

Current vocational education and  
training strategies and responsiveness to  
emerging skills shortages and surpluses

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Program 5:  
Understanding VET's current and adaptive capacity



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The views and opinions expressed in this document are those of the author/project team and do not necessarily reflect the views of the Australian Government, state and territory governments or NCVER

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# About the research



## *Current vocational education and training strategies and responsiveness to emerging skills shortages and surpluses* by Jack Keating

The Australian vocational education and training (VET) sector is a complex and multi-faceted entity which receives direction and funding from both the Australian Government and the state and territory governments, as well as being influenced by local social and economic imperatives and the historical structure and role of the sector.

This report examines the system's capacity to adapt to the current and anticipated demand for skills in the workforce, while taking account of the multiple demands imposed by government-determined priorities. Its focus was on the planning processes for publicly funded training.

### Key messages

- The planning and funding arrangements for VET in Australia are relatively tight, with limited capacity for market responsiveness. Considerable resources are directed towards these processes, but planners have not paid enough attention to how public funding can stimulate fee-for-service demand and, to a lesser extent, industry and individual investment in training.
- The economic boom has reduced demand for formal VET. In some areas, technical and further education (TAFE) institutes have found it difficult to fill their funded places. The system needs to find ways to strengthen the individual demand for training.
- At the same time, TAFE institutes retain a role in providing tertiary education pathways for school leavers. TAFE institutes are the major provider of second-chance education and also have a growing percentage of teenage students. This poses new challenges for TAFE institutes.
- For the system to introduce greater flexibility, there needs to be more interactive and responsive planning which allows for the flow of information from local markets to influence national thinking. This suggests that data collection must have more than a compliance focus.
- Cooperation between providers, public and private, and other agencies can increase local capacity for planning.
- Funding mechanisms should go beyond allocating student contact hours to financing contestable programs and programs delivered by private registered training organisations.

This report is one part of a program of work conducted by the National Institute of Labour Studies, Flinders University, and the Centre for Post-compulsory Education and Lifelong Learning, University of Melbourne. *A well-skilled future* by Sue Richardson and Richard Teese provides a synthesis of that work. Another suite of NCVER-commissioned work examined the role of VET in regional partnerships. This work is summarised in *Regional partnerships: At a glance* by Tabatha Griffin and Penelope Curtin (NCVER 2007).

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Managing Director, NCVER



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# Executive summary

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This report is a component of the research program entitled *A well-skilled future: Tailoring VET to the emerging labour market*, in which the evolving labour market and changing work organisation and management are examined in the context of the vocational education and training (VET) sector. The research has been undertaken by researchers from the National Institute of Labour Studies, Flinders University, and the Centre for Post-compulsory Education and Lifelong Learning, University of Melbourne.

The research attempted to examine the processes used across the national VET system for managing the relationship between the supply of and demand for training. In particular it looked at the capacity for the supply of training to adapt to the current and anticipated demand for skills in the Australian workforce. These processes can broadly be divided as market and planning-based mechanisms. To a considerable extent, the market-based mechanisms are outside the formal infrastructure for VET and are not subject to major interventions. Therefore, this study has concentrated mostly upon the formal planning processes for VET, located predominantly at the state and territory level.

## Formal processes

The allocation of public VET funding is based upon two sets of processes. At the national level it is governed by the principles and protocols of the National Training Framework, and the associated negotiations between the Australian Government and state and territory governments. These negotiations are influenced by the federal and state and territory priorities for skills development, which in turn have been informed by research, consultation and economic and social policies. At the state and territory level the allocation of funds is framed within agreements with the Australian Government and is made up of:

- ✧ funding for training that is purchased from the public training providers (technical and further education [TAFE]) and other registered training providers
- ✧ funding for apprenticeships and traineeships via employers through the ‘User Choice’<sup>1</sup> allocations and mechanisms
- ✧ funding for programs that are contestable<sup>2</sup> for public and private registered training organisations.

The planning processes are influenced by research and reconnaissance on skills needs and supply, which range from national estimates of ‘Skills in Demand’ compiled by the Department of Education, Employment and Workplace Relations, to the information gathered by local training organisations through their industry and community interactions. All state and territory training authorities maintain and, in most cases, continue to adjust planning processes for the purchase and

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<sup>1</sup> ‘User choice’ is a national policy designed to give employers a choice of registered training organisation in the delivery of off-the-job training for their apprentices and trainees.

<sup>2</sup> Contestable funds are those allocations of training funds that are not directed towards a single registered training organisation and can be contested by a range of providers, usually through tendering processes.

delivery of VET. Apart from negotiations with the Australian Government, these processes typically include:

- ✧ the use of broad employment and industry data supplied by the Commonwealth, and in most cases the use of projections and modelling, including the Monash model
- ✧ statewide research into regional skill needs and VET demand, which in some cases includes separate data-gathering exercises, and the use of regional or area studies and industry studies
- ✧ formal and informal input from industry and the use of industry (training) advisory bodies in some systems
- ✧ research and planning undertaken by large training providers, which in most cases are TAFE institutes/colleges
- ✧ the input of state and territory economic and social policies and priorities, including industry and regionally specific initiatives
- ✧ the use of contestable funds to allow some degree of market influence.

Full-fee VET programs delivered by public and private training organisations are generally not influenced by these processes. VET in Schools and school-based apprenticeship programs, which continue to grow in levels of participation, are influenced by VET planning and skills priorities processes in some systems, and not in others.

These formal processes are dominated by the allocations to and negotiations with the TAFE sector, which accounts for over 85% of public training funds. In most cases TAFE institutes/colleges retain a relatively local clientele. The degree of autonomy of the institutes/colleges and their market orientation varies across the country. However, they continue to play a significant social role for different social groups, as second-chance education, and more recently as a provider for school-age students.

## Complexity and flexibility

The planning processes are required to deal with a complex and dynamic labour market and patterns of skills demand. Occupational skills markets range from the highly localised, especially in rural areas, to the use of the international labour market in some of the major mining and development markets. They also vary across occupations and across regions, especially in the context of the boom in mining and related industries. This is reflected in the patterns of school leaver entry into VET programs, including apprenticeships.

As a consequence of the complexities of the labour market and the multiple demands upon the VET system, the planning processes used by state and territory training authorities are relatively different, dynamic and in some cases quite complex.

## Implications for VET

Public investment in VET is premised upon the limited capacity of the market to generate sufficient levels and appropriate forms of training to supply the skills that are needed by industry and the community. The planning processes are premised upon the objectives of achieving the most efficient and effective allocations of public funds and of maximising the overall levels of skills formation. In this context some of the implications for future VET planning include the following:

- ✧ The dominance of the TAFE sector in the delivery of formal and publicly funded VET risks a type of path dependency, with strong pressure upon the planning processes to maintain existing agreements for the large TAFE providers who can lack flexibility in their delivery profiles.

- ✧ With the exception of major industry and infrastructure developments, it remains difficult for skill and industry-specific publicly funded training to be delivered to enterprises or communities at relatively short notice. Flexibility remains a major issue.
- ✧ There is a common problem of data quality and consistency. This is especially the case at regional levels where the relationship between the demand for and supply of skills can be volatile.
- ✧ The current economic boom has reduced the demand for formal VET. In some areas of the country, some TAFE institutes have found it difficult to fill all of their funded places. This limits the reliance upon individual demand for VET, and requires ways of strengthening this demand.
- ✧ The TAFE sector retains a role in providing tertiary education pathways for schools leavers, is the major provider of second-chance education, and has a growing percentage of teenage students. The planning processes need to reconcile mostly localised social demands with regional and wider skills demands.

# Introduction

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This report provides an overview of the approaches used by state and territories in planning the provision of publicly funded training, including the purchasing strategies employed. It also considers the relationship between the authorities and the TAFE institutes and the considerations taken by the authorities when dealing with the broader training market. The report has been drawn from a series of interviews with officials within each of the state and territory authorities, other state and territory planning agencies and a sample of TAFE institutes from most of the states and territories.

