818	940	51.7	670	36.9	133	7.3	43	2.4	17	0.9	15	0.8
Voc. placement	209	99	47.4	80	38.3	15	7.2	9	4.3	6	2.9	-	-
	2027												
3 Find out what sorts of skills are required for the job													
Work experience	1790	842	47.0	792	44.2	94	5.3	30	1.7	11	0.6	21	1.2
Voc. placement	207	107	51.7	89	43.0	8	3.9	1	0.5	2	1.0	-	-
	1997												
4 Work with others													
Work experience	1608	750	46.7	748	46.5	71	4.4	21	1.3	2	0.1	16	1.0
Voc. placement	193	95	49.2	87	45.1	8	4.1	1	0.5	2	1.0	-	-
	1801												
5 Experience responsibility													
Work experience	1546	664	42.9	714	46.2	108	7.0	37	2.4	8	0.5	15	1.0
Voc. placement	200	82	41.0	104	52.0	10	5.0	3	1.5	1	0.5	-	-
	1746												
6 Become better informed about career choices available													
Work experience	1543	592	38.4	701	45.4	174	11.3	49	3.2	10	0.6	17	1.1
Voc. placement	194	66	34.0	102	52.6	16	8.2	8	4.1	2	1.0	-	-
	1737												
7 Better understand my employment potential													
Work experience	1485	582	39.2	681	45.9	158	10.6	32	2.2	11	0.7	21	1.4
Voc. placement	193	80	41.5	92	47.7	16	8.3	5	2.6			-	-
	1678												

Expectations	Number of students expecting to gain knowledge and experience	Number and percentage of students reporting outcomes											
		Strongly agree		Agree		Neutral		Disagree		Strongly disagree		No response	
		no.	%	no.	%	no.	%	no.	%	no.	%	no.	%
Work experience/ vocational placement allowed me to:													
8 Increase confidence in my ability													
Work experience	1428	598	41.9	662	46.4	125	8.8	20	1.4	8	0.6	15	1.1
Voc. placement	188	78	41.5	90	47.9	16	8.5	3	1.6	1	0.5	-	-
	1616												
9 Understand the number of different jobs that are available													
Work experience	1322	416	31.5	653	49.4	163	12.3	69	5.2	9	0.7	13	0.9
Voc. placement	174	57	32.6	85	48.9	22	12.6	9	5.2	1	0.6	-	-
	1496												
10 Decide which course to do at university/TAFE													
Work experience	1167	395	33.8	480	41.1	182	15.6	84	7.2	15	1.3	11	0.9
Voc. placement	136	37	27.2	66	48.5	23	16.9	8	5.9	1	0.7	1	0.7
	1303												
11 Decide which subjects to do next year													
Work experience	929	329	35.4	396	42.6	127	13.7	63	6.8	3	0.3	-	-
Voc. placement	75	21	28.0	32	42.7	17	22.7	4	5.3	1	1.3	-	-
	1004												
12 Decide which apprenticeship/ traineeship to do in future													
Work experience	867	271	31.3	366	42.2	147	17.0	62	7.2	6	0.7	15	1.7
Voc. placement	131	43	32.8	58	44.3	25	19.1	4	3.1	1	0.8	-	-
	998												

Using a rating scale which identifies for students the types of activities that should result from work experience/vocational placements may bias their responses to fit in with what they feel the researcher wants them to say or what sounds like a worthwhile response. For this reason students were also asked to respond to a variety of other questions which would also provide information on how students evaluated their experience.

Overall fulfilment of expectations

Students were asked to reflect on their experience and to give an overall indication of the extent to which this had fulfilled their expectations. Once again the majority of work experience and vocational placement students indicated that the experience had met their expectations to a reasonable or great extent. There were few students who gave negative responses. These data are reported for work experience and vocational placement students in Table 8.

Table 8: Student perceptions of overall fulfilment of expectations

Perception	Work experience students (n=234)	Vocational students (n=234)
	%	%
Expectations met to a great extent	31.6	29.1
Expectations met to a reasonable extent	48.7	49.1
Not sure whether expectations met or not met	11.0	13.2
Expectations met to a little extent	5.8	5.6
Expectations not at all met	2.9	3.4
	100.0	**100.0**

In addition there were positive and statistically significant relationships between outcomes reported by all students and their overall assessment of whether or not expectations had been fulfilled. (Pearson-product moment correlation coefficients ranged from between r=.37 and r=.41, probability in all cases was at the p=.000 level.)

Another way to assess whether or not students believe that the experience is worthwhile is to ask them whether or not they would like to repeat the experience. When students in this study were asked how willing they were to repeat the experience, the overwhelming majority of students replied that they were willing to do so. There were little or no differences between the responses of work experience and vocational placement students. These data are presented in Table 9.

Students also provided reasons for why they would or would not like to repeat the experience. The most frequently reported reasons for students wanting to repeat the experience, for both work experience and vocational placement students, was that the experience had been fun or enjoyable. For work experience students the second most frequently reported reason for wanting to repeat the experience was that it had been beneficial, useful or worthwhile. Also highly reported was that work experience had

allowed students to gain experience in the real world of work, and had provided self-development opportunities. For vocational placement students the findings were similar. However they were more likely to say that experience in the workplace had provided them with skill development (technical or personal) than were work experience students.

Table 9: Willingness to repeat work experience/vocational placements (n=2248)

	Work experience	Vocational placement
	%	%
Willing to repeat the experience	82.2	80.6
Not willing to repeat the experience	5.8	7.5
Not sure	12.0	12.0
	100.0	**100.0**

There were few differences between work experience students and vocational placement students. The most frequently cited reason for not wanting to repeat the experience for both groups was that it was boring or tedious, with not enough to do. Work experience students, however, were more likely to say that the work environment was not satisfactory than were vocational placement students. Vocational placement students were more likely to say that the experience did not provide much opportunity for learning. These data are provided in Table 10. Here the percentage of cases column is based on the total number of responses for the question. However, ranks to positive and negative responses have been allocated separately. The totals for positive and negative responses have also been provided.

Table 10: Student reasons for wanting to attend work experience or vocational placement in the future (n=1899)

	Work experience		Vocational placement		Total group
	No. of cases	Rank order	No. of cases	Rank order	No. of cases
Reasons for wanting to repeat the experience					
Prior experience was enjoyable, fun, interesting, exciting	468	1	56	1	27.5
Prior experience had been good, beneficial, helpful, useful or worthwhile	273	2	14	6	15.1
Prior experience provided an opportunity to gain experience in the real world of work	263	3	26	2	15.2
The experience provides opportunities to increase knowledge about oneself and possible careers available	259	4	16	5	14.5
Prior experience allowed the development of technical skills and personal skills (responsibility, maturity, independence, tolerance, patience)	152	5	24	3	9.3
Prior experience provided opportunity to learn a lot	148	6	17	4	8.7
Desire to broaden knowledge of other jobs and workplaces	140	7	8	10	7.8
Experience helps to further future employment opportunities	93	8	14	6	5.6
Experience allowed opportunity to work with supportive co-workers and meet new people	78	9	4	11	4.3
Desire to change career option	62	10	9	8	3.7
Will consider going on work experience again if it is better organised, more relevant or worthwhile	36	11	2	15	2.0
Experience allows opportunity to learn and practice skills not available at school	28	12	3	14	1.6
Prior experience allowed opportunity to work in occupation of their choice	23	13	9	8	1.7
The workplace is better than school	19	14	4	11	1.2
The experience allowed opportunity to work with others and as part of a team	17	15	-	-	0.9
The experience can be included as a résumé item	17	15	-	-	0.9
Further work experience is compulsory and required to complete course	3	16	4	11	0.2
Total number of positive responses	**2079**		**210**		

Reasons for not wanting to repeat the experience	Work experience		Vocational placement		Total group
	No. of cases	Rank order	No. of cases	Rank order	% of cases
The experience was boring, tedious with not enough to do	45	1	6	2	2.6
The work environment was not good (staff not friendly, hours too long)	37	2	5	3	2.2
The experience did not provide much opportunity for learning (pointless, waste of time)	30	3	9	1	2.1
Don't want to miss school/too much school work to catch up on	29	4	2	4	1.6
Further work experience is not required	19	5	2	4	1.1
The work was not what I want as a career	7	6	-	-	0.4
Treated poorly and without pay	6	7	1	5	0.3
Work experience was hard and tiring work with too much to do and too much responsibility	5	8	-	-	0.3
Work experience was too difficult to organise and expensive	3	9	-	-	0.2
School is more fun than work	2	10	-	-	0.2
Was given an unjust report	2	10	-	-	0.2
Not sure of what to expect in another workplace	1	12	-	-	0.1
Total number of negative responses	**186**		**25**		
Total number of all responses	**2289**		**235**		**131.5**

Employment offers

Another measure of whether or not students derive benefits from their time in the workplace can be based on the number of offers of employment or further training opportunities received by students as a result of their participation in work experience. In this study just over a third of the students reported having received such offers. These offers included part-time employment, full-time employment, apprenticeships, traineeships and further work experience. Vocational placement students were far more likely to receive offers of part-time and full-time employment than were work experience students. This information is presented in Table 11.

Table 11: Employment and training offers made to students (n=721)

Offer	Percentage of students receiving offers	
	Work experience	Vocational placements
	%	%
Part-time employment	28.0	38.2
Full-time employment	5.3	9.8
Apprenticeship	5.3	8.9
Traineeship	4.3	3.3
More work experience	57.0	39.8

Other frequently reported offers included casual or holiday work (n=17) references (n=7) and voluntary work (n=12). Almost three quarters (72.0 per cent) of the work experience students and a similar proportion (65.4 per cent) of work experience students indicated that they had accepted employer offers.

Conclusions

A learning experience

These findings show that the overwhelming majority of students are generally positive about their experience in workplaces. They show that students believe this form of experience can help them to develop industry-specific practical skills and knowledge and understanding of occupations and about themselves that will stand them in good stead for approaching the work environment. They also show that they are generally satisfied that the experience in the workplace allowed them to develop personal skills to enable them to better communicate with others, co-operate with workmates and take responsibility. There is also evidence of immediate employment benefits for students.

The great majority of students were especially positive about the value of the skills they had learned in the workplace. This shows that workplaces have also been accepting of students because there were few students who mentioned a hostile work environment as reasons for either not wanting to repeat the experience, or for the experience not meeting their expectations.

However, there is still a group of students who report negative experiences. An examination of the reasons given for students' negative experiences should lead schools to ensure that they have a safety net for students who may be in the wrong environment, or placed in a workplace at the wrong time. This may help students who complained of not having meaningful things to do, or those who complained of being bored, to be placed in an appropriate environment.

However, they also show that if the aim of current educational policy is to develop apprenticeships and traineeships in the emerging and growth industries more work will need to be done to raise the profile of these occupations within the minds of students.

It is also especially noticeable that substantial numbers of students are not interested in pursuing the traditional trades. This may be because they are not aware of what these trades are about, or because they and their parents may see these trades as being what you do when you are good with your hands and nothing else. The fact that the traditional trades generally do not bring with them large amounts of remuneration may also affect the aspirations of students.

If we are serious about opening up avenues for students to be employed in the new growth industries of hospitality, technology and tourism there will have to be a concerted campaign to help students become attracted to the possibilities of working in these areas. If we are serious about ensuring that there are no skill shortages in many of the traditional trade areas it will be important to make sure that students know enough about these areas as well.

Vocational placements still continue to attract small numbers of students in their senior years. It is important then to find out why it is that so few students are selecting these courses as viable pathways to employment or to further study.

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Developing opportunities for young people

Frank Hayes
Co-ordinator, The Mackay Region School-Industry Links Scheme

The development of the Mackay Region School-Industry Links Scheme Inc., servicing nine senior secondary schools in the Mackay region, is discussed. It uses a co-ordinated approach to industry placement/work experience for year 11 and year 12 students. Initially it was funded by the Commonwealth Government through the Australian Vocational Training System Pilot Project initiative and then by the Australian Student Traineeship Foundation (ASTF). Structured work placement secured the commitment of local business leaders. Employers wanted one point of contact. Work experience was then begun as well. The future of this and other programs depends on future funding and recognition by State government of regional successes and of the collaborative efforts of the community. Recognition by government of this, rather than attempting to re-centralise and 'own' the development, is essential if it wants regional commitment. The community needs to be involved; with the right support and a little effort they will bond together.

Introduction

MY COLLEAGUES AND I appreciate the opportunity to share with you the learning experiences that we have come across in the development and implementation of the Mackay Region School-Industry Links Scheme Inc.

Who are we?

The Mackay Region School-Industry Links Scheme Inc. is an incorporated body that services nine senior secondary schools in the Mackay region.

We are managed by a diverse management committee that represents the schools, employers, Technical and Further Education (TAFE) in Mackay, Group Training Australia (Mackay Regional Apprentice Employment Limited—MRAEL), regional industry training advisory bodies (ITABs) and other community stakeholders.

The scheme formed in September 1994 as an Australian Vocational Training Scheme (AVTS) pilot project and developed to its current status with the support of the Australian Student Traineeship Foundation. Because of the rapport developed with

local business and, at their suggestion, the scheme has also become involved in the Department of Employment, Education, Training and Youth Affairs' (DEETYA) Job Pathways Program and the new 'PartTime Traineeship' concept.

Our mission statement was to implement a co-ordinated systematic approach to industry placement/work experience for year 11 and year 12 students that supports the Australian Vocational Training System and the National Framework for the Recognition of Training Principles.

About six months after the program had begun, we decided that we were in a state of change from a pilot status to an established scheme where expectations were high and we needed to define exactly where we were heading.

At the time, we decided as a group to build on the successes we have had to date and expand. However this mission statement reminded us what our prime motive was and continues to be with respect to the year 11 and 12 target group.

However, our role has now expanded and we are in the processes of redefining our mission statement.

Background

Some facts about the scheme:

- formed in September 1994 as an AVTS pilot project
- designed our own CNM01 senior vocational training program
- in 1995—two schools: 150 students
- in 1996—five schools: 550 students
- in 1997—nine schools and over 1200 industry placements

Our initial approach in 1994 was to develop a vocational training program that put in practice the National Framework for the Recognition of Training (NFROT) principles. This program is now recognised by the state training authorities as the CNM01 senior vocational training program. The program allowed us to implement structured workplace learning that was underpinned by nationally recognised training modules in four vocational areas i.e. metals engineering, clerical, hospitality and tourism, and building and construction.

In the interests of maintaining employer support and servicing all students the program has now expanded to incorporate work experience as well as structured workplace learning and so far this year we have implemented more than 1200 vocational workplace learning placements in local businesses.

The reason why we expanded beyond the area of structured work placement was that we knew that to secure the commitment of the local business leaders we had to co-ordinate the placement of all students in a professional manner. That is, we had to be able to make effective use of the time available and all the work placement opportunities available in the region.

Employers want one point of contact. They abhor several schools all ringing them on the same day for work experience. They need to know that their involvement is

valued and that they won't be harassed indiscriminately to the point where they refuse to participate.

In a constant state of change

Now incorporating work experience as well as structured workplace learning:

- we secured a Job Placement Program (JPP) contract and placed 58 students in employment
- we have instigated part-time traineeships
- we see a need to be involved in the whole process of the students' school-to-work development
- we need to do it all to secure the employers' commitment and satisfy *all* students

We will be addressing the above issues when we redefine our expanded role in the community.

We have learnt that students who are studying to become physiotherapists or any other profession or trade that does not have nationally recognised training modules have exactly the same right to formal on-the-job training while in high school as a student who is studying to become a turner and fitter or clerk.

We have established a rapport through this year's JPP program and employers now see us as a reliable and effective recruiting agency for school leavers. Should we receive funding in the 1997–98 JPP Program we should be in a better position to supply the business community with well-prepared school leavers.

How did we do this?

We:

- formed a management committee that represented all stakeholders
- established an effective marketing strategy
- designed an effective database
- employed and supported a co-ordinator and other staff

Our management committee must be recognised for its support and direction. Few communities have a management committee that is as diverse and effective as ours. Their ability to put their individual organisational interests behind the interests of the community's youth is commendable.

After establishing an effective marketing strategy, we designed a computer database that can track all the students and employment opportunities in our community, and in some cases outside our community (we do assist other communities, especially students in remote localities).

We employed a co-ordinator who became the employer's central point of contact and our small staff of doers are multi-skilled in the areas of vocational education, marketing, national training issues and organisational development.

Why is Mackay unique?