The vocational education and training (VET) sector in Australia is oriented towards industrial training. The first national principle for VET is that 'Industry and business needs, both now and for the future, drive training policies, priorities and delivery' (DEST 2005). This principle supports the objective that 'Industry will have a highly skilled workforce to support strong performance in the global economy'.

The principles and objectives of the National Training System are enacted through decisions about the allocation of the public training resources. Typically the allocation of these funds is through three means:

- ✧ for training purchased from the public training providers (TAFE) and other registered training organisations (RTOs)
- ✧ for apprenticeships and traineeships via employers through the 'User Choice' allocations and mechanisms
- ✧ for programs that are contestable for public and private RTOs. VET in Schools is a further form of funding, but is mostly administered separately.

The responsibility for the allocation of these funds rests with state and territory training authorities. These authorities are located within a national training system that sets guiding principles and objectives and establishes national priorities for VET. The national training system also includes funding agreements between the state and territory governments and the Australian Government that set down agreed profiles for the public purchase of training.

Each of the state and territory governments maintains a set of publicly owned, funded and directed TAFE colleges/institutes (Tasmania and the ACT each have one TAFE institute). The degree of autonomy of these institutes varies between constituencies. However, they receive the bulk of public funding for VET, and have substantial remits for the delivery of programs to individuals and industry. Therefore, the decisions on VET provision taken by TAFEs have a significant impact upon the patterns of VET delivery across the country.

Beyond the purchased TAFE provision there exists smaller amounts of User Choice funded provision, contestable funding and fee-for-service in public and private training providers. Fee-for-service is in accredited and non-accredited VET; and industry-provided training also can be formally recognised or informal. All of these elements constitute the supply of VET within Australia, and the strategies used by training authorities are designed, at least to some extent, to maximise the quantity, quality and fit to need of this supply.

# The training market

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The formation of a national training system in the 1990s included the objective of establishing a 'training market'. Key principles of the national system have been that it should be demand-driven, industry-led and responsive to industry needs. As a consequence, the supply side infrastructure of the national and state and territory systems has been designed to support these national objectives and principles. This infrastructure consists of three elements:

- ✧ The supply of training providers consisting of 58 public TAFE providers (as of 1 July 2006), plus a range of specialist colleges, and over 3000 private registered training organisations (RTOs) (Harris et al. 2006), and the supply of training personnel
- ✧ The advisory and decision-making infrastructure, which includes strong industry input and leadership
- ✧ The purchasing infrastructure, which effectively determines the content and the form of the training that is delivered through public funds.

The relationship between the demand for and supply of training is difficult to quantify. On the supply side, Harris et al. (2006) estimate that in 2003 there were 2.2 million students in private RTOs compared with 1.7 million in the TAFE sector. The lack of information on the amount of training delivered per enrolment in RTOs makes these comparisons problematic. Average hours delivered per student will be higher in the TAFE sector, and enrolment data gathered at a single point in time rather than annually is typically around half the annual levels, as demonstrated through the 2001 census.

In 2004 fee-for-service was 11.3% of all accredited training and approximately 8% within TAFE. Private RTOs also deliver non-accredited training and most estimates find that only between a quarter and a third of private training organisations are registered with the state training authorities and therefore the bulk of non-TAFE training is delivered outside the regulated sector.

On the demand side the ABS records that 34 200 TAFE applicants were unable to gain a place in May 2005 (ABS 2005). The reliability and the implications of this figure are disputed. This unmet demand is for free or minimal-cost training in TAFE. However, it does not give any real indication of the level of demand from individuals and industry for training, whether publicly funded or fee-based, not met because of lack of provision due to fit for need, location, timing, price or quality.

The training market is not a pure market in that it has a large injection of public funding that must be managed and accounted for and because the training sector, and especially the TAFE sector, is subject to the constraints of social policy objectives. These constraints take multiple forms and include priorities for different social groups and areas, the maintenance of the public TAFE system, and the location of a significant and growing element of training within the school sector. As well, the demand for training can be influenced by externalities, including the Commonwealth subsidies for employers who take on apprentices and trainees.

A failure of or a weakness in demand is endemic to VET systems across most countries and has provoked a range of policy responses. In most cases these have been supply-side responses, such as those pursued through the National Training Reform Agenda in Australia. However, they also have included demand-side responses, such as the imposition of training levies, taxation inducements

and subsidies designed to stimulate industry demand for skills and individual investment in VET (Haukka et al. 2004).

Australia has amongst the highest levels of private investment in school and tertiary level education amongst OECD countries and this investment is growing in both sectors (OECD 2005). Public policy has both exploited and in turn is designed to stimulate private investment in these sectors. This is a more difficult challenge in the VET sector because its individual clients mostly have lower levels of income and weaker educational backgrounds, and because of the inherent difficulties in increasing industry investment in training. In Australia there are limits to industry demand for training, with an apparent fall in employer investment in training (Smith & Billett 2004). Outside the traded goods sector and with the growth of contingent employment (Richardson & Tan 2007), the Australian market limits the pressures for firm-based training.

On the other hand, it is widely acknowledged that industry makes a substantial investment in training in the workplace. The observable contributions are time off for employees to undertake training, the supervision of training and the payment of wages above levels of productivity. This investment typically is seen as equivalent to the levels of formal investment in VET, that is, circa \$4–5 billion per annum. Richardson (2005) argues that, if informal training or skills formation gained through work experience is added, this contribution can be multiplied. She estimates that if the wage and salary increases gained by workers as a result of work experience are taken into account the combined level of individual and industry investment in training grows to about \$30 billion, which is a level comparable with the level of investment in school education.

Therefore, there is a case in Australia for state intervention in both the demand and supply of training. Demand requires a degree of public stimulus and where possible, incentives for firms. Public supply is necessary, as has been shown repeatedly across nations, private training provision will mostly be concentrated in areas of low capital costs. Therefore, in economies such as that of Australia, there is a need for state intervention to ensure sufficient infrastructure for the processes of skills formation.

For state and territory training authorities a critical question is how to maximise the overall levels of investment in skills formation and to best match the formal and state-funded training with the informal work-based skills formation. Therefore, the relationship of the authorities with the training market has some challenges.

- ✧ The relationship between formal and informal training is a particular challenge and dilemma for the VET sector. An increase in informal learning amongst mature age workers and their recognition through the recognition of prior learning (RPL) were cited in interviews with a number of state training officials as important policy objectives. There has been a substantial and recent interest in RPL, or the recognition of informal learning, in Europe and it is seen as a potential means of enhancing individual investment in lifelong learning (Bjornavold 2001), although this assumption remains largely untested.
- ✧ The VET sector can be viewed in isolation, yet it intersects with the other education sectors and these intersections have an impact upon the market behaviour of the VET sector. The school and university sectors have powerful institutional relationships in the form of examinations and selection systems, and the TAFE sector has been co-opted into these systems, which have not been designed to serve it. This may have the impact of introducing market distortions for the TAFE sector that are expressed as its residual status amongst school completers as a provider of tertiary education.
- ✧ For state and territory authorities there are significant complexities in managing the relationship between the supply of publicly funded training, the demand for fee-based training and the supply of work-based accredited and non-accredited training. Purchasing profiles run the risk of substituting fee or industry-based training and the challenge is to use public funding to encourage industry investment.
- ✧ There can be a dissonance between individual demand and skill needs. Several authorities reported an excess of individual demand in areas of low priority for skills, such as beauty

therapy. Most states and territories look towards the VET, and especially the TAFE, sector to contribute towards the broader social objectives or raising levels of initial education and training. In a context where there is falling demand for VET and especially for TAFE courses because of the strong employment market, authorities feel the need to provide some response to individual demand. This is especially the case when the demand comes from disadvantaged groups, for example, Indigenous girls.

- ✧ Given the centrality of state and territory authorities to funding and administration of VET in Australia, the states and territories effectively form regional training markets. These markets however are not consistent in their definitions and behaviours as they overlap with economic, industry and labour markets or sub-markets. This overlap provides another level of complexity for the authorities.