Mackay is unique because of:

- the number of businesses, schools and students involved
- the linkage (schools-businesses-*others*)
- the assessment process
- the relationship between planning and doing
- change in culture

Mackay's uniqueness is based on several factors:

- The number of students in structured workplace learning will exceed 1200 in 1997. The number of registered businesses supporting the program is currently in excess of 630, and we have stopped chasing employer support as we do not have enough students to go around. We have a cluster of two private and seven public schools which work together with a common vision.
- The cohesive linkage between schools, TAFE, businesses, ITABs, unions, private providers, Mackay Regional Apprentice Employment Limited (MRAEL), Training Employment Queensland, local government and others has been critical to our success.
- An assessment process has been developed that involves the teacher, employer and student using a tried and proven home-grown assessment instrument—the log book.

We have travelled a bumpy road since September 1994. We have challenged all the reasons why it won't work, e.g. there aren't enough employers to support the program. We have set realistic but challenging benchmarks that are leading us to the big vision. We tackled this task like eating an elephant, one bite (benchmark) at a time, and we didn't give up until we achieved our goal.

Who does the work?

The management committee creates the ideas, provides the advice and support, and manages the finances and resources.

The staff (three semi-permanent and two secondments) disseminates information to all the stakeholders and players, places students, provides advice and support to schools and employers, controls student behavioural problems, and arranges meetings and the provision of advice to other programs.

Shared work includes advocacy, lobbying, influencing people, interpreting policy and seeking financial advice.

A great pleasure in life is doing what people say you cannot do. Anon

Who pays now?

- The Australian Student Traineeship Foundation
- DEETYA
- The schools (via levies)
- The employers (in kind), it can equate to two hours of supervisory time, per student, per day



Initially we were funded by DEETYA through the Australian Vocational Training System Pilot Project initiative. When the pilot program finished we had set a program in place that the community did not want to lose.

The Australian Student Traineeship Foundation (ASTF) came to our rescue and has provided on-going funding since the AVTS pilot project finished. We also receive a ten-dollar levy per placement from the schools and the schools also assist with marketing costs.

To keep a lamp burning we have to keep putting oil in it. Mother Theresa

Who profits? (the student)

The student:

- ❖ accepts the work ethic
- ❖ is motivated to learn
- ❖ can make value judgements
- ❖ understands the world of business
- ❖ improves communication skills
- ❖ benefits from employment opportunities
- ❖ has a deserved advantage
- ❖ makes the connection between school and work

The students can make a career decision based on a value judgement that comes from a real-life experience, not what a guidance counsellor or parent tells them.

- ❖ They gain nationally recognised qualifications that transfer directly into TAFE subjects.
- ❖ It improves their chances of gaining employment.
- ❖ They experience, understand and accept the term 'work ethic'.
- ❖ They understand the connection between school and work by practising the subjects learnt at school in the workplace.
- ❖ It promotes the students' desire to learn more.

- ❖ It teaches them how to communicate and interact with adults in the workforce.
- ❖ It gives them an understanding of the world of business and the need to meet deadlines.
- ❖ It provides them with a reference and gives them an advantage that they deserve.

Who profits? (the employer)

The employer:

- ❖ satisfies a strong moral obligation
- ❖ knows that what they are doing better prepares the student
- ❖ has an effective evaluation process when recruiting new staff

Employers play an active role in this process for various reasons; however I believe that they feel a strong moral obligation rather than the need to make a profit.

They know that the experience better prepares the student for the workforce and maybe a position in their business. It does provide an employer with the opportunity to evaluate a potential employee.

Most employers are also parents and they see the benefits of this learning experience from a parental point of view.

It does cost employers supervision time and in some cases an interruption to their normal mode of operation.

Employers' perspective

- ❖ employers motivated by a moral/social responsibility
- ❖ proven industry support
- ❖ students are not cheap labour
- ❖ they do get in the way
- ❖ they can lower the standard
- ❖ they can be time consuming
- ❖ they do need to be treated as part of the team
- ❖ attitude and behaviour

Who profits? (the teachers)

- ❖ It gives the teachers an opportunity to interact with industry and observe new technology.
- ❖ It expands their knowledge of industry's requirements.
- ❖ They are learning about the national training reform agenda.
- ❖ It improves their assessment strategies by incorporating on-the-job assessment into their overall assessment plan.

Why is it a success?

C.L.I.M.B.

- Communication, customers, consultation and collaboration
- Leadership
- Involvement
- Marketing
- Benchmarks and bloody persistence



Every time I am asked why this program is a success I always respond by stating 'communication, communication, communication'. We are lucky that we have a management committee that can communicate and a community that does listen and respond.

Our leadership is not authoritarian; we have some excellent facilitators on the management committee from all sectors, e.g. TAFE, Training Employment Queensland, teachers, principals and employers; and if there is a problem to solve, then the relevant expert becomes the leader. We value each other's skills and we share the responsibilities.

Involvement is critical to our success and it can only happen in a non-threatening environment. We do have our heated discussions and we all learn.

We put a lot of effort and time into marketing and we utilise all avenues, e.g. TV, radio, newspapers, service clubs, career nights etc.

Benchmarks have been set on a regular basis that address the change in the program's status, and above all we believe we must be tenacious and persistent to succeed—two and a half years ago people said it would never work.

The future! We want:

- ❖ recognition by State government departments of regional successes
- ❖ the provision of support rather than rules
- ❖ the devolution of authority to the communities
- ❖ professional development that supports skilling, and leadership in the schools that use workplace learning
- ❖ the provision of unconditional on-going funding to successful community ventures
- ❖ a community approach, not a blanket approach

Whenever I consider the future of ours and other programs, the first question I consider is funding and the second consideration is acceptance.

If this and other proven programs are accepted as successful, then the governments must take the funding problem on board. Individual industries (the larger ones) may

provide funding, however I believe that it would only be funding in their specific area. There will still be a gap to fill if all students are to receive the opportunities that the students in Mackay receive.

A blanket approach to vocational training will not work either. The situation in Mackay is different to the situation in the western suburbs of Sydney or Longreach in outback Queensland.

Recognition by State government departments that the regionalisation of development and the collaborative efforts of the community, rather than attempting to re-centralise and 'own' the development and control, is essential if they want regional commitment.

The community needs to be involved and shown the way. With the right support and a little effort communities will bond together for the good of their children. Most parents are critical of the current education system and are eager to see and implement initiatives that work.

We must support our teachers by providing leadership and performance-based professional development in the area of vocational education and training.

Education costs money, but then so does ignorance. Sir Claus Moser

The value of qualifications

Warren Grimshaw AM
Chair, Australian Qualifications Framework (AQF) Advisory Board

The Australian Qualifications Framework (AQF) is a single, comprehensive system with twelve qualifications from each of the three sectors of school education, vocational education and training (VET) and higher education. The AQF supports qualifications as a currency for fair negotiation of access to jobs and further education and training The nature and function of qualifications as they operate within the AQF are discussed. In this structure, qualifications function as a form of currency: they are the nationally agreed forms of recognition for the twelve distinctive categories of education and training product in the Australian education and training system. Under the AQF the main changes to the previous arrangements may be summarised as: additional units of currency, additional and more accessible credit facilities and greater potential for the exchange rate to reflect client demand.

Ultimately, however, neither the AQF nor any other system of qualifications can guarantee the exchange rate or the quality of the product being traded. Such a guarantee can only be provided by the three education and training sectors themselves.

Introduction

THANK YOU FOR inviting a perspective from the Australian Qualifications Framework (AQF) Advisory Board on the key issue of this forum: 'Who pays and who profits in 1997 and beyond?'

'Payment' and 'profit' indicates a focus on the hard economic realities of provision of vocational education and training (VET). How, then, do qualifications fit into the economics of VET? What is the value of a qualification in the 'who pays and who profits' equation? And, in particular, how does the *AQF* enhance the value of a qualification to the client—the student and trainee?

In what follows I will explain how the AQF is a structure specifically designed to support qualifications as a currency for fair negotiation of access to jobs and further education and training. That is, I will confine my observations to the nature and function of qualifications *as they operate within the AQF*, rather than attempt to argue the case for the value of VET qualifications as such—based on achievement of national industry/

enterprise competency standards at one of six levels of workplace performance inscribed in the four certificates and two diplomas offered in the VET sector. This case has been eloquently promoted by the Australian National Training Authority (ANTA) over the past decade and is now being put to the test in actual practice. We all look forward to research findings confirming the effectiveness of the new VET qualifications in improving national productivity, but it is still early days, we are just half-way in the transition to the AQF, and it may be some years before any reliable results begin to emerge.

Before I leave this particular aspect, however, I would like to take the opportunity provided in this forum (sponsored as it is by the National Centre for Vocational Education Research [NCVER], the agency responsible for VET national data collection) to indicate the *strong support of the AQF Advisory Board for the current moves to introduce national reporting on completion of qualifications*. Such a move is of major significance in supporting the value of a qualification in the VET sector.

The VET sector, unlike the schools and higher education sectors, does not collect national completion data for qualifications. This situation appears to be an anomaly in the overall logic of the training reform agenda. Under this agenda, VET AQF qualifications function as a critical measure of the nation's effectiveness in training to industry/enterprise standards. This is because Australia has driven an identification between VET qualifications and industry standards which is historically and internationally unprecedented. Industry has been put on the line in assuming virtually total responsibility for the nature and quality of VET outcomes. Over the past decade, industry has entered into a process of meticulous definition of the individual units of competence to be achieved for each level of workplace performance recognised by the six AQF VET qualifications. It is hard to see why all this effort is being expended if there is no *follow-through in terms of national reporting on AQF qualifications completion rates*. If the VET sector does not actively encourage training to a qualification level by identifying most of its training in terms of full/partial completion of a qualification, then the effectiveness of the training reform agenda—improving national productivity through upgrading the skills of the workforce—will not be able to be measured *in the terms in which industry itself has determined*. National qualifications completion data would appear to be an appropriate output measure, showing how much training to the full complement of industry standards is occurring and, from there, enabling assessment of the effectiveness of ANTA policy.

The AQF Advisory Board has a particular interest in this issue, as ministers require the Board under its charter to monitor effective national implementation of the AQF. While the Board is satisfied that timely transition to the AQF is occurring in terms of course offerings and enrolment data, the lack of national data on completed qualifications sends a negative message, as if the VET sector is not fully committed to a qualification as a measure of value. I will leave the issue here, as it is being pursued in other forums such as the ANTA Performance Review Committee, but would be happy to take it up again in the question session later.

Structure of AQF

Turning now to an analysis of the structure of the AQF: under the AQF, qualifications are able to function as a form of currency. Qualifications represent a nationally-agreed 'buying power' for access to jobs and further education and training. Qualifications and Statements of Attainment are 'money in the bank', to be built-up over time and drawn upon for major purchases. The worth of the currency will fluctuate according to the employment and training market, but a well-structured system of qualifications is a stabilising influence. That is, the role of the AQF in establishing the value of a qualification is essentially structural: the AQF is a way of structuring the currency value of qualifications to support fair and rational negotiation of value. This is of particular importance in the current context of increasing deregulation of the employment and training market.

The three main structural elements of the AQF supporting client negotiation of value are as follows:

- the single system model (rather than the dual system)
- the flexible construction of the qualifications descriptors
- the multiple pathways concept

A single, comprehensive system

The AQF is a *single, comprehensive system* embracing a total of twelve qualifications from each of the three sectors of school education, vocational education and training and higher education. Why a single system? Why not have a multiple system as in the UK, where qualifications are grouped according to a general academic category, and the GNVQs or *'general* national vocational' qualifications and then the straight out NVQs or national *'vocational'* qualifications? Or, as in New Zealand, where there is a set of national qualifications alongside a separate set of school and university qualifications? The *conceptual* basis of the AQF as a single or unified system is not as well understood as it might be, so I will attempt clarification.

There are two main reasons for adopting a single-system AQF: the first is broadly philosophical and the second is a pragmatic expression of this philosophy.

In terms of the philosophical underpinnings of training reform in Australian industry, it is widely acknowledged that the traditional distinctions in the culture between the 'head' and the 'hands', 'theory' and 'practice', 'academic' and 'vocational', 'education' and 'training' have had a debilitating effect upon the quality of workplace performance.

Bringing the discipline of thinking into the workplace, and bringing the discipline of the workplace into the thinking process, at every level of performance, is one of the keys to economic progress in an advanced industrial economy. A single system of qualifications, which refuses to label qualifications as either academic or vocational, reflects this philosophical position. (This is not to say that the AQF denies the reality of the sectoral divisions in Australian education and training; as I will show later, the different requirements of the sectors are reflected in AQF qualifications descriptors.)

Pragmatically, a single system assists the establishment and maintenance of parity of value for VET sector qualifications undergoing decisive transformation as *industry-based and industry-driven*. As such, the new VET qualifications risked being even more isolated from academic qualifications than in the past. Members of this audience who recall the Carmichael proposals in the early 1990s to introduce Australian Vocational Certificates (precursors to the current Certificates I–IV) will also remember the concern over the possibility of *parallel qualifications systems* running on, like parallel lines, with no point of intersection. Such a situation would have been completely contrary to the Carmichael vision, which was to dissolve the traditional boundaries and transform the workplace into a place of learning.

Under instruction from all education, employment and training ministers, a single, comprehensive system was achieved over several years of negotiation between the sectors, industry, the professions and the wider community. It represents a significant acknowledgement of the overall benefit of *maximum cross-sectoral interaction* to the totality of the nation's education and training effort.

Indeterminate position of Senior Secondary Certificate of Education

As might be expected, the single structure is not rigid. For example, the Senior Secondary Certificate of Education, with its wide range of breadth and depth of learning outcomes, is allowed an indeterminate position in relation to the Certificate I–IV qualifications. Across the States and Territories, as well as within individual systems, there is considerable diversity of practice at the schools/VET interface, and the AQF provides *a structured environment* within which this diversity can be resolved at the level of a national qualification, whether this is in the form of a Certificate of Education including Certificate I–II units, or as a dual award. Allowing ample scope for negotiation of relative value is essential in the schools/VET interface, which is about to become very active with the New Apprenticeships in schools initiative.

The benefit to the client may be shown, in its broadest application, by the fact that, under the AQF, it is possible for a student working out of school in, say, a supermarket, to gain credit towards a Certificate of Education or a Certificate level I or II qualification. For a year 10 student this could be a significant inducement to stay on at school, or enter a training program, rather than drop out of the system. The AQF Advisory Board is currently highlighting the *parity of value* issue, particularly in relation to university entrance, in its ongoing liaison with the schools certification authorities.

Cross-sectoral qualifications: Diploma and advanced diploma

A similar elasticity of structure is evident at *the two levels of diploma qualifications*. These qualifications have for many years been offered in both the VET and higher education sectors and have shared common titles: the former associate diploma and diploma. Under the AQF these qualifications, while meeting quite different requirements as determined by the sectors, continue to come within common

parameters of learning outcomes, as agreed by both sectors, which establish equivalence of levels. In terms of currency value, for access to jobs or further education and training, it was crucial to the overall commitment to fair negotiation under the AQF that there be no discrimination, in terms of *titles*, which would imply that qualifications offered at these levels in one sector were inferior in value to qualifications at a similar level offered in another sector. Fair sectoral competition and student choice are accommodated under the common titling of diploma and advanced diploma, allowing the *educational quality* of the courses offered in the respective sectors to determine their competitive edge in the marketplace. Thus the diploma levels represent a point of creative and positive resolution of cross-sectoral tension in the AQF.

Consistency and non-duplication constraining flexibility

As most of you will be aware, the strength and flexibility of the AQF at this point is currently being tested. As a framework concept, the AQF gains its prime impact from the fact that it includes and establishes an agreed currency value for *the full range of qualifications* offered across Australia in all three sectors. Hence, from the outset, there has been potential for inclusion of other qualifications as they may develop in response to client need, and which are not already provided for within the framework.

In this context, during the process of establishing the AQF, the university sector put forward the *associate degree* for inclusion. However, upon examination, the range of associate degree offerings were considered to be adequately accommodated under the AQF diploma levels which, as previously noted, have descriptors allowing for interpretation on a 'different but equal' basis by both industry and academic authorities. Hence the associate degree was unable to be included, on grounds that it would cause public confusion as to its currency value vis a vis other equivalent qualifications in the framework. At the point of endorsing the AQF, however, ministers acknowledged the continuing interest of the university sector in this issue and requested the AQF Advisory Board to give further consideration to possible inclusion 'provided the higher education sector can demonstrate that the associate degree does not duplicate other qualifications in the framework and that guidelines can be developed to ensure it is issued on a consistent basis.'

Recently, the university sector has confirmed its interest in offering an associate degree qualification and has revived its case for inclusion of an associate degree qualification in the AQF, to be offered solely by the higher education sector.