Within these constraints an optimal planning regime will:

- ✧ locate and design the infrastructure of public (and publicly funded) training providers and their personnel in a manner that can best respond to demand, and remain efficient and effective
- ✧ structure public funding in ways that best stimulate demand, especially in industry and skill areas where there is the greatest current and projected skill needs
- ✧ allocate funding to providers and programs that best meet the demand from industry and individuals
- ✧ in doing so are based upon the best projections of local and wider future skill needs, and localised demand.

## Skills, skills supply and skills shortages

Within an increasingly deregulated labour market, as suggested by the high and growing levels of contingent employment (Richardson & Tan 2007), there is an argument for a minimal state role in the provision of training. Publicly managed training systems invariably are cumbersome and are prone to failing to meet enterprise skill needs. Within the traded goods sectors, where nations locate their quest for the competitiveness and high levels of total factor productivity, there is an even greater capacity for disjuncture between skill demands and its provision through public VET systems. The disjuncture is in the types of skills that are delivered, and the means of their delivery. Crouch et al. (1999) describe this disjuncture as 'inevitable'.

However, the national VET system is strategically and politically positioned such that it is subject to major demands that go beyond those for skills that are industrially and occupationally defined. At the state and territory level the VET systems are primarily oriented to their historical functions of supporting industry skills formation and individual skill needs at entry and continuing levels. However, state and territory governments have the primary responsibility for social policies, and the TAFE sector plays its part in this. TAFE institutes have the primary responsibility for adult education programs and increasingly provide for the school-age cohort. The bulk of the VET infrastructure in Australia is located in the TAFE institutes. Although the sector is market-exposed, the bulk of the institutes/colleges retain some degree of responsibility for or orientation towards their sub-regions.

These characteristics of VET provision and responsibility have an impact upon the planning and administrative processes for publicly funded VET and the regional VET markets. State and territory authorities see their roles as extending beyond the function of purchasing training and assuring quality. VET strategies are linked to other state and territory economic and social development priorities and strategies, including industry and regional economic development strategies. In this regard there are some common aspects of the state and territory approaches and some observations about the training market and system that can be reported:

- ✧ All states and territories are signatories to the national VET principles, objectives and priorities. While there obviously will be differences in the emphases in some of the objectives and

priorities, on the whole the states and territories share the main priorities. They include the emphasis upon re-skilling older workers, opportunities for young people and an emphasis upon apprenticeship training.

- ✧ The 'Skills in Demand Lists' provided by the Department of Education, Employment and Workplace Relations are used by all systems. There is less consistency in views on what constitutes skills shortages and there is a feeling that the list becomes unreliable in localised labour markets. This is especially the case in small and isolated markets where the demand for and supply of skills and labour can be volatile.
- ✧ With a strong national employment market several states and territories are now reporting labour shortages as well as skills shortages. Labour shortages range between absolute shortages, such as that in the Northern Territory where there is a shortage of low-skilled and inexperienced labour, to a shortage of categories of skilled workers who are willing to work at market wages or work in their occupations.
- ✧ Officials in several states have argued that in some industries and occupations there are available stocks of skills. However, the industry and employment conditions are not conducive to the mobilisation of these skills.
- ✧ All systems have identified trade skills as areas of skills shortage and support the emphasis upon apprenticeship training, and in most cases funding for apprenticeships is a priority. However, there are different policies towards eligibility for User Choice funding.
- ✧ There is a general recognition of the importance of training for paraprofessional occupations in the future. As a consequence some systems are looking towards prioritising higher-level qualifications (AQTF IV and V).
- ✧ The role of the VET system as a means of facilitating employment entry is partially separated from its role as a supplier of skills.
- ✧ Systems consistently recognise training market weaknesses, including the mismatch between individual demand and industry skill needs. Areas of excess demand include hospitality and various design courses. One factor that might influence this mismatch is VET in Schools courses, which tend to be directed by student choice rather than industry skill needs.

## Labour markets

The concept of labour market segmentation has been rejected by some economists in recent years as lacking precision and consistency. However, upon the basis of the observations of officials from the state and territory VET authorities, labour markets across different regions or sub-regions and to some extent across different populations behave in different ways. These behaviours can lead to localised skill shortages or over-supply, especially in smaller and more isolated regions or sub-regions. State and territory training authorities, mostly in conjunction with state and regional development agencies, typically factor these localised labour market behaviours into their planning strategies.



# State and territory planning

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## Infrastructures

Each state and territory maintains a training authority with responsibility for the purchasing of training, administration of the TAFE institutes/colleges, supervision of the Australian Quality Training Framework and other planning and strategic programs and initiatives. Most but not all authorities have an industry-based board or council that provides advice to government on VET policy and operations and in some cases approves the purchasing strategies and key initiatives of the training authority.

The infrastructures to support these activities typically include planning and policy units or sections, which frequently have a research capacity. In most cases these units are dependent upon data gathered through their TAFE sector and national databases (ABS and AVETMISS). Some states have appointed regional planning and advisory officers who provide advice and information that cannot be gained through the TAFE institutes. The authorities also typically utilise the services and output of other agencies, such as those responsible for state and regional economic development. In some states such as Victoria there has been separate regionally based data-gathering through surveys and interviews. However, these exercises are not common or sequenced across the states and territories.

The networks of TAFE institutes are an important element of the training authority planning processes. The institutes have their own formal and informal industry links and networks and are able to gather information about student demand and preferences. Authorities also have their own formal and informal relationships with industry and industry organisations. Some continue to support industry training (advisory) bodies (ITABs). However, some states have discontinued them and others have recently decided to fund them no longer or to change their roles. The state and territory authorities do not appear to use the national industry training councils (ITCs) – although links between the authorities and the ITCs may evolve.

All authorities have multiple links with industry. Apart from the advisory and statutory boards and councils and the ITABs (where they exist), there are a range of linkages and in some cases partnerships with industry associations, unions and individual companies. The state and territory level infrastructure for VET planning is quite complex and variable and compares with relatively simple structures for school education, which is primarily based upon student enrolments.

## Processes

Under the original Australian National Training Authority (ANTA) agreement and the subsequent arrangements whereby the former Department of Education, Science and Training<sup>3</sup> (DEST) has subsumed most of the ANTA functions, states and territories established VET authorities that have the responsibility for establishing and managing the purchasing of training as negotiated and agreed with ANTA/DEST and detailed in the state and territory training profiles. The authority can be located in a board or in the executive function of the relevant government department. The formal

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<sup>3</sup> In December 2007 the Department of Education, Science and Training was abolished. Its functions have been assumed by the Department of Education, Employment and Workplace Relations.

planning processes therefore involve the development of training plans that culminate in their endorsement and enactment by these authorities. The processes through which the purchasing plans and profiles are developed and the balance of factors that influence the plans vary across states and territories. This section gives a brief outline of each of the state and territory planning processes for VET purchase and some of the factors that contribute to the outcomes of these processes.

# Australian Capital Territory

**Table 1** Summary of VET planning process, Australian Capital Territory

Planning process	Use of ITABs	Regional officers	TAFEs	Development plans/policies	Surveys/studies	Statistical models	Advisory/stat authority	Other
<ul style="list-style-type: none"> <li>✧ Analysis of ABS and Treasury data to produce two Half Yearly Outlooks</li> <li>✧ Incorporates skill shortage advice – ITABs, RTOs, DEWR etc.</li> <li>✧ Moderated through Commonwealth agreement, the Canberra Plan, and industry advisory processes</li> <li>✧ Meetings with providers twice per year</li> <li>✧ Ongoing links and negotiations with providers – mainly the TAFE (CIT)</li> </ul>	Small number through the ACT Industry Advisory Assoc.	No regions	Only one TAFE – so has a major influence over planning	The Canberra Plan – Economic White Paper	As practicable	Developing computer model to accommodate and analyse quantitative and qualitative data	Vocational education and training authority: – advisory; and – responsible for strategic plan	

Source: Interview data, 2005

Planning in the ACT combines quantitative data gained through central analyses and qualitative data gained through the providers and industry groups. The processes are informed by overall Territory priorities contained in the Canberra Plan and utilise ABS and Treasury economic, demographic and labour force data. In 2005 the ACT established a cross-agency Skills Forum to coordinate the ACT Government's data collection and analysis on, and policy response to, skills shortages. As there is only one TAFE Institute (Canberra Institute of Technology – CIT) ongoing advice and negotiations with the CIT are built into the planning processes. This includes dialogue over the funding agreement. Input is also received from other RTOs. Industry input is through the ITABs. The qualitative and quantitative data are fed into a computer model to conduct an integrated analysis, although this is not yet fully operational.