If the AQF is to act as a stabilising influence in negotiating the value of qualifications, how will this issue be resolved? From a client perspective, how are the interests of students to be supported? The AQF Advisory Board is currently grappling with the challenge, in the same 'creative' and 'positive' spirit that resolved the cross-sectoral tension over the shared diploma levels at the earlier, developmental stage of the framework. A process of public consultation will be involved as part of developing

advice to ministers on this issue. *I would welcome your thoughts—particularly from the client perspective—in the question time set aside for this session.*

Flexible construction of qualifications descriptors

The second key structural component of the AQF is the flexible construction of the qualifications descriptors. The benefit of this may not be immediately apparent to the student or trainee, but such flexibility means that an *enormously increased diversity of learning outcomes* has been able to be formally recognised in *just twelve qualifications.* As you will appreciate from the overhead showing the large number of different categories of qualifications in the UK, the Australian system is against proliferation of different categories in the interests of ready identification and ease of use.

A national generic descriptor for the end-of-school qualification

To begin with, the AQF generic descriptor for the Senior Secondary Certificate of Education is a *historic* achievement in the context of a traditionally fierce 'States' rights' approach to secondary schooling. In an increasingly portable interstate and international education marketplace, the need for a generic *Australian* end-of-schooling qualification had been apparent for some time, but inevitably stalled over lack of one-to-one equivalence between State/Territory curriculum. Achieving national agreement on common standards of learning outcomes, and allowing for individual State requirements as determined by the various statutory authorities, has resulted in a national qualification with *interstate and international currency value.*

Four levels of certificates

In the past, in the VET sector, there has been an assortment of qualifications including trade and post-trade certificates, TAFE certificates and advanced certificates and a plethora of non-award certificates with *no clear relation* to mainstream qualifications. This meant that a great deal of skill and knowledge was not formally recognised, and there was no incentive to add to and build on this achievement. The four certificate levels represent an acknowledgement of the *full range of skills and knowledge* required in those levels of the workplace which, in fact, employ the vast majority of the Australian workforce.

Some indication of *the range of achievement* now able to be recognised is evident in a recent mapping exercise commissioned by the AQF Advisory Board to establish notional duration of courses to assist efficient planning. The survey, undertaken by David Francis, lists (for example) Certificate I level courses which, under a common rubric of generic learning characteristics, include skills in areas ranging from orchard harvesting, commercial fishing, concrete production, introductory sales and service, office clerical, Aboriginal arts and crafts, Auslan, laundering of textiles, open-cut mining, automotive repairs, wine knowledge and Asian cooking. Certificate II level

courses develop and expand on this range of workplace performance, with articulation arrangements encouraging progressive skill formation through the successive Certificate levels.

The AQF Advisory Board, in its role as monitor of national transition to the new framework over the five-year transition period to the year 2000, has recently obtained ample evidence of enthusiastic transition to the new Certificate levels: Certificate I course offerings totalling over 400, around 750 offerings at each of Certificate II and Certificate III levels and almost 700 at Certificate level IV. Current total enrolments of around 150 000 in the two new Certificate levels I and II are well in excess of enrolments in Certificate III, the former 'trade' or apprenticeship level, which was the beginning point for formal qualifications in VET prior to the introduction of the AQF.

Statements of Attainment

Mention should also be made of the AQF category of *Statement of Attainment* to recognise achievement towards a qualification. There will always be a significant demand for some form of recognition for *partial achievement* of a qualification or of achievement through short courses tailored to a specific workplace need (some idea of the extent of this demand is evident in the VET enrolment data which shows that this item is far and away the largest single category of AQF recognition). In the past this demand has resulted in a confusing proliferation of local or State/Territory-based non-award titles without a stable national currency value. Under the AQF, partial achievement of any qualification in the framework is recognised in the form of a national Statement of Attainment which, when issued in the VET sector, is also required to identify the units of competency which have been achieved when training is based on nationally endorsed competency standards.

Student choice at diploma and advanced diploma levels

The role of flexible construction of the *diploma* qualifications descriptors in supporting student choice and fair competition has been indicated in the preceding section. The AQF descriptors for the diploma and advanced diploma acknowledge that a *plurality of approach* at equivalent levels is part and parcel of market competition and student choice, and students need to assess the extent to which offerings in each sector best meet their career requirements. In light of the relevance of this aspect of the cross-sectoral interface to the current *West review of higher education*, the AQF Advisory Board is preparing to meet with the Committee to provide an AQF perspective to this debate.

The multiple pathways concept

The third key structural element of the AQF is the multiple pathways concept. The range of pathways to a qualification under the AQF is designed to enable formal recognition of skills and knowledge however acquired, from informal training on-the-job, accumulated life experience, or in a formal training program which may be institution-based, work-based or various combinations of these different sites of learning. All of these are *legitimate pathways* to a qualification under the AQF, explicitly

identified in the levels descriptors, and following through to the degree and higher degree qualifications chiefly in the form of credit for prior learning.

The AQF Advisory Board recently commissioned three separate surveys on how the recognition of prior learning (RPL) pathway is operating in the three sectors. The RPL pathway is given particular importance in the Board Charter as a key indicator of effective implementation of the framework. This emphasis reflects the major focus on competency-based and industry-based training in the VET sector, and the importance of RPL in enabling formal recognition of skills and knowledge gained in the workplace and through life experience, contributing towards a qualifications credit balance for the client and representing cost savings for the training budget.

The potential for reduction in the costs of formal training through a system of credit for learning already achieved, may be seen by the following conservative estimate made as part of the survey of the VET sector the Board commissioned from NCVER. In the survey, Richard Kenyon estimated that, in 1995, a total of *11.5 million hours of training* were saved in the VET sector through granting credit for prior learning. The survey identified the high level of credit active at the *AQF diploma level*, in particular, with a saving rate of one in three hours, and pointed to the potential for increasing these savings as credit activity is lifted at other AQF levels.

An additional NCVER telephone survey indicated that key VET personnel had expectations that there would be increased demand for credit with the greater clarification of pathways, qualifications levels and assessment requirements under the AQF, in particular the easier application, processing and attainment of recognition of prior learning (RPL).

Conclusion

I have described the AQF as a structure supporting orderly negotiation of the value of qualifications. In this structure, qualifications function as a form of currency: they are the nationally agreed forms of recognition for the twelve distinctive categories of education and training product in the Australian education and training system.

Under the AQF, the main changes to the previous currency arrangements may be summarised as follows: additional units of currency, additional and more accessible credit facilities and greater potential for the exchange rate to reflect client demand.

Ultimately, however, neither the AQF nor any other system of qualifications can guarantee the exchange rate or the quality of the product being traded: such a guarantee can only be provided by the three education and training sectors themselves.

Longitudinal research and participation in further education

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Changes in patterns of participation in further education, using longitudinal studies of change in achievement over time, are examined. The studies have found increased participation in higher education, and stability in the Technical and Further Education (TAFE) level of participation. Longitudinal research enables a detailed exploration of patterns of participation in cross-sectional data. In higher education there was a more rapid increase in participation by females than males and an extremely high level of participation among the top achievement quartile. TAFE had a small decline in participation among males (partly because of a decline in apprentices), and an increase among females. TAFE had lower levels of participation from the top quarter of achievements and higher levels of participation from the bottom quarter. TAFE in general, and apprenticeships in particular, now have substantially more participants who have completed Year 12 than previously but this appears to be due to the increased percentage of those who have completed Year 12. The differences in participation in further education suggest that it is important to control for the effects of antecedent characteristics when analysing income and other labour market outcomes of programs in further education.

Introduction

One of the most important developments in the methodology of research on school effects has been the use of achievement growth (the change in achievement over time), rather than a single static achievement score at a particular time, as a criterion (Scheerens & Bosker 1997; Ainley & Sheret 1992). In this field it has become accepted that the assessment of outcomes needs to be based on growth if results are to identify institutional contributions to learning. Willett (1994) observes that only by measuring change is it possible to 'document each person's progress and, consequently, to evaluate the effectiveness of education systems'. Although there are technical problems with assessing change (especially with regard to the reliability of measures of change) that does not diminish its importance. Indeed, Willett (1994) argues that reliable measures of change can be obtained best by using a 'multi-wave' perspective, rather than a 'two-wave', perspective and by applying

statistical methods which make use of the full range of data. However, a demand imposed by this approach is that longitudinal studies are, as Sammons et al. (1993) note, expensive to assemble and somewhat scarce.

Where longitudinal data are used in studies of transitions from school to further education and work, the emphasis is less on the measurement of growth in characteristics such as achievement and more on establishing the strength of net influences on participation patterns and outcomes. Net influences, or influences of variables on outcomes when 'other things are equal', are estimated from the application of multivariate (and sometimes multilevel) analysis techniques to data in which the same individuals have been followed over a career through school and into further education and work. Three volumes concerned with completion of secondary school, entry to university and graduation from university provide recent examples of the analysis of longitudinal data in Australia (Williams et al. 1993a, 1993b; Long et al. 1995). Those studies are longitudinal in two senses. First, they follow nationally representative panels of respondents longitudinally through school and into university and, second, the samples were separated in time so that net influences of various factors could be studied within a sample and, as well, comparisons could be made between samples. It is possible to derive valuable inferences from a longitudinal perspective in examining a series of cross-sectional data collections but these are not commonly classified as longitudinal studies.

This paper begins with a reflection on the results contained in a cross-sectional data series: the transition from education to work published by the Australian Bureau of Statistics (ABS). That reflection highlights some major changes in patterns of education-work activities over the 1980s and 1990s. The paper then describes some longitudinal data sets that have relevance to the investigation of issues of transition and to student outcomes from participation in various forms of education and training. Those data are then analysed to provide a perspective on changing patterns over a 14-year period.

Cross-sectional perspectives over time

The period from 1982 to 1992 was characterised by an increase in school holding power to Year 12 (as reflected in the apparent retention rate) from 36 to 77 per cent. After 1992 the figure declined somewhat, reaching 71 per cent in 1996. Information from the Australian Bureau of Statistics series *Transition from education to work* (Catalogue No. 6227.0) indicates that there was a concomitant shift in the destinations of school leavers. Figure 1 documents the study and employment outcomes for four cohorts of school leavers covering the period from 1983 to 1996. The data in Figure 1 are based on information concerning those young people aged 15 to 24 years who attended school in one year (e.g. 1995) and who were not attending school in May of the next year (e.g. 1996).

Figure 1 indicates that an increasing percentage of school leavers proceeded to tertiary study over the period from 1984 to 1992 with a flattening of this growth in 1996. This growth was mainly associated with increased university enrolments. However

there was a growth in participation in vocational education and training (VET) from 1984 to 1988.

Figure 1: Study and employment outcomes for school leavers aged 15 to 24 years

SCHOOL IN 1995 BUT NOT ATTENDING SCHOOL IN 1996

Attending tertiary (57%)		Not attending tertiary (43%)	
University	28%	Employed FT	16%
VET	24%	Employed PT	1%
Other	5%	Unemployed	2%
		NLF	3%

SCHOOL IN 1991 BUT NOT ATTENDING SCHOOL IN 1992

Attending tertiary (55%)		Not attending tertiary (45%)	
University	27%	Employed FT	15%
VET	23%	Employed PT	9%
Other	4%	Unemployed	17%
		NLF	4%

SCHOOL IN 1987 BUT NOT ATTENDING SCHOOL IN 1988

Attending tertiary (43%)		Not attending tertiary (57%)	
University	18%	Employed FT	35%
VET	23%	Employed PT	7%
Other	3%	Unemployed	12%
		NLF	4%

SCHOOL IN 1983 BUT NOT ATTENDING SCHOOL IN 1984

Attending tertiary (39%)		Not attending tertiary (61%)	
University	15%	Employed FT	34%
VET	20%	Employed PT	6%
Other	4%	Unemployed	16%
		NLF	4%

Notes: University includes college of advanced education enrolments in years prior to 1992, VET represents vocational education and training (mainly TAFE), NLF refers to people not in the labour force.

Source: Australian Bureau of Statistics (various years) *Transition from education to work*, Catalogue No. 6227.0.

Among those school leavers who did not continue with study there was a substantial decline in the percentage of school leavers who obtained full-time employment and a steady rise in the percentage who were employed part-time.

The percentage of each group of school leavers who were unemployed in May of the year after leaving school fluctuated over the period and the percentage not in the labour force remained fairly constant.

Given that there was a net increase in school holding power over the 1980s and into the 1990s, and an increase in the percentage of school leavers entering university, issues are raised about the composition of the groups entering various forms of further education. In this paper those issues are addressed using longitudinal data.

Longitudinal data

In Australia, and overseas, there is a number of longitudinal studies that vary in scope and design. The present paper utilises data that form part of the *Longitudinal surveys of Australian youth*. This project now incorporates three components: *Youth in transition*, the *Australian youth survey*, and the new *Longitudinal surveys of Australian youth*. The data from the *Youth in transition* component are used as the basis of the present paper. The two other components are described to complete the picture.

Youth in transition

Youth in transition is a program of longitudinal surveys conducted by the Australian Council for Educational Research (ACER). It began in 1978 with the survey of a single national sample of 17-year-olds, some 6247 persons who had been born in 1961. In 1981, 1984 and 1989 similarly sized samples from the 1965, 1970 and 1975 birth cohorts were added to the program. Up to 1996 the annual surveys of these samples have yielded information covering ages 17–33 years for the 1961 cohort (finished in 1994), 16–30 years for the sample born in 1965 (finished in 1995), 15–24 years for those born in 1970 (finished in 1994), and 14–21 years for the newest of the samples, those born in 1975. Data will continue to be gathered from the 1975 cohort.

The structure of the samples is such that the data provide the opportunity to examine changes that occur within samples, as the cohort ages, and between samples. The data focus on participation in education and the labour market, along with transitions within and between these states, over the period ranging from the late 1970s through to the present time. So, as well as being able to examine educational and occupational participation and transition within each of the samples, it is also possible, by looking at differences between samples, to look at the way in which the dynamics of this participation have changed with changing social and economic conditions.

The design of the *Youth in transition* surveys was influenced by existing samples and data. The surveys of the 1961, 1965 and 1970 birth-cohort samples were established as follow-up surveys of samples of students tested in 1975 as part of the Australian Studies in School Performance (ASSP) project, and in 1980 as part of the Australian Studies in Student Performance project (Keeves & Bourke 1976; Bourke et al. 1980). In 1975 and again in 1980, in each of the two phases of a national testing program, nationwide samples of 14-year-old and 10-year-old students completed standardised achievement tests in basic reading and mathematics skills.

While this testing program was initiated independently of *Youth in transition*, the longitudinal surveys were designed to capitalise on the fact that standardised achievement test data were available for national samples of an appropriate age. Thus, the first of the longitudinal surveys, which began in 1978, was based on the sample of

the 1961 cohort tested in 1975 at age 14 as part of the ASSP project. In 1981, the sample of 10-year-olds tested in 1975 reached age 16, and became the second sample in the longitudinal studies program. And, in 1984, the sample of 10-year-olds tested in 1980 in the second phase of the ASSP project were surveyed for the first time as part of *Youth in transition*. The follow-up of these three samples exhausted the potential of the ASSP studies to provide already tested samples. In order to introduce a fourth school-age sample into the program, in 1989 analogous standardised tests were designed and administered to a national probability sample of students born in 1975.

Data collection has been exclusively by mail survey, with respondents being asked to complete a single questionnaire each year. An initial mailing is undertaken in December of each year, with two additional follow-up mailings to (then current) non-respondents in the period January through March. The primary concern of the surveys has been the patterns of participation in education and the labour force, and the transitions within and between the two, of persons in their mid-teens to mid-twenties. To address these concerns each of the four surveys is structured around a core of repeated measures which provide year-by-year information on participation in education and the labour force, information comparable within and between samples across years. The context of this participation is measured by additional questions which appear in one year only or may be repeated over several years.

Australian Youth Survey (AYS)

The Australian Youth Survey (AYS) follows a nationally representative group of young people aged 16 to 19, with the initial cohort of approximately 5300 young people interviewed for the first time in 1989. Since then the sample has been interviewed annually on a wide range of topics including school experiences, school-to-work transition, labour market experiences, post-school education and training, income, health, housing and job satisfaction. New nationally-representative samples of sixteen year-olds have been added each year to maintain up-to-date information on school completion and post-school education and training. The sample and survey design permits groups of students to be tracked as they leave school and enter further education and the workforce. Information is provided on qualitative issues relating to experiences and activities as they move from one area to another, for example, the types of courses students enter as they move from school to Technical and Further Education (TAFE) and the types of work they gain. Data is also collected for measuring activities in quantitative terms, for example, the length of time spent looking for work, numbers of jobs and periods of study. This information is recorded using a monthly calendar to map out periods of activity. A new group of 16-year-olds (about 1500) was added in 1990. Further additions of 16-year-olds (approximately 1200 per year) were made from 1991 to 1994. No further samples have been added since 1994. Until 1994 personal interviews were conducted but since 1995 the AYS sample has been interviewed by telephone rather than face-to-face.

The AYS was part of a program of longitudinal studies managed by the Economic and Policy Analysis Division of the Department of Employment, Education and Training (initially by the Australian Bureau of Labour Market Research). The program began in

the mid-1980s with the Australian Longitudinal Survey (ALS). The ALS comprised two samples of Australian youth: long-term unemployed young people aged 15–24 who were registered with the Commonwealth Employment Service (CES sample), and a nationally representative sample of 9000 young people aged 16–25 (the youth sample). The sample of unemployed young people was surveyed for the first time in 1984 and interviewed again in 1985, 1986 and 1987. The youth sample was surveyed for the first time in 1985 and re-interviewed in 1986, 1987 and 1988.

The longitudinal surveys of Australian youth

A national sample of 13 000 Year 9 students was selected in 1995 as the first cohort in the new program of *Longitudinal surveys of Australian youth*. In that year reading and numeracy tests were administered to students in their schools to provide information on early school achievement for use in later analyses of educational and labour market participation. Students also completed a background questionnaire about educational and vocational plans. In 1996 the sample was surveyed by a detailed questionnaire mailed to their home addresses and replies were received from approximately 10 000 of the sample. Concurrently, schools and teachers in the sample schools were surveyed in order to obtain information about the curriculum and organisation of the schools in the sample. From 1997 the program of annual telephone interviews of these students will begin and it is anticipated that the cohort will be surveyed annually at least until the age of 25.

From school to further education

In this paper data from three cohorts of the *Youth in transition* collected are used to explore patterns in participation among cohorts of young people in various forms of further education. It makes use of a series of variables representing school and social background firstly to compare patterns in the 1990s and secondly to examine changes over the 14 years from 1980 to 1994. The cohorts used are those born in 1961 (reaching 19 years of age in 1980), those born in 1965 (reaching 19 years of age in 1984) and those born in 1975 (reaching 19 years of age in 1994). The results for the C61 and C65 cohorts have been previously reported by Long and Sturman (1990) and Long et al. (1996).

Variables

Dependent variables

The dependent variables in this paper refer to whether the respondent participated in the specified form of education up to, and including, the age of 19 years. It is possible for a respondent to have participated in more than one form of education and this is recognised in the analysis. In the analysis the term *higher education* is used to encompass students who studied in *universities* or in *colleges of advanced education* before the introduction of the unified national system. For much of the period over which data were collected a binary system of higher education operated. Participation in *TAFE* is examined for TAFE as a whole and separately for *apprenticeships*, *traineeships* and *other*

TAFE. Traineeships are only relevant to the youngest cohort and even then the numbers involved are too small for any reliable conclusions to be drawn. In this paper no distinction is made between full-time and part-time participation although this distinction is possible in principle.

Independent variables

School achievement is a score which combines results from standardised reading, and mathematics tests administered to sample members in 1975. Thus *school achievement* refers to achievement at age 14 for the 1961 and 1975 cohorts and achievement at age 10 for the 1965 cohort. For this paper the achievement scores were then divided into four quartiles from highest to lowest.

Schooling attained refers to the years of secondary school completed by the respondent. In the tables presented in these analyses it is represented as a dichotomy: completed Year 12 or not.

Gender: The measure of gender derives from self-reports in answer to the question *Are you a boy or a girl?*

Socioeconomic status, based on parents' occupations, is a combination of reports of father's and mother's occupation coded to the Australian National University (ANU) 6-point scale (actually re-coded to this from the 16-point scale) (Broom et al. 1977). For the tables presented in this paper the scale was collapsed to three categories representing high, middle and low socioeconomic status. A principle components scale, which combined three characteristics—family wealth (based on ownership of consumer durables), parents' occupations and parents' education)—was also computed for the C75 cohort and gave similar results to the simple occupational status measure.

Ethnicity: A respondent was defined as *English-speaking* if their father had been born in Australia or had been born outside Australia in a predominantly English-speaking country, and as *non-English-speaking* if their father had been born outside Australia in a predominantly non-English-speaking country.

Patterns of participation in the 1990s

Table 1 records patterns of participation in various forms of further education up to the age of 19 years for the cohort that reached that age in 1994. It can be seen that 39 per cent of the cohort had participated in higher education compared to 32 per cent in TAFE. One-third of TAFE participation was in apprenticeship courses, a small amount in traineeships and more than half (18 per cent of the cohort) did not involve either of these forms. Other data indicate that university students in this age group are overwhelmingly full-time (93 per cent) whereas in TAFE far fewer are full-time (estimated at 34 per cent) (ABS 1996).

Table 1: Participation rates in various forms of further education to age 19 for the cohort born in 1975

	Higher Education	TAFE			
		All	Other TAFE	Apprent.	Trainee
All persons	39	32	18	11	3
Gender					
Males	34	39	20	21	2
Females	43	27	16	4	3
Socioeconomic status					
High	53	26	15	9	2
Middle	37	35	20	14	2
Low	22	38	22	12	3
Ethnicity					
English-speaking	39	31	18	12	3
Non-English-speaking	47	32	20	8	3
School achievement					
Highest quartile	69	18	11	7	2
Third quartile	41	34	20	12	3
Second quartile	22	40	22	14	3
Lowest quartile	6	43	24	13	3
Schooling attained					
Completed Year 12	51	26	19	5	2
Not completed Year 12	0	54	17	30	3

Gender differences

Gender differences were clearly evident. There was a higher rate of participation in higher education among females than males but the pattern was reversed for participation in TAFE. Within TAFE the predominance of males was most evident in apprenticeships and less evident in other forms of TAFE. These findings on qualifications reflect other research which has focussed on gender equity in educational participation.

Socioeconomic status (SES)

Socioeconomic status strongly influenced whether respondents participated in higher education. The difference in the participation rates between the highest and lowest socioeconomic status groups was 31 percentage points. In TAFE the distribution across socioeconomic groups was smaller (12 percentage points) and in the opposite direction: higher participation rates were observed in the lower socioeconomic groups. This is evident for all forms of TAFE.

Ethnicity

Young people of non-English-speaking background participated in higher education to a greater extent than their peers of English-speaking background. The difference was 8

percentage points. In TAFE there was little difference in participation rates between these two groups but young people of non-English-speaking background participated less in the apprenticeship system. This reflects previous research which has shown the high value many immigrant Australians place on education and, in particular, their preference for higher education over other forms of post-secondary education (Sturman 1985; Williams et al. 1993).

School achievement

In the case of higher education the relationship with earlier school achievement was quite predictable but nevertheless very pronounced. Only 6 per cent of those from the lowest school achievement quartile compared with 69 per cent from the highest had participated in higher education by the age of 19. In terms of TAFE, the direction of the relationship was reversed. Only 18 per cent of the top achievement quartile had participated in TAFE compared to 43 per cent of the bottom achievement quartile. For apprenticeships, the corresponding figures were 11 per cent of the top quartile and 13 per cent of the bottom quartile, and in other TAFE the gap was from 11 to 24 per cent.

Schooling attained

Completion of Year 12 was clearly a requirement for participating in higher education in this age range. Some 51 per cent of those who had completed Year 12 and virtually none who had not completed Year 12 pursued a higher education qualification. However, this was not the case for TAFE. More than half of those who had not completed Year 12 (54 per cent) participated in TAFE along with one quarter (26 per cent) of those who had completed Year 12. Participation in apprenticeships reflected the different pathways followed by Year 12 completers and non-completers more strongly than non-apprenticeship forms of TAFE. These participation rates need to be considered in conjunction with Year 12 completion figures to obtain a picture of the composition of these forms of further education. For apprenticeships, 5 per cent of the 78 per cent of the cohort who undertook Year 12, compared to 30 per cent of those who did not, means that Year 12 graduates made up 37 per cent of apprentices.

Changing patterns of participation in TAFE over 14 years

From the cross-sectional series of data noted in a previous section of the paper it was evident that there had been changes in the destinations of school leavers over the period from 1983 to 1996. In this section the participation rates in TAFE as a whole, and apprenticeships as a specific form of TAFE, for three cohorts are compared. Relevant results are shown in Table 2.

Table 2: Participation in apprenticeships and other forms of TAFE from 1980 to 1994

	All TAFE			Apprenticeship		
Cohort	**C61**	**C65**	**C75**	**C61**	**C65**	**C75**
Year of attaining age 19	**1980**	**1984**	**1994**	**1980**	**1984**	**1994**
All persons	29	32	32	18	18	11
Gender						
Males	42	45	39	34	35	21
Females	16	22	27	4	4	4
Socioeconomic status						
Highest	28	29	23	15	14	9
Middle	32	34	34	22	21	14
Lowest	25	36	36	17	22	12
Ethnicity						
English-speaking	30	32	31	20	18	12
Non-Eng.-speaking	24	34	32	12	19	8
School achievement						
Highest quartile	24	23	18	14	12	7
Middle quartiles	32	34	36	21	20	13
Lowest quartile	28	39	43	18	23	13
Schooling attained						
Completed Year 12	21	18	26	7	3	5
Not comp. Year 12	38	43	54	26	27	30

It is evident from Table 2 that although participation in TAFE as a whole remained fairly constant over the period (consistent with the observations in an earlier section of the paper), participation in apprenticeships declined from 18 per cent to 11 per cent.

Gender

The data in Table 2 indicate that male participation in TAFE declined a little over the 14-year period while female participation rose. Even though TAFE remained predominantly male in 1994 the gap had narrowed somewhat. A large part of this change arose from a decline in the participation of males in apprenticeships. There also appeared to be a decline in male participation and a rise in female participation in other forms of TAFE.

Socioeconomic status

The distribution of participation in apprenticeships and other forms of TAFE appears to have remained generally similar over the 14-year period.

Ethnicity

Between 1980 and 1984 there appears to have been a rise in participation by young people of non-English-speaking background in apprenticeships that was followed by a decline from 1984 to 1994: a decline that was a little greater than that for those of

English-speaking background. Participation in TAFE as a whole by young people of non-English-speaking background rose between 1980 and 1984 and thereafter remained steady.

School achievement

There is evidence that the level of earlier school achievement among those who participated in TAFE as a whole declined from 1980 to 1994. In 1994, compared to 1984 and 1980, there was a higher percentage of students from the lowest quartile and a lower percentage of students from the top quartile. In the case of apprenticeships the trend is not so clear. For that form of education there appears to have been a decline from 1980 to 1984 but thereafter there is little change.

Schooling attained

Even though the participation rates in Table 2 indicate changes in participation rates for those who have completed Year 12 compared to those who have not, the data need to be considered in combination with Year 12 completion rates. This indicates that whereas in 1980 13 per cent of apprentices had completed Year 12, in 1984 the figure was 7 per cent and in 1994 (as noted earlier) it had risen to 37 per cent. This represents a substantial shift in the school background of apprentices. For TAFE as a whole there is also evidence of an increased proportion of entrants with Year 12. In 1980 Year 12 completers comprised 23 per cent of participants. This figure hardly changed by 1984 (it was then 21 per cent) but by 1994 it had risen to 43 per cent.

Changing patterns of participation in higher education over 14 years

Changes in patterns of participation in higher education over the same 14-year period from 1980 to 1994 are documented in Table 3.

The most striking trend evident in Table 3 concerns the overall participation rate in higher education up to the age of 19. Over the 14 years to 1994 the rate almost doubled. There was an increase for both males and females but the increase for females (a factor of 2.3) outstripped that for males (a factor of 1.7). The pattern of participation in relation to socioeconomic background remained broadly similar in 1994 to what it was in 1980. Participation among the highest socioeconomic group remained more than double that of the lowest group, the ratio of the participation rate among the highest to the lowest group changing only slightly from 2.6 to 2.4. Participation by young people of non-English-speaking background remained higher than for those of English-speaking background.

Table 3: Participation in higher education from 1980 to 1994

Cohort	C61	C65	C75
Year of attaining age 19	**1980**	**1984**	**1994**
All persons	20	19	39
Gender			
Males	20	19	34
Females	19	18	43
Socioeconomic status			
Highest	31	33	53
Middle	21	17	37
Lowest	12	11	22
Ethnicity			
English-speaking	19	18	39
Non-English-speaking	26	23	47
School achievement			
Highest quartile	43	41	69
Middle quartiles	14	14	31
Lowest quartile	5	3	6
Schooling attained			
Completed Year12	45	45	51
Not comp. Year 12	-	3	0

In terms of earlier school achievement, participation in higher education continued to draw predominantly upon the highest achieving quarter of the school population. By 1994 more than two-thirds of this group entered university compared to just over 40 per cent some 14 years previously. This means that far fewer of the highest achieving students now enter the world of work and this may influence the perceptions that some hold of the capacities of school leavers. The data confirm that completing Year 12 remains clearly associated with participation in higher education.

Conclusion

Longitudinal research enables a detailed exploration and elaboration of patterns of participation that are evident in cross-sectional data. The present paper examined changes in patterns of participation in a context of increased participation in higher education and stability in the level of participation in TAFE. Higher education was characterised by a more rapid increase in participation by females than males and an extremely high level of participation among the top achievement quartile. TAFE was characterised by a small decline in participation among males (partly associated with an overall decline in apprenticeship participation) and an increase among females. There

was some evidence that over the period TAFE had lower levels of participation from the top quarter of achievements and higher levels of participation from the bottom quarter. TAFE in general, and apprenticeships in particular, now have a substantially higher percentage of participants who have completed Year 12 than previously, but this appears to be due to the increase in the percentage of the cohort who have completed Year 12 rather than a dramatic change in the participation rate among this group.

The differences in patterns of participation among these forms of further education revealed in this paper suggest that it is important to control for the effects of antecedent characteristics when analysing income and other labour market outcomes of programs in further education. Long et al. (1996) have analysed and reported on these outcomes for the first two cohorts. It remains to be seen how these outcomes have changed for the cohort born in 1975.

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Returns from training for apprentices

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The establishment of a workplace-based apprenticeship training program in the metals and engineering area is outlined. It was begun because changes to the training curriculum and flexible delivery concepts provided an opportunity to improve the quality of apprenticeship training, both for the employer and the employee. A company with many apprentices used an alternative approach, a workplace-based training model. Work-based learning was considered more suitable for training apprentices than the integrated on-the-job and off-the-job approach of apprentice training in Australia. The company had commercial reasons as well, as it reduced the off-the-job component to fewer than half the days of the traditional model. The company workshops were registered as a provider site. The quality of training was assured. The company expects a measurable return on its investment in apprentices, that their productive output and the quality of their work will surpass that from the traditional model. The role of the Chamber of Commerce and Industry of Western Australia (CCI) in the program is explained. CCI will be looking at the program's wider application.

Introduction

THIS PAPER PROVIDES information about the establishment and operation of a workplace-based apprenticeship training program in the metals and engineering area. The program was established because changes to the nature of training curriculum and flexible delivery concepts provided the opportunity to significantly improve the quality of apprenticeship training, both for the employer and the employee.

This alternative apprentice training approach marries training to good business practice. The company involved believes it will get a return on its investment in a large apprentice workforce. The productivity of the company and its success in securing contracts allows it to provide employment for a large number of apprentices. Apprentices are now seen as contributors to the efficient operation of the company at an early stage of their training.

The balance required in the establishment of the program is to ensure the operational requirements of the company and the training needs of the apprentices are complementary.

This paper describes the setting up of the workplace-based program and explores the movement towards workplace-defined (and delivered) training. The role of the Chamber of Commerce and Industry of Western Australia (CCI) in the program is explained.

It should be noted that no claims are being made for the transferability of the program to other domains. The brief history of the program suggests that it may be applied in other metal and engineering environments and possibly other industry sectors. CCI will be looking at its wider application for member companies in a range of industry sectors during the coming months.

Development of an integrated approach to apprentice training

The benefits of work-based learning are now clearly recognised and much of the training reform activities of the past decade have been focussed on establishing a vocational training system that accepts workplace requirements and recognises the value of knowledge and skills learned at work.

The establishment of an industry-responsive approach to vocational training has also accepted the need to integrate the learning activities of the educational institution and the workplace. This integration has been a key component of the competency-based training approach. Although not exclusive to a competency-based system, the integration of institutionalised learning and workplace activities has progressed in Australia because of the development of a competency-based approach. In 1980 the Department of Labour Advisory Committee (DOLAC) established a Working Party on the Prospective Demand for the Supply of Skilled Labour. The DOLAC Working Party recommended the establishment of an apprentice training system based on the achievement of competencies. Murphy (1990, p. 101) identified the work of the DOLAC Working Party as the starting point in the process that was eventually to lead to a national competency-based training system. The recommendations of the Committee of Inquiry into Labour Market Programs chaired by Mr Peter Kirby extended the DOLAC Working Party position and reinforced the view that apprenticeship programs should become competency-based in their orientation. Recommendation 33 of the report published in January 1985 stated in part that:

> *The Commonwealth Government, in conjunction with the States, should take steps to bring together work on:*
>
> *(iv) the development of competency standards for the trades.* (Kirby 1985, p. 131)

Recommendation 33 of the Kirby Report was identified by the Commonwealth-State Training Advisory Committee (COSTAC) as being an important element in the development of industry training. COSTAC established a working party to progress

Kirby's recommendation. The terms of reference of the COSTAC Working Party included the following:

> *Recommend on the scope for the development and co-ordination of on- and off-the-job training providing the basis for the development of a competency based trade training system.* (Department of Employment, Education and Training [DEET] 1998, p. 4)

In respect to this term of reference, the working party recommended that future trade training should be modular, self-paced, flexible in both delivery and assessment methodologies and be fully integrated between on- and off-the-job (DEET 1988, p. 25).