The characteristics of the ACT make its training market different. The qualifications profile of the workforce is high and it has a high rate of year 12 completions, thus lowering the school age demand for TAFE. The Australian Government also does a lot of its own training and the Department of Defence is a RTO. On the other hand VET in Schools is strong and a recent survey found a very high interest amongst school students in school-based apprenticeships. As well, the senior colleges in the ACT are significant providers of adult education. The market is also complicated by geography, as the ACT is the dominant service provider to the surrounding region of NSW. Consequently NSW data also have to be employed within the quantitative analysis.

# Western Australia

**Table 2 Summary of VET planning process, Western Australia**

Planning process	Use of ITABs	Regional officers	TAFEs	Development plans/policies	Surveys/studies	Statistical models	Advisory/stat authority	Other
<ul style="list-style-type: none"> <li>◇ Regional &amp; industry analyses</li> <li>◇ State Training Strategy</li> <li>◇ Regional reports</li> <li>◇ Planners with regional responsibility; 8 non-metro, regional reports; stakeholders/providers consultation; ABS, Monash et al. data</li> <li>◇ 19 industry-based studies; data analysis, and industry advice – including ITABs</li> <li>◇ Profile (including targets) forwarded to TAFEs for responses – deliver plans</li> <li>◇ Annual purchasing model negotiated with TAFEs through annual review of profiles – quarterly reviews and adjustments</li> </ul>	Yes – provide qualitative information	8 Regional Coordinators – industry & community planning	Negotiate profiles using quarterly reviews	Regional Development Commission Have had a priority in the metals area	Use of regional data gathering – qualitative & quantitative Use of state-based demographic data	Econometric analysis to check regional analyses Piloting of model developed for apprenticeship and traineeships Less emphasis upon Monash model	State Training Board: – strategic advice and leadership; – establish taskforces & initiatives; – recognise industry training advisory bodies	Regional development commissions

Source: Interview data, 2005

The planning process incorporates industry wide and regional analyses. The training authority uses regional and industry planners to produce industry and regional reports. The studies also are supported by the Regional Development Commissions under the Department of Local Government and Regional Development. These studies are combined with econometric modelling using ABS and delivery data to ensure that there is no over supply. An ‘Apprenticeships and Traineeships Forecasting Model’ (Miles Morgan 2005) has been developed. It will be tested in 2006 and possibly utilised within the overall planning processes.

Strategic projects related to skills shortages have been initiated: an econometric model for all VET; industry-based studies (hospitality, tourism and resources) to assess how much industry pays; and an analysis of skills shortages in the non-trades areas such as Community Services and Health. Profile-based funding accounts for about 90% of the budget and is made up of three components: access programs that relate to particular client groups in particular places; the Skilling WA program that is targeted at existing workers and just-in-time module delivery; and industry programs delivering full qualifications in skills shortage areas. There is \$5 million for contestable programs. A Critical Skills Training fund (\$5 million) has been established (for 2006) and is targeted at skills shortage areas, and will mostly be delivered through competitive tendering. Apprenticeships and traineeships are a priority, and overall there has been a growth in funding.

# New South Wales

**Table 3 Summary of VET planning process, New South Wales**

Planning process	Use of ITABs	Regional officers	TAFEs	Development plans/policies	Surveys/studies	Statistical models	Advisory/stat authority	Other
<ul style="list-style-type: none"> <li>✧ Background research and analysis – labour market and industry skills, plus special areas such as ATSI – environmental scan</li> <li>✧ State priorities negotiated with treasury &amp; other agencies</li> <li>✧ NSW Strategic VET Plan and TAFE Strategic VET plan</li> <li>✧ National priorities &amp; targets and state priorities distributed to all providers</li> <li>✧ TAFEs develop profiles related to local needs</li> <li>✧ TAFEs assisted to develop institute Service Delivery Strategy based upon central template</li> <li>✧ Local negotiations with industry</li> <li>✧ Negotiated with TAFE NSW</li> <li>✧ Results and service plans with TAFE agreed</li> <li>✧ Profile recommended to Minister by BVET</li> </ul>	Strong network – 20 ITABs	Regional offices of Dept. of Education and Training	Strong role in assessing local needs & negotiating agreements through the negotiated development of the institute Service Agreement Strategies	Close relationship with Dept. of Commerce Immigration has a major impact upon skills profile Overall state priorities negotiated with Treasury	Environmental scan – demographic & employment projections National Economics – occupational level analysis of demography & economy/LM Skilled Migration Research	Environmental analysis	Board of Vocational Education & Training – advisory & overseas policy and planning initiatives plus industry forum to provide advice	Regional Industry Advisory Boards

Source: Interview data, 2005

NSW has a strong state and regional infrastructure of 20 ITABs, regional industry advisory boards and TAFE institutes, which maintain a strong regional service role. There are strong and iterative interactions between these elements and targets are set for local skill needs and equity groups. TAFE has a strong community service obligation across the state, and especially in some regions. The size of the state and its economy and the strength of its statewide TAFE structure make planning a complex ongoing exercise that involves multiple inputs and players. There are 900 RTOs, of which 450 receive funds under market programs. RTOs provide training under User Choice and through contestable funds. These funds include those provided under the SkillsGap program (Department of Employment and Training [NSW] 2005). Other programs that are available to RTOs include the Contracted Training Provision Program, School-based Traineeships in NSW Program, and the Partnering–Training for Older Workers Program. It also funds an Industry Skills Training Program which allows a range of organisations (including group training companies – but not other RTOs) to apply for funding for programs ‘to encourage innovative industry training initiatives and address current and future skills shortages’ (Department of Employment and Training [NSW] 2005). There is a policy priority of skilling up existing workers, and part of the strategies in addressing this includes the development of a new RPL tool – ‘Prove it’.

# Queensland

**Table 4 Summary of VET planning process, Queensland**

Planning process	Use of ITABs	Regional officers	TAFEs	Development plans/policies	Surveys/ studies	Statistical models	Advisory/ stat authority	Other
<ul style="list-style-type: none"> <li>✧ Labour Market Research Unit, regional planning officers, and district youth achievement planning committees, together with TAFE provide local market intelligence</li> <li>✧ Targeted industries – from Dept of State Development: Smart VET for priority industries</li> <li>✧ DEWR skills list</li> <li>✧ Skills Ecosystems – 20 area analyses</li> <li>✧ State priorities – including Skills Formation Strategies</li> <li>✧ ITABs, Centres of Excellence inputs</li> <li>✧ Other industry stakeholders</li> <li>✧ Negotiate performance agreements through iterative processes with TAFEs</li> </ul>	Yes, but likely to modify	Regional planning officers in each region	Through regional planning officers and the Skills Ecosystems	White paper: education & training reforms for the future, including: 17 Skills Formation Strategies Development of regional training strategies. Office of Industry & Community Development – influences government investment in VET	Survey of local training providers – 2nd year	No longer use Monash model Analysis through LM research unit	Training and Employment Recognition Council – advisory only re planning	Centres of Excellence – Mining industry

Source: Interview data, 2005

The directions for VET in Queensland have been strongly influenced by white and green papers under the umbrella of the ‘Smart State’ objectives that have set the directions for education and training in the immediate future. A recent Research Paper and subsequent Green Paper (Department of Education and Training [Qld] 2005) have proposed a number of reforms and initiatives.