This recommendation was the first formal recognition that training provided in the institutional setting should complement and be integrated with the activities of the workplace. In the decade since the release of the COSTAC Working Party report the notion that on- and off-the-job training should be integrated has never been questioned.

In Western Australia the mechanics of integration followed a bureaucratically determined approach. The development of a competency-based approach for apprentice training had been clearly signalled by the Federal Government as a priority item in the restructuring of Australian industry (Dawkins 1987, p. 12). The Western Australian system captured the mood of the day and reflected the COSTAC Working Party recommendation for a co-ordinated approach.

The introduction in January 1988 of the New Apprentice Training and Assessment System (NATAS) required an apprentice to attain prescribed levels of on-the-job and off-the-job skills. In measuring apprentice performance, the institutional and the workplace components were considered. The competence of the apprentice was determined from evidence provided by the employer and the Technical and Further Education (TAFE) college attended for off-the-job training (DEET 1990, p. 4). Although NATAS promoted an approach that recognised the importance of integrating institutional and workplace training, it failed to provide an effective vehicle for integration. Problems with employer understanding of the model, TAFE staff refusing to measure apprentices against the NATAS Trade Training Schedules, and difficulties aligning the on-the-job and off-the-job skills contributed to the failure of the system. NATAS became a symbolic change only where the pressure to implement a system which reflected the newly emerging competency-based approach resulted in unrealistic expectations, unco-ordinated efforts, simplistic solutions and impossible deadlines (Collins 1992, p. 19).

The requirements for the TAFE teachers and employers to use a 'tick-a-box' approach and sign off on a range of skills in a Trade Training Schedule became a major hurdle in the implementation of NATAS. Williamson (1991, p. 42) describes how employers simply ticked the boxes without giving any consideration to whether an apprentice had demonstrated the skill. In the TAFE context, many teachers refused to complete the off-the-job section of the Trade Training Schedule.

Although still a requirement under the existing apprenticeship arrangements in Western Australia, the NATAS approach to the integration of institutional and workplace training has been largely discounted.

Industry Training Council (1996) reported that although there has been some slight fluctuation either side of the base apprentice range, there has been no major change in numbers in the period 1986 to 1996 (see Table 1).

Table 1: Metal trades apprentices—Western Australia

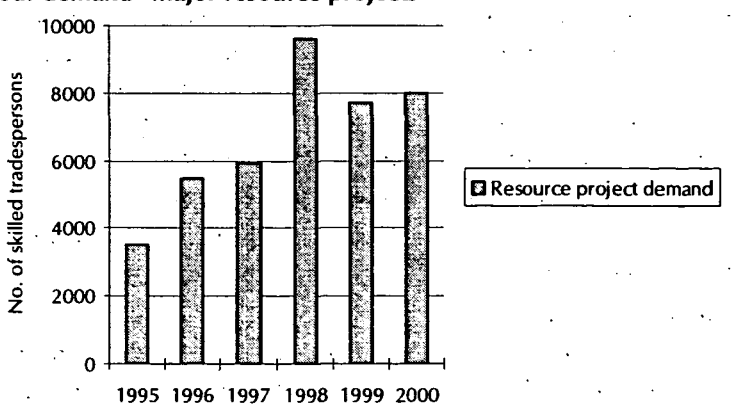
Year	Commencements	Total in training
1986–87	1525	4990
1987–88	1375	4836
1988–89	2665	5908
1989–90	1828	5889
1990–91	1958	6082
1991–92	1534	5659
1992–93	1581	5112
1993–94	1751	4989
1994–95	1883	5105
1995–96	1993	5847

Although able to support a base of between 5000–6000 apprentices during normal periods, the metal and engineering sector has experienced boom conditions when additional apprentices are required. The late 1980s saw an increase in apprentice numbers. The current demand for skilled workers for resource sector developments is once again creating a demand for additional apprentices.

The *Worley report* sponsored by the Western Australian Departments of Training and Resource Development into the *Skills requirements of resource development projects in Western Australia 1996–2000* (1996, pp. 9–13) identified a growing demand for metal trades and engineering tradespersons through to the turn of the century. The report recommended the development of a range of apprentice training strategies, such as adult apprenticeships, accelerated programs and recognition of existing skills.

The *Worley report update* (1997) reinforces the need for innovative apprentice training. The update shows the level of skills demand for the next few years in a range of metal and engineering occupations. Figures 1 and 2 show this demand.

Figure 1: Labour demand—major resource projects



An alternative approach

When the opportunities created by curriculum changes and flexible delivery have presented themselves, industry has addressed the training demands of the metal and engineering workplace by becoming registered providers of apprentice training. Figures provided by the Metals, Manufacturing and Services Industry Training Council (MMSITC) (1997) show that there are currently 60 registered providers of National Metal and Engineering Curriculum (NMEC) modules in Western Australia. Of these providers, 12 are companies which are registered to deliver all or part of various metal and engineering apprenticeship programs. The unavailability of user choice and the flow of public funding to providers of choice has precluded most of the companies registered as providers from delivering workplace-based programs. However, three of the larger companies have moved towards self-funded apprenticeship training.

At the beginning of 1997, three large employers withdrew their apprentices from the traditional off-the-job provider. These apprentices numbered approximately 270, about 5 per cent of the total metals and engineering apprentice population in Western Australia. Although different in their approach, each employer has decided to provide the complete apprentice training program at the workplace. Each of the companies have registered training provider status. Each of the companies is funding the complete apprentice training program for its employees.

For two of the companies, a large mining and processing company in the north of the State, and a plant and equipment supplier and service provider in the Perth area, the process has included the establishment of on-site training centres. These centres provide the off-the-job training associated with the apprenticeship program. The training follows the typical integrated approach described previously in this paper (without the bureaucratic element). For the third company, the process has meant the establishment of a workplace-based training model. It is this third company that is the focus of this paper.

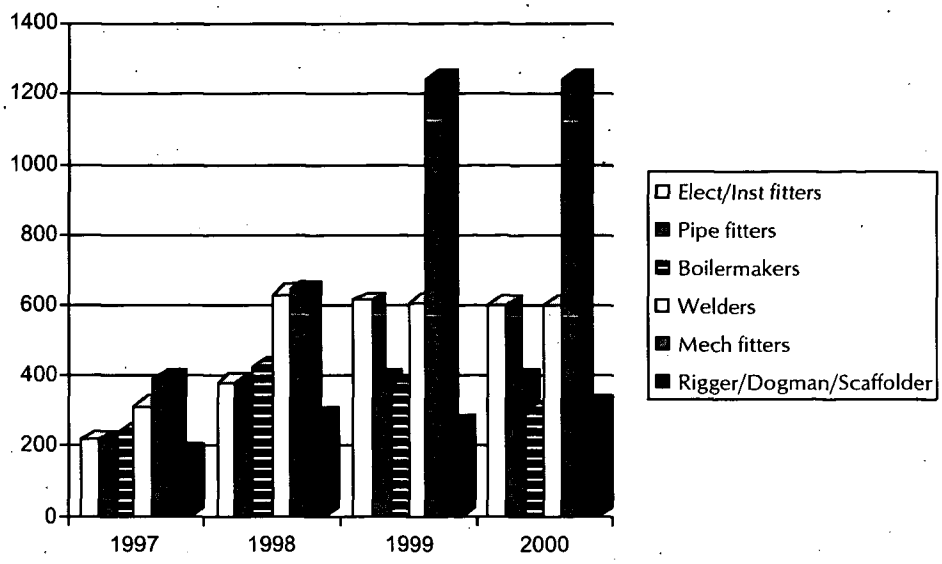
It is interesting to note the general trend in metal and engineering apprenticeship training and the demand for skilled labour for resource development activity in Western Australia, which is fuelling the interest in training matters.

Contrary to popular belief, the apprenticeship system in Australia has remained relatively strong over the past two decades. Dockery (1996, p. 3) reported that when measured both over time and by international standards, the Australian apprenticeship system has maintained a healthy position. Despite a sharp drop in apprenticeship numbers between 1990 and 1993, the ratio of apprentices in training to total trade employment has remained around 13 per cent for the past 10 years.

In Western Australia, the situation reflects the national figures. The Western Australian Department of Training (1996, p. 58) reported an increase of apprentices in training of 3.5 per cent during 1995–96 over the previous year.

The overall metal trades apprentice population has remained fairly static for the past 10 years. The base metal and engineering labour market in Western Australia can support between 5000 and 6000 apprentices. The Metals, Manufacturing and Services

Figure 2: Occupational demand—major resource projects



The continuing demand for apprentices plus the effects of the resource-development activities will ensure that companies will need to consider a range of methods to get the most benefit from their apprentice training programs.

CCI Training Services

The CCI is a direct employer of about 380 apprentices and trainees, and manages around 120 apprentices and trainees for other employers. CCI Training Services operates a group training model. Those direct employees of the CCI (380) are hired to host companies. Host companies pay CCI an hourly rate which encompasses wages, superannuation, worker's compensation, administration costs, etc. The hourly rate increases as an apprentice progresses through the various stages of training, and becomes more skilled and productive. Apprentices under management are employed directly by a company that purchases an apprentice management service. This arrangement has resulted from the out-sourcing of non-core activities by many businesses. CCI manages the on-job and off-job training, provides counselling and pastoral care and deals with disciplinary and skill deficiency problems. The cost of the management service is negotiated with participating companies.

The CCI does not receive recurrent government funding for its group training operation. It does, however, receive employer incentives the same as all other employers of apprentices. CCI Training Services operates in a commercial environment and its operation depends entirely on the service it provides and the value host companies place on that service.

It was through the CCI group training arrangement that the workplace-based apprentice training model was developed for the third company previously mentioned.

A workplace-based apprentice training program

Carter and Gribble (1991, p. 17) use Levy's definition of work-based learning to underline the importance of linking the learning of an employee with their work role. The defining characteristics of the workplace-based training model are that it should:

- provide a learning environment in the workplace
- provide appropriate on-the-job learning opportunities
- provide appropriate off-the-job learning opportunities to support the workplace activities.

In their study of learning in the workplace, Harris and Volet (1997, p.17) identified a range of 'processes and practices that provide opportunities for people to learn in the course of their work'. It is the provision of these workplace learning opportunities that is the key element in the workplace-based apprentice training program.

During January 1997, CCI in partnership with a large engineering construction and fabrication company based in the Perth area developed a proposal to redefine the training of apprentices. The company employs over 1600 staff on various sites throughout Australia. At its fabrication workshop facility in Perth over 800 skilled tradespersons produce components for a range of resource sector projects. The company hosts 100 apprentices in its workshop. These apprentices are employed by CCI and placed in the company workshop on a permanent basis.

The apprentice-training proposal had the following specifications:

- establish the company workshops as a registered training provider site
- provide a complete training service for all CCI apprentices placed in the company workshops
- provide a full-time metal fabrication trainer to manage and deliver all apprentice training and assessment activities
- liaise with external training providers, such as TAFE colleges, to ensure an efficient transition of apprentice training from external providers to in-house training managed by the CCI
- establish individual competency profiles for each apprentice. These profiles will align with the company skill needs
- ensure that all apprentices complete the engineering modular training required by the company in the engineering tradesperson–fabrication (boilermaking and welding) skill areas
- ensure that all apprentices are monitored and where performance and skill levels drop below acceptable levels, provide remedial programs
- establish a workshop-based training and assessment model which will be used to deliver all apprentice modular training in the company workshops
- provide block release training programs for those knowledge and skill areas that cannot be covered in the workshop-based training. The block release programs will be delivered at the CCI training facility
- ensure that all training provided satisfies the regulatory requirements governing apprentice training in Western Australia

Figure 1: Number of clients in vocational programs 1987–1996

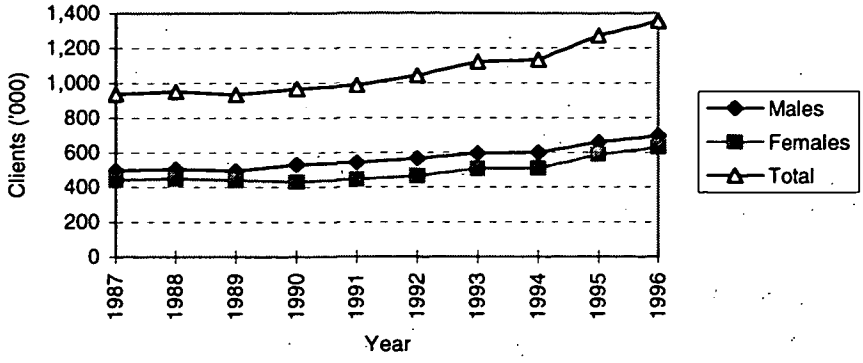


Figure 2: Number of apprentices and trainees in training

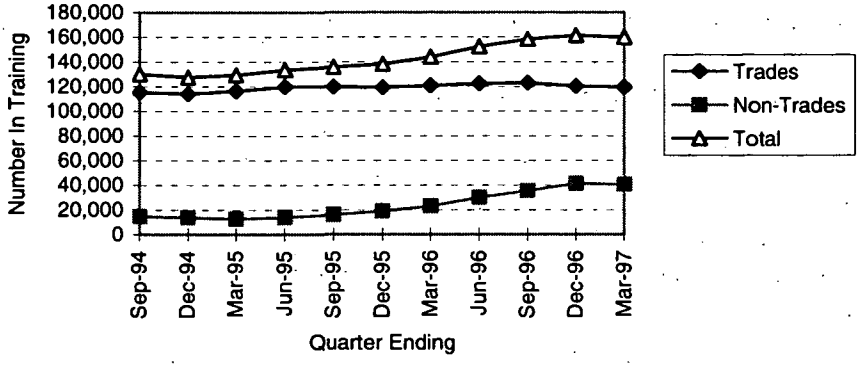
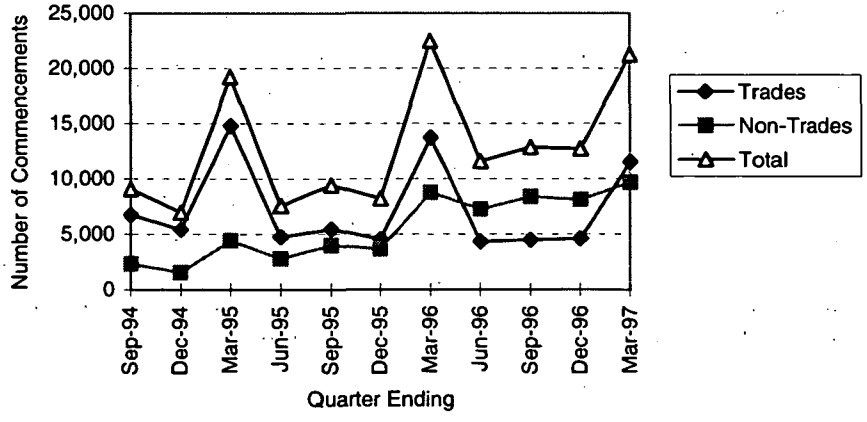


Figure 3: Number of apprentice and traineeship commencements



annual collection based on programs of training by providers, information is collected on a quarterly basis relating to contracts of training (apprentices and traineeships). The information reported in this paper is derived from these collections.

The aim of this paper is to give a brief overview of the types of people undertaking VET programs, where they come from, who they are and what they are doing. All information is based on the national data collection. A more detailed picture is available through a suite of publications published by the National Centre for Vocational Education Research (NCVER) for the Australian National Training Authority (ANTA).

VET activity

In 1996, almost 1.75 million clients undertook education and training with providers of vocational education and training in Australia. Of the total, over 1.35 million undertook activity in vocational programs (operative, preparatory, trades/skilled, and professional/paraprofessional), with the remainder undertaking personal enrichment programs. In total, females account for 53 per cent of all clients and 47 per cent of clients in vocational programs.

In 1996, a total of 294.3 million hours were undertaken, with 285.0 million in vocational programs and 9.3 million in personal enrichment programs. Of the total number of hours reported in 1996, 82 per cent was associated with Commonwealth and State recurrent funding, 6 per cent with Commonwealth State specific funding and 11 per cent with fee-for-service activity. These hours were delivered by TAFE (94 per cent), community-based providers (4 per cent) and publicly funded private providers (2 per cent).

Figure 1 indicates the number of clients in vocational programs, 1987 to 1996, by sex. Here the increase in the number of clients participating in VET can be seen. However, it is pertinent to keep in mind the fact that the national data collection has been increasing in the number of providers from which the data is being collected. More community-based providers and private providers were introduced in the collection in 1995 and 1996. Looking at TAFE providers there has been an increase in activity from 1995 to 1996 (0.6 per cent clients and 2.4 per cent hours).

To put these figures into context, it is also useful to briefly look at the number of persons in a contract of training. When looking at the information on a quarterly basis from 1 July 1994 there has been an increase in the total number of persons in training. This increase is due to an increase in the number of commencements in contracts of training in the non-trade areas. Figures 2 and 3 look at the number in training and the number of commencements in a contract of training from September 1994, for both the trade and non-trade areas. Most training in the trade area consists largely of traineeships, but also includes a small number of apprenticeships.

National student profiles

Sandra Pattison
Senior Project Officer, Data Management and Analysis Branch, National Centre for Vocational Education Research

A brief overview of the numbers involved in vocational education and training (VET) programs in Australia, and its diverse student profile, is given. Training is funded from public sectors, private sources, such as companies purchasing training for their employees, and individuals. It includes full-fee paying clients from overseas studying in Australia. Training is provided by public Technical and Further Education (TAFE) institutions, community-based providers, private providers, enterprises, and secondary schools. Information in this paper is derived from a national data national collection under the Australian Vocational Education and Training Management Information Statistical Standard (AVETMISS). The aim is to give an overview of the types of people undertaking VET programs, where they come from, who they are and what they are doing. A more detailed picture is available from publications published by the National Centre for Vocational Education Research (NCVER) for the Australian National Training Authority (ANTA).

Introduction

THIS PAPER GIVES a brief overview of the profile of students undertaking education and training in vocational education and training (VET) programs in Australia. VET programs are undertaken by clients of both sexes, from all age groups, and from a diversity of backgrounds. These backgrounds include Aboriginal and Torres Strait Islander clients, clients with a disability, clients who are employed, unemployed or who are not in the labour force, and clients from a full range of prior-education levels.

The training undertaken is funded from public sectors (Commonwealth and State/Territory), from private sources (e.g. companies purchasing training for their employees) and individuals. It includes full-fee paying clients from overseas studying in Australia. Training is provided by public Technical and Further Education (TAFE) institutions, community-based providers, private providers, enterprises, and secondary schools.

All publicly funded providers (except schools and some enterprises) are currently reported in a national data collection under the Australian Vocational Education and Training Management Information Statistical Standard (AVETMISS). As well as an

effective ways to train their apprentices. The need to integrate the institutional and workplace environments, first identified over a decade ago, has not been turned into a workable approach that benefits industry.

The model described here will provide the company with a measurable return on its investment in the training of apprentices. It is possible that within two years many of the apprentices will be able to undertake trade-level work. The productive output of the apprentices and the quality of work will far surpass anything available from the typical integrated on-the-job and off-the-job training approach.

If employers are shown that training methods exist which allow for the more efficient skilling of apprentices in a workplace setting, they will invest in apprenticeship and traineeship training. For some employers this investment will continue to be made for cultural and community reasons, but more importantly, for many employers apprenticeship and traineeship training will receive consideration for sound business reasons.

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the activities of the workplace to ensure an appropriate and meaningful learning experience is available for the apprentices.

The program reflects Billet's key elements of a workplace learning environment, as described by Harris and Volet (1997, p. 37), in that it provides:

- access to authentic work activities
- access to experts—the full-time trainer and the company's supervisors and tradespersons
- mentoring and feedback from experts—again, the trainer, supervisors and tradespersons
- access to a range of activities which cover the process and product of the occupational area—the NMEC modules chosen by the company provide for the complete range of occupational skills
- explicit instruction on the tasks to be completed
- appropriate sequencing of activities to allow the apprentices to gain an understanding of the occupational area

Conclusion

This paper has provided a description of an alternative approach to the training of metal and engineering apprentices using a workplace-based training model. The model is founded upon the notion that a work-based learning approach is more suitable for the training of apprentices than the integrated on-the-job and off-the-job approach typical of apprentice training in Australia.

The training program described in this paper was developed by CCI for a large company that hosts 100 apprentices employed by CCI. Although no claims are made about the usefulness or transferability of this approach to other areas, there appears to be no reason why the model could not be used by other employers, both large and small.

The decision of the company to move from the traditional off-the-job training model to a workplace-based approach was taken for commercial as well as training reasons. Continuation with the traditional off-the-job program would see the company release its apprentices for a total of 10 800 days (108 days an apprentice). The work-based approach will reduce the off-the-job component to fewer than half the days shown. The off-the-job time will focus on those components of the NMEC modules best suited to institutional delivery. The remainder of the module outcomes will be linked to real work activities and training tailored to suit the work available and the productive activity undertaken.

The quality of training is assured. The company workshops are registered as a provider site. But more importantly, the needs of the company for highly skilled workers and the needs of the CCI for a transparent, quality training approach for those apprentices it employs, will guarantee quality outcomes.

Despite the moves made by the publicly funded training system to provide an industry responsive training system, employers continue to look for alternative, cost-

- maintain full records on module completion and achievement for each apprentice
- reduce the current off-the-job training requirement by at least 50 per cent
- assess apprentice performance against module outcomes and assessment criteria using real work activities
- accelerate training to allow capable apprentices to complete the 24-module program within two years

In meeting the specifications, consideration has been given to the productive needs of the workplace, the needs of the individual apprentices for a supportive learning environment and CCI's responsibility to ensure relevant and quality training is provided.

A full-time trainer is located on-site in the company workshop. The trainer works the same hours as the apprentices (under the company's current Enterprise Based Agreement this is 45 hours a week) and provides a work-based training resource that may be called upon by any of the apprentices at any time. The majority of the skills identified by the company as being required by the apprentices are assessed against normal work activities. Each apprentice completes 24 NMEC modules—the common training regime for metal and engineering apprentices across Australia (the introduction of New Apprenticeships from January 1998, and a shift in emphasis to units of competence, will be easily accommodated by the program).

Those components of the modules which are best delivered in an off-the-job environment are provided during block-release programs at the CCI's Kwinana Training Centre. The company specification for at least a 50 per cent reduction in the time spent off-the-job (that is, in a learning environment away from the company premises) has been achieved in the program.

The delivery of the majority of the apprenticeship training in the workplace repositions the skills development process at the point where the actual skills are defined and acquired. The provision of skills training in an institutional setting can never replicate the needs of the workplace. The model requested by the company and developed by CCI acknowledges that the training for the majority of the skills required by an Engineering Tradesperson-Fabrication is best provided in the workplace. However, it is not only training at the workplace which is important, but the completion of real work activities under real work conditions.

The development and operation of the workplace-based program has produced some unexpected value-adds. The project has drawn interest from other employers who want to reclaim control of training and do it themselves. The cost of post-trade training is likely to be reduced. The apprentices involved in the program have accelerated through the off-the-job modules and are continuing to develop skills using the same workplace-based model. The CCI has developed a range of skills in the establishment of the program that is allowing it to provide a training management and brokerage service.

Harris and Volet (1997, p. 27) use Nyhan's description of 'work content becoming learning content' to highlight the importance of real work activities in the training process. The apprentice training program developed by CCI uses the workplace and

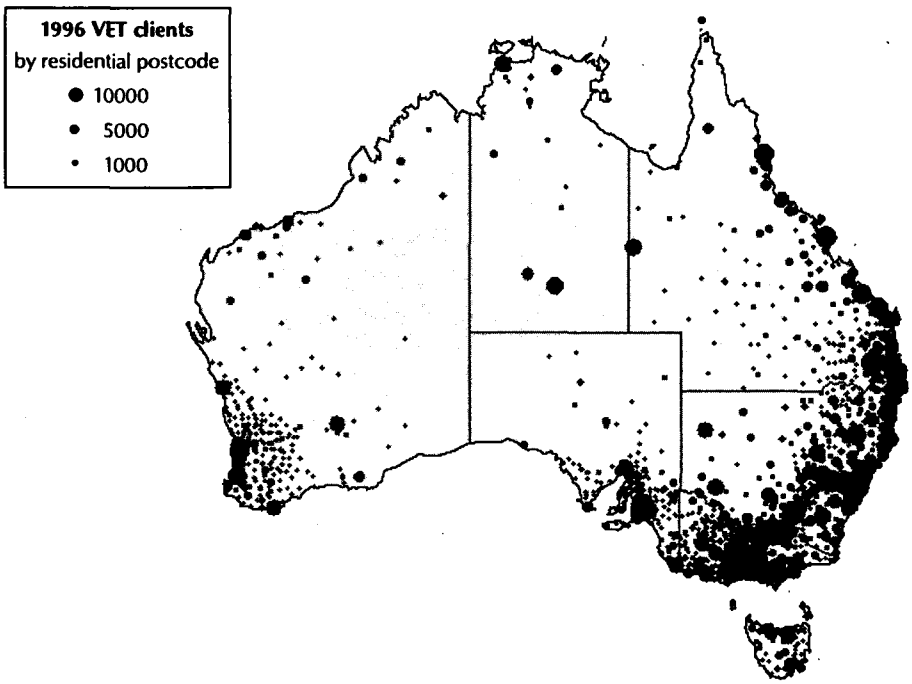
Student profiles

Where do students come from?

Students mainly reside in capital cities (58 per cent), with the remaining students coming from other metropolitan areas (7 per cent), rural areas (29 per cent), and remote areas (4 per cent). This compares with approximately 63 per cent of the population of Australia residing in capital cities (ABS *Australian demographic statistics*, September Quarter 1996).

Figure 4 gives a distribution of students by their residential postcode. This gives us an overall idea as to where these students come from.

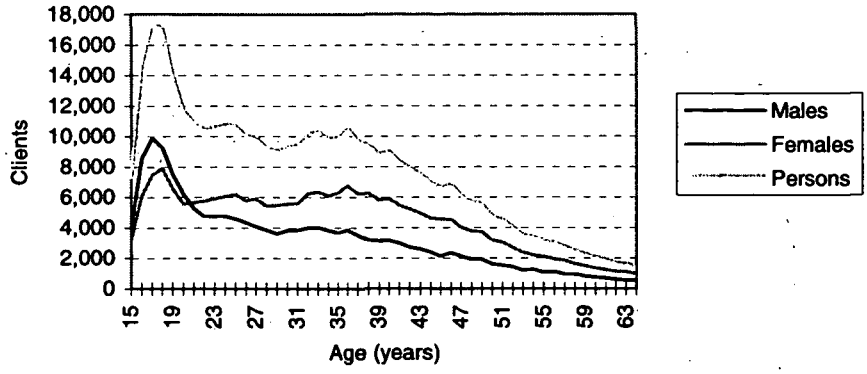
Figure 4: Distribution of students by their residential postcode



Who are they?

Looking at the age distribution of students, the number of females is greater than the number of males aged 21 or more. Students aged 19 and under account for 19.6 per cent of clients in vocational programs and 15.3 per cent of all clients (including personal enrichment). Figure 5 shows this age distribution for all clients by sex for Australia in 1996.

Figure 5: Number of clients in 1996 by age



In general, clients in vocational programs in 1996 have the following characteristics:

- 47 per cent were female
- 2.4 per cent have identified themselves as Aboriginal and Torres Strait Islander
- 65 per cent come from the main English-speaking countries
- 58 per cent have English as the main language spoken at home
- 48 per cent were in some sort of employment at the time of enrolment
- 29 per cent have completed year 12
- 24 per cent have some form or other of prior-educational achievement after leaving school

What are they doing?

These clients undertake a variety of courses and subjects, ranging from personal enrichment programs and one-off modules through to certificate, associate diploma and diploma courses. The length of these courses also varies greatly. Looking at the different qualifications associated with the courses in which the clients enrol, there are differences in the number of enrolments and hours for differing qualifications. These enrolments and hours are reported in *Australian vocational education and training statistics 1996: In detail*. Figure 6, following, looks at the number of enrolments and hours by age.

Here qualification have been grouped as follows.

Dip/Ass	Diploma and Associate Diplomas, Australian Qualification Framework (AQF) Diplomas and Advanced Diplomas
Cert I-IV	Advanced Certificates, Certificates and AQF Certificates I-IV
Other	Which includes Endorsements, Statements of Attainment and Certificates of Proficiencies.

Figure 6a: Course enrolments

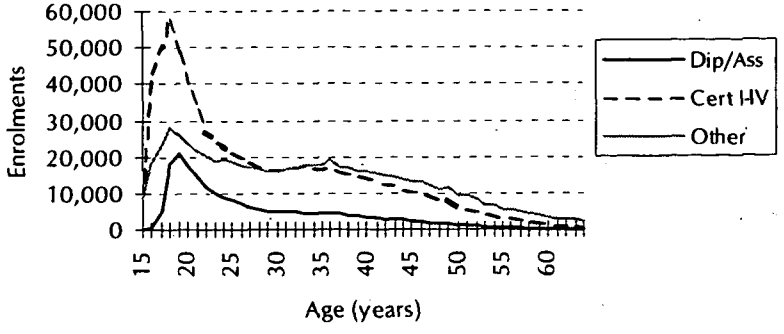


Figure 6b: Hours

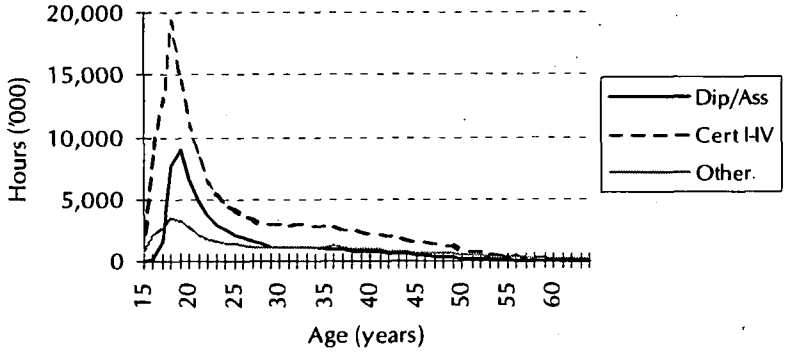
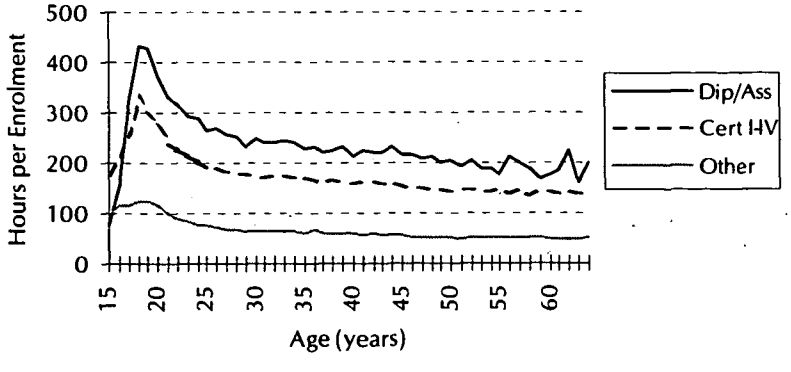
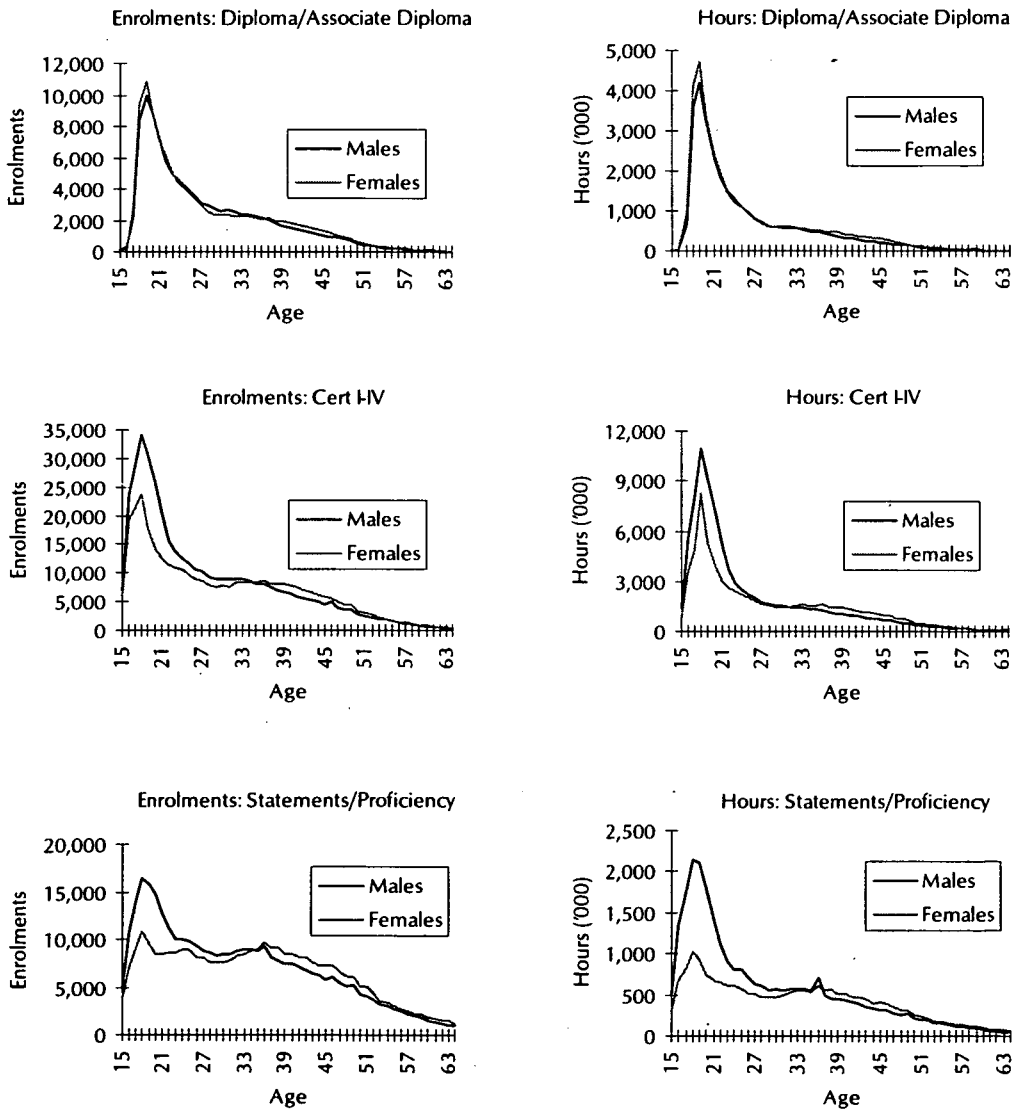