The strength of regional populations and industries in Queensland has led the TAFE sector to have a strong regional focus and the planning processes emphasise the interaction between regional analyses and central purchasing plans that lead to the performance agreements. The Department of Employment and Training has adapted some of the concepts of the Skills Ecosystems to the planning processes and the TAFEs are allowed for a degree of discretion in their annual profiles.

# South Australia

**Table 5 Summary of VET planning process, South Australia**

Planning process	Use of ITABs	Regional officers	TAFEs	Development plans/policies	Surveys/studies	Statistical models	Advisory/stat authority	Other
<ul style="list-style-type: none"> <li>◇ Three key drivers: Government priorities; economic &amp; labour market shifts (including skill shortages – using the DEWR list as a starting point); and major projects</li> <li>◇ The planning process has consideration of:               <ul style="list-style-type: none"> <li>– Workforce development strategy – industry asked about their skill needs</li> <li>– SA’s Skills Action Plan</li> <li>– Economic modelling – using Monash model</li> <li>– Consultation process – industry associations etc.</li> <li>– Moderate through TAFEs and develop and negotiate TAFE performance agreements</li> <li>– Incorporate government priorities</li> <li>– Allow local flexibility as the year progresses</li> </ul> </li> </ul>	9 state industry skills boards	No	3 TAFEs – 2 metropolitan and 1 regional	Major projects – e.g. Olympic Dam, Air Warfare Destroyer project Workforce Development Strategy – what are the likely areas of skill shortages? SA’s Skills Action Plan	Survey of SBNAs	Yes – based upon Monash model	Training & Skills Commission – assists, advises and makes recommendations to the Minister	17 Local Employment & Skills Formation networks

Source: Interview data, 2005

The planning process in South Australia attempts to get the big picture right and allow for a degree of flexibility and local decision making. The central planning combines economic analyses that are moderated through industry advice, input of government priorities including a Workforce Development Strategy (Department of Further Education, Employment, Science and Technology 2005) and the impact of major projects and advice from the providers. Local knowledge is included through 17 Employment and Skills Formation Networks. TAFE institutes have a degree of flexibility in their profile, and the directors are involved in the central planning processes. The institutes input individual demand into the planning processes and are set 12 high levels targets that are modified annually. South Australia is moving towards a three-year planning cycle.

Skills development has become a major policy area as articulated in the South Australia’s Skills Action Plan (Department of Further Education, Employment, Science and Technology and Department of Trade and Economic Development 2005). The state cannot rely upon skilled immigration, and the recent announcements of major projects such as the destroyer project have raised the urgency of skills development. The South Australian Government provides vocational education and training through TAFE, User Choice and South Australia (SA) Works. SA Works received approximately \$23 million in 2005. It is contestable and is administered through 17 Local Employment and Skills Formation networks and identifies ten industries for actions to address skills issues.

# Tasmania

**Table 6 Summary of VET planning process, Tasmania**

Planning process	Use of ITABs	Regional officers	TAFEs	Development plans/policies	Surveys/studies	Statistical models	Advisory/stat authority	Other
<ul style="list-style-type: none"> <li>❖ Use of a three-year framework – adjusted annually</li> <li>❖ Direct industry liaison, including with national skills councils</li> <li>❖ Training demand profiles moderate the framework</li> <li>❖ Negotiations with TAFE</li> <li>❖ Industry advice informs competitive tendering process and user choice funding</li> <li>❖ Adjust purchasing agreement through TAFE negotiations</li> <li>❖ Liaison with development and labour market analysis agencies</li> </ul>	<p>No longer funded except for building &amp; construction. Several supported by industry.</p>	<p>3 industry liaison officers; &amp; 3 area taskforces (in the process of being established – focus on youth)</p>	<p>One only</p>	<p>Tasmania a State of Learning Guaranteeing Futures Dept. of Economic Development – Skills Response Unit – Audits of industries. Industry Development Plan and Industry Council plans</p>		<p>No – once used Monash model</p>	<p>Learning and Skills authority – advice to the Minister on the development and implementation of policies, plans and programs Tasmanian Industry Advisory Group specifically advises on industry matters</p>	<p>Industry advisory groups 20 regionally based skills centres</p>

Source: Interview data, 2005

Tasmania has one TAFE institute and the planning processes are relatively immediate and practical. There is a three-year planning framework that is based upon data analysis and industry advice. It once used the Monash model, but with the major impacts of change occurring in sub-regional labour markets, the model lacks precision. There are some labour shortages, especially in the skilled trades areas. The planning process has a regional aspect that includes three industry advisory officers and the development of three Area Task Forces, as well as an industry advisory group.

The processes include detailed planning and negotiations with the TAFE institute where each industry area is examined to determine industry needs and the supply of training. The TAFE also inputs its own information gained through its industry reference groups and student demand. The overall budget is approximately \$100 million of which \$2 million is for contestable programs. Most of these programs are located in RTOs. There has been a range of initiatives designed to address skills shortages in key industry areas, including the Fast Track Skills Project, the Partnership to Jobs project and the current Skills for Growth initiative, which is designed to address areas of skill shortages and workforce capacity in the trades and other growth industries and in industries where there are substantial work and career opportunities.



# Northern Territory

**Table 7 Summary of VET planning process, Northern Territory**

Planning process	Use of ITABs	Regional officers	TAFEs	Development plans/policies	Surveys/studies	Statistical models	Advisory/stat authority	Other
<ul style="list-style-type: none"> <li>❖ Use of national (ABS, DEWR) data and NT data for labour market profile</li> <li>❖ Workforce NT Report – skills deficits and needs, survey of major projects, demographic data, surveys from industry training advisory councils</li> <li>❖ Moderate through industry advice</li> <li>❖ Negotiate with providers over this (two major providers)</li> <li>❖ Allow 6% variation from modelling</li> </ul>	Industry training advisory councils	No	Negotiate with two public providers and 6 smaller RTOs that receive recurrent funding.	Workforce NT Report & NT Jobs Plan NT Government priorities, National priorities Priorities for community development – e.g. Indigenous community	Through Workforce NT Report	No	Chief Executive is the 'Authority'	

Source: Interview data, 2005

The NT experiences difficulties in attracting and retaining skilled people. A recent strengthening of the economy and predicted economic growth over the next few years have contributed to an increased demand for labour. There is an acute labour shortage (except amongst the Indigenous community) and almost any form of training will lead to employment. Some of the main areas are of skills shortage are automotive, building and construction, cookery, plumbing, hairdressing, childcare etc: it's especially acute in the traditional trades. Planning is made complex by the high level of workforce and population mobility, although this level has halved in recent years. Furthermore, the size of the NT means that there are identifiable sub-regions and economies. Small regions are very susceptible to peaks and booms, especially in particular industries. Developments like the Alean redevelopment in Nhulunbuy influence the local demand for training, although these projects also attract labour that follows the big projects. Nevertheless, the territory has to be able to make training available when it's needed.

The planning process incorporates complex labour market profiling, which involves a detailed analysis of the NT industries and labour market. This utilises detailed workforce analysis (Department of Education, Employment and Training [NT] 2005) that includes macro-economic analysis with workforce analysis. There are two major public providers in the NT – Batchelor Institute of Indigenous Tertiary Education (BIITE) and Charles Darwin University. The Department of Employment, Education and Training is able to negotiate with these institutions directly about their profile. There are few private RTOs in the NT, and public providers occupy 80–85% of the market. There is generally little difference between what CDU and BIITE provides and the priority areas identified by the Department of Employment, Education and Training. There is a high level of flexibility for the providers within the targets and the profiles, because of the characteristics of the students.