Figure 6c: Average hours per enrolment



The number of enrolments and hours undertaken by males and females in diplomas and associate diplomas are similar for all ages and both sexes. Among the certificates grouped together here, the number of enrolments and hours differ between males and females, with more males aged 16 to 30 participating in these courses. The profile for clients studying in other courses (statements of attainment etc.) varies from the profile of clients in other courses. Participation in these courses is more constant over all ages. The number of hours studied by females is less than the number of males in this group. Figure 7 looks at these qualifications by age and sex.

Figure 7: Enrolments and hours by sex and qualification



Further information on any aspect of the national data collections is available through the publication series *Australian vocational education and training statistics*, and *Australian training statistics*. Further information is also available upon request to the manager, data management and analysis branch, National Centre for Vocational Education Research.

Training to add value

David Curl
Manufacturing Industry Consultant

This paper describes a manufacturing industry consultant's experiences with Technical and Further Education (TAFE), explaining why he took up further study; whether it was appropriate, some experiences, including difficulties, and ends with a discussion of the opportunities further studies provided. It was found that TAFE provided a good flexible arena to gain valuable and relevant knowledge. These experiences demonstrate that further study has opened doors with progress from a toolmaker to manufacturing manager. These opportunities came through hard work and, most of all, knowledge from people at TAFE.

Introduction

HI, I'M DAVID Curl and I'd like to talk today about my experiences with Technical and Further Education (TAFE). My aim will be to give an insight into how training can help through my experiences.

I will begin by talking briefly about myself; then on to why I took up further study; whether the study was appropriate for me, some of my experiences and conclude with the opportunities it has given me. I will talk for about 20 minutes so if you have any questions could you please save them until the end. Thank you.

About myself

I'm a manufacturing industry consultant and hold an Associate Diploma of Production Engineering. I'm married and have two young children. My history begins by leaving Murray Bridge High School in 1969 to do a fitting and turning apprenticeship at Chrysler Australia Ltd. in Lonsdale. We studied at Kintore Avenue in a very old, dark and dingy college.

On completing my apprenticeship in 1973 I travelled through England and Europe on a working holiday for several years. There I helped further the good ol' Australian image ... in true Barry Mackenzie style, taking any sort of job ranging from toolmaker to lifeguard to dustman. I thoroughly enjoyed those years and eventually returned to Murray Bridge where I joined an electrical manufacturer as a toolmaker in 1977.

I worked my way up to become a supervisor of several different departments. Many years later I married, had a couple of children and started an Associate Diploma of Production Engineering part-time, lasting nearly six years.

In 1989 I moved to James Hardie Irrigation, which produces domestic and agricultural products—like most of you would probably use in the garden—hose-end fittings, sprinklers etc.

I moved to Hardie's for more challenging work and enjoyed an exciting period of change with the company as it went through the first round of best-practice programs. *For those of you not familiar with the program it was a government initiative with unions and business to assist companies with change in order to become more competitive.*

Hardie's received the maximum sum which helped accelerate the process. It could not be used for capital equipment etc. but instead on training and other non-capital expenditure. The changes made were quite revolutionary at the time, as we introduced the latest in manufacturing technologies and management philosophies.

The site's efforts resulted in one of the most successful and radical changes in Australia, with dramatic improvements in world competitiveness. It involved moving from a traditionally run business to a plant that operated under what is termed team-based cellular manufacturing. *I will come back to some of these changes later.*

I held several positions while at Hardie's including production engineer, best-practice project manager and eventually manufacturing manager.

Well that's very briefly where I've been and what I've been doing until now.

Reasons for taking up TAFE study

So, why then did I suddenly start to study again?

One main reason, I think, was boredom—the end of the line. I had worked my way up in a job and as supervisor of a department I had really run out of things to improve.

My work day was down to about one-and-a-half hours and then I would be left wondering what to do. I wanted to do more but didn't know how!

I got to thinking, and recalled some post-trade study I had done in that dingy old college years ago and I remembered that I had actually enjoyed it. I figured that some of that information was helpful in my work and maybe there were other subjects that could help as well.

I enrolled in a computing course and loved it. I began to realise that a lot of the information I was working with was being superseded and a lot of new information was also becoming available.

I went onto other technical subjects such as CAD/CAM and was amazed at the developments that had been made over the years and was left yearning for more. I also wondered why many factories were not using much of this information or equipment, because I could see that it would improve so many industries' performance!

After completing several engineering subjects I did a subject called communication. This subject opened my eyes and helped me enormously. I began to better understand what made people tick and that there was so much known about theories and models of what went on within people and companies—things such as organisational behaviour could actually be learnt. I learnt about things like motivation and leadership.

Things that I wondered—if I had been a supervisor for so many years, why hadn't someone taught me this stuff before? Not to mention—my boss at the time didn't even think it was necessary for me, or anyone else, to learn anything (just do what he said and everything would be fine) and didn't assist in any way. Confusing, isn't it?

By now I could see *learning* would help me. It made my job easier from the technical point, and also helped me as a person. It was relevant and enabled me to fix problems and continually contribute to the company in some way. These are the things that motivated me to do more.

I found I could learn very little more from within work and it had to come from outside.

How appropriate was the study?

So, just how relevant was the material I was learning at TAFE?

I went on to study other subjects in the course—*some 1600-odd contact hours* in all.

During this time I had established a relationship with a couple of the TAFE lecturers and they soon become my mentors. One suggested that I had gained enough experience through travelling the world and working in many different places both in and out of my trade and had been working as an engineer for quite some time, that I should diversify a little. He suggested I balance my course with other subjects such as accounting, product-costing and psychology. I took his advice and selected a mix of suitable electives and changed my course from mechanical to production engineering which was now more appropriate for me.

Meanwhile back at Hardie's things had taken off. It was about 1990 and I was one of two engineers assigned to be on the design team for the changes to be made to the plant. I was also given the opportunity to be the site project manager for the best-practice program.

I mentioned earlier the changes made at Hardie's and I'd like to go into a little more detail of these for you now.

Our aim was to change from a traditionally managed and laid-out factory to one of an empowered workforce and a flat management structure broken into mini-factories or cells. It also involved implementing a quality system ISO 9002, a computerised production planning system (namely MRP II), a touch-screen self-paced learning system and introducing the National Metal Based Competency Standards.

In the early stages of the change I was fortunate enough to go to the USA on a benchmarking tour. We visited several plants and one of these was the GE plant in

Alabama. GE produced about 4000 refrigerators a day, with 1600 employees and only three or four levels of hierarchy.

We had at the time a plant based on the old hierarchical pyramid structure. It was very autocratic and cumbersome (slow to react). But they had inverted the pyramid. We were going to do this too!

We also changed the layout of our factory from what is called process to a product layout or flow line and created product groups called cells.

To do this we had outside help from people such as CSIRO and a well-thought-out plan to guide us, but because it was so new, unfamiliar and misunderstood, coupled with the normal resistance to change, it made it a frightening thing for many people involved.

For me, though, I was quite comfortable with it. And I think it was not only the fact that I like a little adventure and change, but more, that I actually was already familiar with what we were about to do from the study and learning from my TAFE courses. We are generally fearful of the unknown.

Before travelling to GE I had already learnt the theory of many of the technologies I was about to witness and implement. I was able to test that theory against what I had seen and it became useful knowledge in helping me in the change process from both the design and motivational point of view.

I had studied the theory of total quality management, learnt about Dr W Edwards Demming—the quality expert who helped revolutionise Japanese industry, socio-technical design, new organisational structures, empowerment, MRP (MRP is material requirements planning, something used in manufacturing) and lots of other good stuff at TAFE and *now someone* wanted me to use it.

I'm a fairly excitable sort of person I guess and we had learnt about an MRP guru at TAFE called Oli White and when I arrived at GE to my amazement they had actually had this guy design and help implement their systems. These people were the real experts, the real leaders. To talk to them and be able to participate in meaningful dialogue was a great thrill for me. So having seen all this in action in world-competitive companies I was immediately excited and motivated towards these changes and would become a key driver.

Well, yes, you may be able to tell. I like information and especially knowledge. Theory plus experience is knowledge. Theory needs to be tested.

My mentors were not long from the workplace and they had real knowledge! I used it. They knew that facts alone were not enough. I listened to them about how things worked in the real world like the internal politics and I learnt how to apply my academic theory!

Appropriate? Yes, absolutely, for me.

Some of my experiences

I have talked a little about my experiences and I'd like to touch on some of the difficulties too.

For me I had been out of college for so long (about 12 years) I didn't know where to even go for help. My boss was no help so I wrote to Kintore Avenue. They had gone. I eventually found Regency college and began to get relevant information and enrolled.

On my first day I remember bumbling around like a country hick and asking for help. You don't like feeling stupid and out of your comfort zone, but it seemed most people were in a similar predicament and it eventually came together.

Next I think was the shock of actually trying to learn. Even worse, I thought we were there to be taught but instead we were expected to do a lot of work and research ourselves. This was quite a shock and difficult to come to grips with at first. When I last went to school we would sit and listen, have a test and that was it. This new way I think is a good thing but does take a bit of getting used to. Maybe a first subject could be 'learning to learn'.

Finding time to do all this is also difficult. With a young family it puts enormous pressure on the household. Some weeks I would need to do about 30-plus hours, I really *wanted* to learn. That's like two jobs. I noticed some young students could get away with much less. *Wet hair, just in from a surf, doing their homework in the corridor before the lesson! They most probably passed!*

The pressure is great and all students need a lot of support through these years. It's hard. Hard on everyone. You never seem to be able to really relax. There is always that commitment, pressure of a deadline, study, a project, homework or something. To have people prepared to help out with things, bear with you for a few years and to have good guidance and support from a mentor is extremely important. *The casualty rate for adult students is high. Our maths class started with around 40 and finished with 12. Not many passed.*

Okay, so what did all this mean for myself?

Well, it certainly provided me with opportunities.

Opportunities further studies provided

TAFE provided a good flexible arena for me to gain very valuable and relevant knowledge. I had understanding advisors who suggested at times that I could receive status for something but it might be better to actually re-do it. Other times I might have been given extensions on deadlines. It was possible for me to change courses part-way through.

I was well-directed and found the facilities at TAFE excellent. Benefits from networking from other students and teachers were invaluable.

Further study has opened doors for me ever since I started. I was able to pick relevant subject matter and apply it. I don't believe any of my study to be a waste of time as all learning can help stretch your brain and keep you fit.

Well, that's about it. I have covered some of the reasons why I wanted to take up further study, how it can be appropriate and some of my experiences along the way.

Conclusion

To conclude, I'd like to add that to progress from a toolmaker to manufacturing manager with four promotions in almost as many years and to have had the experiences I have had within a progressive and exciting company is, to me, quite an achievement. I believe these opportunities have come to me through hard work and most of all ... knowledge.

And that came from people at TAFE.

Key issues

Peter Kirby
Chair, National Centre for Vocational Education Research

A conference summary of all the presentations at the conference is made and each is commented on. The conclusion is that the future will be evolution rather than revolution in the vocational education and training (VET) sector. Since the birth of Technical and Further Education (TAFE) in 1975 it has survived many reports, many reviews too numerous to mention, many new reforms of many new governments and it soldiers on. TAFE will take it all aboard, marshal its forces and go on competing, marketing and delivering to many users' satisfaction and it will give many users very many good choices into the next century and beyond.

MY CHALLENGE IS to comment on the 47 presentations made in the past three days within my allotted half-hour, which I intend to keep to reasonably strictly, although I should warn you that my plane doesn't leave until 6pm!

I shall, as do all people who summarise long conferences, do my best to make some pertinent points but most particularly, to exhibit my bias to distort the presentation of others and to ensure there are no questions at the end of my presentation. Inevitably, too, because of time constraints, I shall probably give more emphasis to the first two days of the conference than to the last. That in no way reflects my views about the third day, which I personally found the most interesting.

Well, congratulations to all of you who survived this far. I am sure you are all now anxious to rush back and put into practice the many things you have learnt and the many directions you have been given over the past three days. I will occasionally slip into using the term 'TAFE' when I should say 'VET'. That is because most of my life from Kangan[1] onwards was spent with TAFE, not with VET, and VET still means to me the place where I take my dog regularly.

The Commonwealth minister, David Kemp, you will recall, opened the conference on the first morning by telling us that he wanted to put the reforms in context. As all governments since Whitlam, in my experience, have told me that in respect of TAFE they want to reform the system, I wondered whether this minister's statement and his intentions would be different from the others and, in particular, whether the process

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The market for VET : Client perspective—
Students and trainees

would be different. That question stayed with me until the second day, when Joy Selby Smith enlightened me that the process was no different this time around.

Were the reforms, however, to be evolutionary or was this to be a revolution for TAFE? That question was unanswered for me by the end of the day. The minister introduced us to the concept of the training market. I noted that he used the singular and I note that we use the singular with other markets such as labour markets when, in fact, we know there is a plurality of these markets, that in fact there is no single market. I couldn't think of one single market which operated in Australia, not even in such things as telecommunications and multi-media. I thought it was a little bit deceptive in this case, when we are talking about an innovation, to talk about a training market and it might have been a little more helpful to the ensuing discussion had we recognised at the start that there were numerous training markets. Anyway, his concept of the training market was said to be critical for the success of the reforms. The market was to operate on the basis of competitive forces driven by the power of user choice. The power of the user to choose would necessitate third-party access to public facilities, separation of purchaser and provider in State systems and establishment of standard unit cost. These themes were repeated throughout the conference although less so today, I felt, than in the first two days.

The minister also mentioned, in passing, the disintegration of the youth labour market and surprisingly we heard no more about that until a question was asked on the second day, and really only today did that problem re-emerge. He also mentioned the fact, and I assume it was fact, that there are unfilled vacancies for apprentices and trainees. That surprised me but obviously it didn't surprise you, because it didn't receive any further mention.

In the next session Vince FitzGerald gave us a description of the training market, its size and major components, and a very impressive market it seemed to be, conservatively valued at seven billion dollars Australian. Vince repeated some of the imperatives that the minister had raised—separation of the purchaser and provider, user choice—but he also raised justifications for government funding of CSOs (community service obligations). This raised a second issue for me. While there was general acceptance, it seemed, of the need for the government to continue its responsibility for funding CSOs, I wondered whether they could be really iron clad in this environment of competition, the fight for the dollar—in this competitive market, driven by user choice—unless the funds for CSOs actually flow to the particular clients. So, I thought, was this a claim for vouchers.

Paul Barker gave us an interesting insight into developments in New Zealand about which I only have time to make two points. The first: I would have found it personally satisfying and interesting if he had compared the performance of New Zealand, not with Australia but with Victoria since they are both about the same size, both in population and land size, have extraordinarily similar economies and Victoria, from what I have heard, seems to be at the leading edge of the minister's reforms. Second was the comment that New Zealand's polytechnics are moving out of trade training and into university-type qualifications. Given the funding arrangements

which he described as operating in New Zealand, I thought that was a very unsurprising and rational decision which linked, in fact, to Terry Moran's later comments on work being done by the Australian National Training Authority (ANTA) to see the links between qualifications and economic advancement.

Bruce Chapman completed the first morning's work with an entertaining and plausible case for a Higher Education Contribution Scheme (HECS) in VET. Without question it was a presentation intended to deceive us all. As a preliminary to unsettling us, he told that economists were among the most miserable of the species. All of us non-economists immediately heartily agreed but it was quickly disproved because, as I looked up, Vince, who sat next to him and is an economist, was broadly smiling at the comment. And, directly after lunch, Kaye Schofield—a person who is not an economist—gave the most depressing of outlooks for TAFE, telling us that the future was linked to euthanasia, or death by a thousand cuts, that the institutes would not be able to compete in this new training market. They might survive if they each became corporatised but even then their chances of survival were less than 50/50. So we now know that there are groups more miserable than economists. Are they all associated with TAFE? And are the economists in TAFE the most miserable species of all?

The second deception of Bruce was to make HECS look attractive to TAFE—but is it really so attractive for all the categories of TAFE students and all the TAFE activities? What would happen to those low HECS administration costs if TAFE were included in HECS? Points from the parallel presentations in the first part of the afternoon included Perce Butterworth's suggestion that there was no vision for the new VET—a point that was also raised in a question the following morning.

Clive Graham complained about how the reforms were damaging the competitive private-sector providers. I sat up at that point to listen. Taking the licence which I mentioned at the start of this presentation, I could say that Clive seemed to be advocating competition within a well-regulated training market.

Jessie Borthwick questioned whether that half of the workforce with no post-compulsory qualifications were simply in that state because no-one had formally recognised their skills. I thought that was another most important consideration in respect to Terry Moran's international qualifications research project.

Kim Bannikoff's concern was that there had been significant increases in labour-only hire firms that did not invest in training. The question for me arising from this is: is this ultimate competitiveness in a competitive training market?

And, finally, Chris Robinson's observation that full information is essential to a competitive market seemed to me a matter that was not dealt with adequately at the conference. This is an extremely difficult goal to achieve as we know simply as consumers. In this so-called training market full of so many different titles and names and so much confusing information about qualifications, is it really going to be easy to have full information about the opportunities available? I make this point because I am at the moment involved at the Royal Melbourne Institute of Technology (RMIT) looking at one or two of their current problems. One of them I discovered is that they give considerable articulation for TAFE students in a course which they run from their

city campus but they give no articulation whatsoever for the same course which they run from the Burwood campus. It really seems that within large TAFE institutes and universities it is very hard to have everybody well informed. How will we go about those same institutions giving full information to the public?

To return briefly to Clive Graham's presentation, with which I had such a fascination, it was the first insight that we were given into the dynamics of competition at the micro level. It struck me as somewhat different to the impression we had been given by the theoretical and macro descriptions of the competitive training market's characteristics. To reinforce this notion of the operation of a competitive market at the micro level, in the second group of parallel sessions, Bill Streat of IDP and Susan Holland of AusTraining described the mix of collaboration, co-operation and competition that proved so successful in the international markets. It appeared that this was an example of success in a very competitive market, brought about by moderating the competitive approach and restricting the full impact of competition to gain market advantage.

In another session, Peter Kearns reminded us that OECD countries were seeking to encourage learning societies and learning organisations to cope with change and to achieve economic growth. Suddenly I recalled that not too long ago that seemed to be the cherished objective of another reform of government, 'the clever country'.

Brian Knight also advocated greater attention to the dynamics of the micro level with his advocacy of more case studies. He also pointed to the fact that market forces do operate, to some degree, in that New South Wales is a large exporter of trainees and Victoria and Queensland are importers.

The day was completed with a reminder from Amanda Moore that the Adult and Community Education sector is part of this debate. It is a large and effective sector for many students and it needs to at least be taken into account in the development of user choice and competitive training markets.

So day one ended with a number of questions on my mind. Are the changes sought in Dr Kemp's reforms to be evolutionary or revolutionary? Is there one training market or a number? Can CSOs be cocooned in this new environment? Why was there no vision for TAFE to which these reforms can be anchored? (There seems to me to have been a vision in the past.) And was the micro operation of the competitive markets consistent with the macro-theoretical view?

Not all of these questions have been resolved during the following two days. Where day one had been what I would call contemplative, day two was combative. Terry Moran opened events with a somewhat stronger advocacy of the desired reforms than even the minister had given. There is no need to repeat these reforms, but I want to refer to things mentioned by Terry. His reference to Michael Keating's speech 12 months earlier to a similar audience, I believe, when Keating said that, in respect to VET, competition was essential and power should be given to the client, Terry recorded a strong agreement to this, not once, but three times during his speech. Terry's view is that VET doesn't act like a market, that the provider is the key, and yet surveys show a high level of satisfaction with TAFE.

I would make the point that TAFE has no reason to feel embarrassed with the progress it has made in these reforms. It started earlier than most in this competitive approach to government services and it has gone further, a lot further, than many other government services. I agree with Terry that the provider is the key. I believe the provider always has been the key. That is why there is such a high level of satisfaction among those who have had dealings with the providers. I've seen thousands, literally thousands, of students who have gained awards, I've seen the smiles on the faces of their families and friends, I've heard the incredible stories told by those students who attend the annual training awards. This is the face of TAFE in the 1990s, this was the face of TAFE in the 1980s, this was the face of TAFE in the 1970s and that very success is why we need to concern ourselves more with the micro issues. What made Jozefa Sobski's college the provider of the year in 1996? In what markets do TAFE colleges and institutes currently operate? Why do employers strongly support some colleges and not find such strong support for others? Why are clients willing to pay thousands of dollars for a course that they can get free from TAFE? These are the sorts of questions at the micro level which will tell us a lot more about the competitive nature of the training markets.

When Jozefa Sobski and Des Fooks took questions to Terry, we began to see more clearly the divisions of opinion. Incidentally, I thought that both Jozefa and Des should have had their CVs included in the program. It would have been useful to have included in the program, perhaps for a future occasion, a debate of the traditional kind, having speakers for and against one of the major reforms considered by the conference and perhaps a decision about who won could be voted on by the rest of us. The discussion which ensued from this interchange answered one question for me and raised another. Hans Christian Andersen's 'ugly duckling' saw itself transformed into a beautiful swan when it saw its reflection in the pond. If people had kept throwing stones in the water, the ripples would have prevented the swan from ever seeing the vision. You have to have at least one clear day to see the landscape. In TAFE's case the pond is a sea and the waves are tidal. How on earth are you going to develop a vision with so many changes thrust upon the system, from so many quarters, at much the same time?

My new question arising from the start of the second day related to staff. At least one strong school of thought, I believed, of Australia's successes in the competitive market put the answer that first and foremost these successes came from the quality of people in the organisation. Isn't that an important plank in the justification for investment in training? Why then did we discuss the reforms without mentioning investments in the staff who are expected to bring them about? Why was no mention made of staff development, the investments that have been made or are required in the teaching and non-teaching staff of colleges to bring about the required reforms? It seemed to me, by the second day, an incredible omission.

Again, I need to be brief in mentioning the points from the parallel sessions. Steve Balzary, in the session I was, in noted that a number of expectations of employers of the training system had not been fulfilled. He mentioned the importance of

competitiveness to the quality of the workforce and again it seemed to me that was a similar consideration for TAFE's own workforce.

Pat Wright told us that among other things his research had shown that training had increased productivity, particularly in those firms where training and IR (industrial relations) reform had been coupled. The previous government I understand had had such approaches, an earlier basis for reforming TAFE which I think was connected with a report called *Australia reconstructed*.

Kevin Peoples gave us a most humorous presentation. He told us that he didn't believe in training markets and industry-led systems, but he did believe in productivity improvement, in meeting employers' as well as other clients' needs, in improving Australia's competitiveness and as a result he wanted to be part of the debate. Kevin's vision was for a comprehensive system that went beyond markets and competition. At that point, somewhat tired, I thought I heard Myer Kangan saying 'here, here'. Kevin's presentation showed that there was no unbridgeable gap between us on the second day. Perhaps, as others might have put it, there is more that binds us together than divides us. But Kevin did leave us with a puzzle. What were those two lecturers doing whose staff development took place while driving to work and showering, teaching their non-fee-paying course at 3am in the morning?

In the parallel session on market implementation Llandis Barratt-Pugh suggested that describing the training area as a market leads us to use all the wrong words—clients and products—for our business. He also pointed to the danger of spending more time managing the arrangements instead of improving the quality of the education and training.

Wendy Murray raised what was to be a feature of the second day, the needs of the student. She pointed out that there is currently no clarity about who is purchasing what and we need to know more about what the student wants.

Linda Barker took up this call to focus on the client, suggesting that the benefit of market segmentation is the attention which it gives to individual client requirements.

On the afternoon of the second day, Joy Selby Smith, in a very informative presentation on the development of the user choice policy, reminded us that if it works and lasts it becomes policy. I have to say, sadly, from 40 years' public service experience, that both conditions aren't necessary.

John Maddock and Lyndon Rowe from different ends of the spectrum of opinion brought us once more to the very considerable divisions that had typified the second day. Although acknowledging the gains from competition, John saw disadvantages, for his college at least, in creaming, reduced investment in staff and capital and no investment in low-volume products. Lyndon, however, referred to the frustration of employers with the slowness of the reform process with too much emphasis on process and not enough on outcome. His rallying cry was 'Don't argue, implement!'

In the adjacent room, presentations were being made on the issue of industry investment. Gerald Burke pointed to the fact that public training tended to be high when employment is declining and projected economic growth would see

unemployment remain high which had considerable implications. He reminded us of those who miss out on training as well as those who get the most.

Stephen Billett argued that if we are to embrace the market approach the goal should be collaboration rather than competition, a point made forcefully by Robin Shreeve on the third day. Later in the same afternoon, Lusia Guthrie explained why her company, Faulding, didn't use TAFE and John Jarvis, Denis Street and Brian Bowker described how information technology could play an increasing part and have an increasing influence on the delivery of training as it is plain within some of their computer service companies. This is a topic which probably deserves a conference on its own.

We ended the day on a very high note. Renee Wanna-Jansen advised us of the attention which is now being given to small business, an area apparently where private providers are doing particularly well. Nigel Smart told us that the system was providing value, although there was room for improvement. He also added that we needed to investigate the different components of the market (or perhaps the different markets, in my view) and Bill Galvin told us that the partnership between the hospitality industry and TAFE was very much a success story.

We finished the second day, at least in my group, with a film on the Olympic champions and those who had never won. Bill left before the film finished so I wasn't sure what the message was that he wished to convey. I thought there were two possibilities. One, which the film had told us had been an objective for establishing the Olympic Games—let's increase understanding among all people—which seemed to me a good thing for the end of the second day. But perhaps he was trying to tell us that there will be many many competitors but few will win.

The third day was conciliating; contemplative, combative, conciliating. The minister this day, Dorothy Kotz, brought faith into the equation. You may not have picked it up, but along with vision and commitment she said we needed faith in the new reforms. She raised the importance of general education and generic skills. The minister also brought us back to the problem of the disastrous youth labour market and the importance of giving these young people self-confidence and self-esteem. I have to say, by way of an aside, that recently I've been involved in looking at problems, only in Victoria, of young people associated with drugs, and particularly suicide, and I have to say it was thought-provoking and far far worse than I'd imagined when I started, and the two characteristics of these young people were they had absolutely no self-confidence and absolutely no self-esteem. What a situation for Australia to be in at the end of this century.

The session with the student as a client got us off to another range of papers and was presented in the context of the very high standards of presentation which we had received throughout this conference. I have to say that without taking anything away from the other sessions, in terms of the thought-provoking presentation of information in this session, I thought it was the best that I attended at the conference. I would encourage you to read the papers by Damon Anderson and Robin Shreeve because I

thought they were outstanding in dealing with the problems in a very straightforward and pragmatic way.

Damon Anderson asked whether reality really matches the rhetoric, whether the reforms will empower students over providers. He pointed out that students were given all the responsibilities as customers but none of the rights and entitlements. Robin Shreeve, I might say, I would willingly go to his college and if he didn't win the 1996 Best Provider then the other colleges in New South Wales must be really outstanding. He pointed out that all this marketing, pricing and product strategies that we have been told about were nothing new to TAFE. Not only has it been doing it for some years, but TAFE continues to do these things and is extremely good at what it does. He again reminded us of the results of client surveys and, in his case, pointed to two client surveys carried out by private-sector contractors that had produced ranges of satisfaction between 90 per cent and 94 per cent of the clients who had attended the courses of the two colleges. The private contractors had pointed out that never in all their 20 years working on client satisfaction surveys had they ever found a client whose satisfaction levels came within 50 per cent of the levels they found for those two colleges. He also demonstrated the policy confusion which we have at the moment by showing the very considerable differences between what you are asked to, what you do, what you are paid to do and the results on which you are judged.

Carol Ward completed this outstanding session by providing a very strong case as to why there was a need for regulation, a sort of consumer protection.

In the parallel sessions, I'm informed, Warren Grimshaw took us back to a fundamental—the qualifications are, in fact, a currency in the labour market. John Ainley reminded us that there has been less growth in VET than in higher education in the last 10 years and that VET no longer attracts the most able students that it once did. Gary Collins, from the employer perspective, pointed to the reality that training is influenced by the business and production cycles and has to be a productive activity within the firm.

The sessions just before tea this afternoon gave us an appreciation of the make-up of the VET student body from Sandra Pattison. David Lundberg raised some challenging propositions related to whether entry-level training adequately matches the needs of students and employers and David Curl, who I'll come back to in a moment, provided a student's perspective giving the experiences of a very successful TAFE student.

John Goodman and John Hill in the other session spoke of the challenges and hurdles in getting school-industry link programs off the ground, a not unfamiliar story for those who have been involved in similar initiatives of government.

Josie Misko told of the experiences of school students in work experience and the benefits it gave them, and Frank Hayes gave a most interesting presentation on the somewhat familiar experience of a child who gave a teacher a hard time and where that led to improvements in approaches.

The amazing thing was that as David Curl was making his presentation next door, we had this wonderful music from, I think, 'The mission', coming across the

boundary between us. It really was an inspiring way to end the conference, and David told us the answer to the question posed at the beginning of the conference: Who pays, who benefits? We all pay, some pay more than others. Who benefits? David benefited but what he showed, without doubt, was how much we all benefit.

So, is it to be evolution or revolution? Of course, it's evolution. Those who've lived from the birth of TAFE in 1975, the modern TAFE system—and some of you here I know were not just at the birth, you were at the conception—will know that it will be evolution. We've survived the many reports, the many reviews too numerous to mention, the many new reforms of many new governments and TAFE soldiers on. TAFE will take it aboard, will marshal its forces; it will go on competing, marketing and delivering to many users' satisfaction and it will give many users very many good choices into the next century and beyond.

And finally, I have to make the awards because awards are essential at these conferences. These are the conference Oscars that have been arrived at after a great deal of consideration by a committee of one. The nominations are: Bruce Chapman—'The role of HECS in TAFE', for comedy; Terry Moran—'Competitive is the key', for the special effects, particularly on the audience: in this case best supporting roles go to Jozefa Sobski and Des Fooks. The third nomination is Kevin Peoples—'A market for all', for mystery. What was being taught at 3am? And the final nomination is Bill Galvin—'Tourism 2020', for his vanishing trick.

And the winner is . . . Ah, you'll have to wait until you have completed and handed in the conference evaluation forms that are in your satchels and which we would like back.

Thanks to Richard Kenyon and all his staff for a magnificent conference. Thanks go to the Hilton who showed once more that they are very good at meeting the needs of conferences and thanks to all of you for the part you have played, for you have made it a success. Please have a safe journey home.

Endnote

1 Myer Kangan was Chair of the Australian Committee on Technical and Further Education, who produced the influential report *TAFE in Australia: Report on needs in technical and further education* (1974).

VET MARKETS

The market for vocational education and training is the most comprehensive volume yet produced about the development of vocational education and training (VET) markets in Australia.

More than forty papers in this volume describe and analyse a large number of issues associated with the development of VET markets. This includes consideration of some of the pitfalls that may arise with the rollout of market mechanisms in VET.

This book is a valuable resource document for anyone interested in the impact of market mechanisms on education and training.

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