# Victoria

**Table 8 Summary of VET planning process, Victoria**

Planning process	Use of ITABs	Regional officers	TAFEs	Development plans/policies	Surveys/studies	Statistical models	Advisory/Stat authority	Other
<ul style="list-style-type: none"> <li>✧ Analysis of 19 industry skill needs to determine industries' share of training</li> <li>✧ Analysis of 13 Area Study Reports</li> <li>✧ Use weightings model to determine industries' share across regions of training</li> <li>✧ Moderate and validate through industry advice including ITABs, MICC, peak bodies</li> <li>✧ Other government department inputs</li> <li>✧ Inputs from government priorities and policies including target groups – under 25s &amp; over 44s</li> <li>✧ Negotiate profiles and performance agreements with TAFEs</li> </ul>	Yes, but diminished numbers role in planning	No	Negotiate profiles and balance of delivery between TAFEs	Min. Statement on Adult & Community Education & Knowledge & Skills Dept of Human Services	19 industry studies upgraded annually; and 13 area studies	Use ABS data to analyse demand & AVETMIS for supply. Use weightings model to determine industry share	Learning & Employment Skills Commission – advisory role & executes responsibility for the state training system Manufacturing Industry Consultative Committee	31 Local Learning & Employment Networks – minimal role in planning

Source: Interview data, 2005

The planning process in Victoria uses sets of regional Area Study and Industry Study reports to adjust TAFE profiles and negotiate performance agreements. The area studies identify duplication and gaps in provision. The Industry Studies, combined with econometric analyses, inform calculations of industry share of the publicly funded training. The two sets of studies inform calculations of shifts in profile across industries and regions. These calculations use a set of weightings that are based upon three sets of criteria: industry skill needs that factor in new entrants to occupations and skill gaps; return on investment – that factors in net replacement rates, skill shortages and the contribution of training to the economy; and government policy.

The analyses are moderated through industry advice, including input from the ITABs, and advice from the providers. These analyses then provide the basis for negotiations with the TAFE institutes over their profiles and performance agreements. There are two priorities – under 25s and over 44s (consistent with the Commonwealth's targets), and the state is looking towards AQF IV and above training in the context of growth in para professionals occupations.

# Funding and providers

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## Contestable funds

All states and territories include programs that are delivered through competitive processes and which are outside User Choice. In most cases the share of the overall VET budgets is not great, and mostly it ranges between 4% and 10% of the overall VET allocations. However, when User Choice funding and those elements of VET in Schools funding which are used for purchasing training are included, this can grow to up to 20% of the VET budget.

Contestable funds typically are allocated through special programs that are mostly directed towards critical skill and industry needs, local priorities and the needs of social groups or communities. The combination of 'critical skills' and 'strategic priorities' is suggested in the titles of these programs: the Critical Skills Training Fund (WA); the Priority Education and Training Program (Victoria); Skills Equip (Tasmania); the Strategic Skills Training Program (NSW); South Australian Works (SA); and the Strategic Purchasing Program (Queensland).

The funds are variously designed to target: key industries and developments; types of industries – such as rural and small businesses; key industry areas – such as manufacturing; types of workers – such as seasonal and rural workers; and equity groups. In many cases the targeting is associated with major economic and social policies, priorities and strategies that have 'whole of government' foci. Some authorities have stressed the importance of the capacity of contestable funds to stimulate innovation in training delivery.

## User Choice

The terms for purchasing formal training for apprenticeships and traineeships are established by the national User Choice agreement. However, within these terms states and territories have certain discretions related to priorities for funding. These priorities are in the context of an increase in traditional apprenticeships reported by most authorities and confirmed by NCVER data that indicate a 25% increase in apprenticeship commencements over the two years to June 2006. This is in the context of an overall increase in apprenticeship and traineeship commencements of 3.8% and a decline of numbers in training of 2.5% (NCVER 2006).

These trends are consistent with the observations and actions of the state and territory authorities. The 6% increase in withdrawals is consistent with a strong employment market and with an increased availability of apprenticeships. Most states and territories have priorities for User Choice funding that favour apprenticeships and new entrants.

There are also some general features of the operation of user choice, and they include the following:

- ✧ Across jurisdictions the TAFE sector has most of the market for apprenticeships and the private RTOs have most of the market for traineeships. In the more isolated regions the lack of RTOs does not allow User Choice to operate and the TAFE is the only viable provider. TAFE also is the only provider in some industry and occupational areas.
- ✧ There are some restrictions on the allocation of User Choice RTOs in some industries in some states and territories. However the examples of this are relatively few.

- ✧ Regional and rural areas tend to depend upon TAFE for User Choice-based provision more than urban areas.
- ✧ TAFE is the major but not the only provider for VET in Schools and school-based apprenticeships.
- ✧ Some industries, especially construction, have pre-apprenticeships.

Brief details of the implementation of User Choice in each of the states and territories are as follows:

- ✧ The ACT has a priority for apprenticeships and traineeships. Both new entrants and existing worker apprenticeships and traineeships are funded, although existing workers receive fewer, as it is assumed that they will require less training through the use of RPL. School-based apprenticeships are supported, but pre-apprenticeships are not strong in the ACT.
- ✧ Victoria does not prioritise apprenticeships or traineeships and funds both. However it does prioritise new entrant apprenticeships and traineeships, which are fully funded, and restricts funding for adults apprenticeships, especially traineeships. Employers are paid a completion bonus for apprenticeships. School-based apprenticeships are integrated and they are cap free. Pre-apprenticeships are strong (and virtually required) in construction and are being introduced in automotive and engineering. The training authority encourages more pre-apprenticeships.
- ✧ Not all qualifications are funded in Tasmania and there is a preference for higher-level qualifications and at entry level. However, all entry-level apprenticeships and traineeships are funded. Existing worker apprenticeships are not funded, although there are some exemptions. A program (Trades Express) is being introduced, which is designed to accelerate trades recognition and training processes in trade areas which are in demand. School-based apprenticeships are not a priority, and to some extent mainstream VET in Schools programs, with their heavy emphasis upon extended work placements fill this role.
- ✧ Under its recent Green Paper (Department of Education and Training [Qld] 2005) the Queensland Government has proposed a series of reforms (some of which have already begun) to the apprenticeship and traineeship system. They include shortening some apprenticeships, introducing a period of intensive training for some apprenticeships prior to workplace entry, the establishment of a specialist Trade and Technical Skills Institute, and means of reducing private provider barriers to entry into training areas.
- ✧ Western Australia has a general priority to support apprenticeships, which have been growing in recent years. The traditional trades are a particular priority. The focus has been upon 15 to 18-year-olds, but existing worker apprenticeships are funded. Pre-apprenticeships do exist but are not a priority.
- ✧ About 75% of all apprenticeships and traineeships in South Australia are supported through User Choice funds in South Australia. Most certificate I to III programs are funded, plus some certificate IV, V and IV (diploma) level programs. Trainees can only be funded for two programs. Priorities are provided in some areas, such as construction (upon the basis of the Skills in Demand list), defence (because of the destroyer project) and mining.
- ✧ The Department of Education and Training in NSW supports all 'approved' apprenticeships and traineeships and does not discriminate between age groups. Training is provided by TAFE institutes or RTOs. However, there are restrictions on RTOs in some non-metropolitan regions and in some industry areas. School-based apprenticeships have not been encouraged in NSW.

Personnel from the authorities identified the following difficulties in User Choice:

- ✧ In the context of a robust employment market, many entrants are unwilling to undertake apprenticeships or are likely to withdraw when they can earn higher wages as full-time workers.
- ✧ There are a number of employers who want to take on an apprentice, but cannot find suitable school leavers. This is especially the case in manufacturing.
- ✧ The throughput in some industries and occupations such as industrial chefs is high. However, the industry cannot hold workers because of poor wages and work conditions.

- ✧ There are some regulatory barriers to apprenticeships, including licensing.

These weaknesses limit the capacity of the system to meet industry skill needs, and state and territory authorities have invested and are investing in various innovations to attempt to overcome some of the weaknesses. The innovations mostly are directed towards means of shortening apprenticeship programs.

## TAFE

More than 85% of publicly funded training is delivered through the TAFE sector. TAFE profiles typically will take up at least 80% of state and territory training program budgets. TAFE also competes for contestable funds. Therefore, the TAFE sector has a major impact upon strategies and responses to current and emerging skill needs and shortages across the country. This impact is through both the direct provision of training and also through the market impact of TAFE programs. The availability of publicly funded programs through TAFE can have the impact of undermining fee-for-service provision by private RTOs and TAFE institutes.

In 2004 fee-for-service represented 11% of recurrent revenue for VET in Australia and payments to non-VET providers for VET delivery represented 7% of public activities expenditure. The extent of fee-for-service outside total VET revenue is unknown. In some states and territories officials have indicated that unaccredited training within the private sector could match overall levels of formal accredited training. However, other estimates are below this level. While VET authorities are conscious of the capacity of poorly planned VET profiles and service contracts with TAFE to undermine the market for non-accredited training, as well as the fee-for-service market in accredited training, the lack of precise information makes it difficult to factor these considerations into the profiling and contracting processes.

The planning processes and the other levels and innovations that are used by the state and territory VET authorities are partially a response to the market or the inherent demand-side weaknesses in the training market, and partially a response to policy requirements and initiatives from state and territory governments.

TAFE's operation as a market responsive provider is influenced in a number of ways.

- ✧ The TAFE infrastructure represents the bulk of the capital investment in VET. Private RTOs typically are absent in high capital cost training and the TAFE workforce represents the majority of the trained workforce for formal VET delivery. In some states TAFE staff are centrally employed and in some, students are centrally enrolled. Under these circumstances the capacity for radical changes in profile, especially in the short term, is limited and a type of path dependency is created. TAFE institutes across most states and territories have some degree of specialisations for institutes/colleges and campuses. This, together with negotiated swapping of profile between institutes, can ameliorate the problem of slowly changing profiles to some extent.
- ✧ In most states and territories TAFEs face the prospect of having funding (or ASCHs) withdrawn if profile is not met. Therefore, for most TAFEs meeting profile is a priority. Fee-for-service can represent up to 30% of the recurrent revenue for an individual TAFE. However, in most cases it is much less than this and for institutes/colleges that concentrate upon trade programs it can be as low as 5%. A drop in overall demand for VET, but an increase in traineeships and apprenticeships has exacerbated this situation. As well, the formula used for ASCHs can influence TAFE's flexibility in shifting profile across industry and course areas. Methods used include different rates for industry areas and weightings for different areas. Most apprenticeship programs are more expensive than the standard rate and the shift towards apprenticeship programs has put pressure upon delivery profiles.
- ✧ The strength and universality of the TAFE system makes it a critical source of intelligence and advice to the central planning processes. TAFE institutes/colleges gather information through formal and informal links with industry, other agencies and through student demand and destinations. All systems utilise this intelligence in different ways, not the least being the

negotiations over funding and performance agreements. Information on industry skills need is gathered through a range of mechanisms:

- ◆ formal institute/college industry committees or reference groups. These can range from the institute/college council to department advisory committees or councils
  - ◆ informal relationships between institute/college staff, industry associations and individual companies, as well as the ITABs. This includes linkages with and feedback from employers that recruit graduates from the institute/college
  - ◆ the use of labour market and industry data provided by the state training authority and the ABS
  - ◆ advice and feedback from the state training authority gained in the negotiations over the funding and performance agreements
  - ◆ linkages with local government authorities, especially in the large states where there is a large number of institutes
  - ◆ the use of environmental scans initiated either by the institute or the training authority.
- ◇ The patterns of these arrangements vary considerably across the different institutes/colleges. Some of the large inner city and highly marketised TAFEs will tend to have formal industry advisory councils. TAFEs in rural and regional areas are significant service as well as economic entities and therefore will have linkages with local government and other elements of the regional economic and social infrastructure.
- ◇ In 1975 the Kangan Report helped to fashion the TAFE sector as a community service provider that Goozee (2001) describes as being *all things to all people*. Although the national training reforms have emphasised the role of TAFE as an industrial trainer, there is strong evidence that TAFE has maintained much of its community service role. As Noonan noted (2002) the TAFE institute is *the bridge to the community* (p.32). It is the largest provider of adult education in the country and its access programs are designed to provide educational re-entry and access for equity groups to education. Most TAFEs have reported a heavy community service obligation and this is especially the case for non-metropolitan institutes/colleges. To an extent the amalgamations that have occurred in states such as Western Australia and South Australia have emphasised their regional roles and the associated community obligations. Indeed the strong role of the TAFE institutes in VET planning in states such as New South Wales has stressed their regional responsibilities. Under these circumstances the responsiveness of the TAFE sector to skills needs and shortages is limited. Those institutes/colleges with the heaviest community and regional obligations are least inclined to have strong fee-for-service programs. This appears to make them more vulnerable to changes in demand within a period of strong demand for labour, as they tend to concentrate upon lower entry-level training. Those institutes and colleges that have high fee-for-service demand, and that typically are located in the centre of the state capital cities and tend to concentrate upon higher level and para-professional provision, are less vulnerable.
- ◇ The TAFE sector also needs to be seen in relation to the other education sectors. There is no discrete TAFE market as students can alternate between the sectors and because the other sectors, or certainly the higher education sector, also play a role in meeting skills needs and shortages. Furthermore, there are five multi-sector universities in Australia, several more include TAFE and VET provision, the bulk of secondary schools deliver VET and there are a number of educational precincts and community colleges that incorporate school and TAFE provision.
- ◆ Some of the more market-oriented institutes/colleges have strong diploma and associate degree programs and tend to have stronger articulation with the universities. This is a two-way articulation with high levels of inflow of university graduates into TAFE.
  - ◆ The substitute role of TAFE for university courses is not clear, but it does exist. Moodie (2005) has examined the complex and apparently conflicting data on enrolment traffic between TAFE and higher education and he estimates that the share of all transfers of 'upwards transfer' is between 58% and 62% and of 'reverse transfer' is between 38% and 42%. Data from the former Department of Education, Science and Training indicate that 9.5% of commencing higher education students in 2004 had a TAFE course as the basis of their admission. It is not possible to identify the proportion of these students who undertook the TAFE studies for the purpose of gaining entry into and credit towards a university

course. In 2001, the figure was 9.4% of commencing students, and of these 52.8% sought credit. This suggests that a good proportion of the TAFE originating students intended to move on to higher education. Thus VET and TAFE profiles and purchasing plans need to factor in their potential overlap with university markets, especially in areas such as engineering and business studies.

- ◆ TAFE is the major provider for VET in Schools programs, and especially school-based apprenticeships, although this varies across states. In most cases TAFEs see these relationships as problematic, and in most cases VET in Schools programs are driven more by student demand than by industry skill needs. States and territories have different approaches to the funding of VET in Schools. The two main models are the direct allocation of funds to schools for the purchase of VET from RTOs and the allocations within TAFE profiles for the delivery of VET to school students. The latter would have some capacity for the TAFEs and the VET planning systems to have an influence over the industry and skills orientations of the VET in Schools programs. Some TAFE institutes have indicated that payment upon the basis of student contact hours prices do not factor in the higher administrative and advisory costs of VET in Schools provision.

TAFE institutes and colleges can play, and in most cases do play, an important role in the development and refinement of the state and territory training profiles. Given the variations in planning processes across the jurisdictions and the different numbers and configurations of institutes and colleges the nature of the input also varies. In some cases the TAFEs are formally included in the decision-making and advisory processes, such as in South Australia where the three institute directors are formally part of the executive of the state training authority.

Input into the planning processes can include:

- ✧ formal advice of state/territory training executive, planning and advisory committees
- ✧ formal input as members of a committee or council of TAFE directors
- ✧ advice on VET demand that is gained through enrolment patterns and other TAFE sources
- ✧ informal networks, which in most if not all systems are facilitated by the regular exchange of personnel between the authorities and the institutes/committees
- ✧ processes and outputs of the development of institute/college strategic plans
- ✧ other data gathered from local areas, either informally through such mechanisms as environmental scans and advisory committees, or through networks
- ✧ the negotiation processes that lead to the funding and performance and service delivery agreements.

Some of the larger systems, such as that of New South Wales, include the TAFE institutes as part of the staged planning mechanisms, whereby institutes respond to draft plans and profiles.

In turn the training authorities in some states, such as Victoria, have a brokerage in negotiating profile between institutes. In some cases the planning processes have identified several institutes that are delivering the same programs to clients within small regions or sub-regions and this has allowed the effective swapping of profile between the institutes.

## Private RTOs

This study has gathered little information on private RTOs, having concentrated upon planning processes at the state and territory and the TAFE institutes that typically have broad program portfolios and broad regional industry and community services obligations.

Private RTOs play a minor role in publicly funded training. However, they deliver a large amount of fee-for-service and non-accredited training and play important niche roles, especially in traineeship

programs and in new industry and skill areas. Funding through contestable programs is a minor part of their operations and they operate mostly outside the publicly funded training programs.

The relationships between the state and territory training authorities and their funding systems varies, and the RTOs include a heterogeneous mix of providers: group training companies, schools, government departments, skills centres in enterprises, ACE providers, large specialist providers in areas such as hospitality and small niche providers. Some officials have commented that private RTOs tend to be more innovative and flexible, and when their delivery of non-accredited training is included they represent the most market sensitive suppliers of training.

## VET in Schools

A major area of growth in formal VET provision has been through VET in Schools and school-based apprenticeships, with 211 900 students enrolled in 2004 in VET in Schools, including 15 200 school-based apprenticeships commencements in 2005 (NCVER 2006b). Although most states and territories incorporate school and VET administration within the one department, VET in Schools is typically administered and funded through the schools division and this funding is not part of the state training profile. Under these arrangements the schools purchase training from TAFE or private RTOs, or are registered as an RTO. However, there are exceptions to this, whereby funding for VET in Schools is incorporated into the performance agreements of the TAFE institutes/colleges.



# Responsiveness and effectiveness

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## The planning infrastructure

The areas and types of training that are funded with public monies are formally controlled by decisions that have three major loci:

- ✧ the planning and allocative processes of the state and territory training authorities
- ✧ the internal priorities and allocations of the public training providers – TAFE
- ✧ the demands of users through User Choice, VET in Schools purchased training and fee-for-service.

To varying extents these decisions are mediated, for example, through:

- ✧ Commonwealth–state/territory negotiations over the training profiles
- ✧ State Training Authority–TAFE negotiations over funding and performance and service delivery agreements
- ✧ the degree of flexibility allowed within these agreements and the capacity to re-negotiate agreements
- ✧ limitations placed upon the use of User Choice funds
- ✧ accreditation and funding restrictions applied to VET in Schools and school-based apprenticeships by state and territory education departments
- ✧ variations in the division of VET budgets between profile, User Choice and contestable funding.

This collection of decision-making loci and the mediating procedures and rules together lead to the allocation of publicly funded training hours by location, course type and levels, mode and timing. A more difficult question is how these allocations influence the demand for training. For example, a frequently cited objective of RPL is that of stimulating individual demand for training, and countries have experimented with both sticks in the form of training levies and carrots in the form of partial subsidies for firms to invest in training. Furthermore, the case studies (see Walstab & Lamb 2008) conducted in association with this project have shown that localised planning and optimal provider market conditions can both stimulate regional demand for training.

At the macro level the location of decision-making at three levels – system planning, provider planning and allocations, and user demand appears to be an appropriate framework. This is not to suggest that the infrastructure is perfect.

- ✧ The geographic and demographic variations in the states and territories do not make them ideal as regional planning infrastructures and the configuration and characteristics of the TAFE institutes and colleges vary across and within states and territories.
- ✧ The allocative mechanisms lack flexibility. They are mostly based upon annual student contact hours (ASCHs) and as such they provide little incentive for providers to be innovative in their delivery. The student contact hours system also discourages cost transfer and subsidisation within institutes of courses that are partially fee-for-service.

- ✧ There remains a major divide between large and mostly publicly funded TAFE institutes/colleges and mostly fee-for-service-based private RTOs. The failure of the TAFE sector to establish a strong fee-for-service element in their operation is in contrast to the limited access of private RTOs to public VET funds, and the high levels of activity outside the regulated providers and programs. The operational and cultural differentiation between the public and private sectors appears to be too great.
- ✧ In a similar manner, the amalgamations of TAFE, such that there are now almost as many universities as there are TAFE institutes in Australia, raise issues of whether sufficient proportions of public training funds are located in providers that are sufficiently responsive to local skill needs, are able to adapt to changes in skill needs and short-term needs, and are likely to work within industry in designing delivery for future skill needs.

## Data for planning

All authorities utilise quantitative data on skills needs and industry and occupational trends at state and sub-regional levels. The data include the Skills in Demand data, other ABS data, AVETMISS data and data gathered and/or computed at the state or territory level. In several if not most cases these data analyses are quite detailed and employ sophisticated modelling systems. However, authorities have recognised the limitations of these exercises because of the unreliability of data at the regional and especially sub-regional levels. So while all authorities utilise the DEWR data, they all acknowledge its limitations and there has been a tendency for several authorities to reduce their use of the Monash model.

Consequently, authorities supplement the survey-based quantitative data with a range of data gathered through other means. This includes the input of the TAFE institute and college strategic plans and proposed profiles, which in turn are based upon local reconnaissance and analysis. This is an important source of information, but it also has its limitations. There is a tendency for many institutes and colleges to display path dependency and have a limited market outlook, and this is in part conditioned by the difficulty in changing staff profiles. The state-centralised employment of some TAFE systems is likely to reduce flexibility in shifting profile. Nevertheless, the interaction between the state training authority and the TAFE institutes/colleges is a key part of the planning processes. This is often iterative and can extend to either one or more adjustments of profile throughout the years, or it can provide the opportunity to renegotiate and possibly trade profile with other institutes throughout the delivery year.

Most large systems employ regional reconnaissance or data-gathering beyond the TAFE networks. These are either regional studies, which can be quite detailed (as in Victoria), or involve the input of regional planning or liaison officers or offices. In most jurisdictions the number of ITAB/ITBs has been reduced, if not abolished. However, all systems retain industry advice mechanisms and networks and the planning processes typically include industry studies or analyses such that the planning processes are a combination of regional and industry analyses (as in Western Australia). All systems have devoted resources to planning units and personnel that coordinate and synthesise these inputs and processes. As would be expected, the amount of resources devoted varies across systems.

## Economic and workforce policies

All systems are influenced by state and territory economic and social strategies and priorities. It would seem that most if not all state and territory governments are now more active in these policy areas than in the past. Strategies and statements that impact upon VET planning have been issued by the department responsible for VET, jointly issued by several departments. Examples include the Northern Territory Jobs Plan – Building the Northern Territory Workforce (Department of Employment, Education and Training [NT] 2005), South Australia's Skills Action Plan – First Steps

(Department of Further Education, Employment, Science and Technology and Department of Trade and Economic Development 2005), and the Queensland Smart State Strategy (Department of Premier and Cabinet [Qld] 2005).

These strategies and statements emphasise the centrality of workforce skill development in state and territory government policies. This was indicated by the decisions of the February 2006 Council of Australian Governments (COAG) meeting to support a substantial new National Reform Agenda embracing human capital, competition and regulatory reform streams. In the smaller states and territories the VET priorities can be influenced by major projects. The Olympic Dam and naval destroyer projects in South Australia and the North West Shelf in the Northern Territory are two examples.

## Social policies

**Table 9** Year 12 retention rates, 17 and 20-year-olds in education, training, employment and unemployment, percentages

Year	Year 12 retention	Full-time education		Full-time work		Higher education		Enrolments in TAFE 15–19
		Age (years)		Age (years)		Age (years)		
		17	20	17	20	17	20	
1985	46.4	35.51	14.26	35.30	62.32	3.1	15.0	40.6
2004	75.3	52.21	37.07	13.41	43.91	13.5	34.5	26.1

Source: ABS, Schools Australia, Labour Force, various years, NCVER

Table 9 compares the percentages of the Australian population aged 17 and 20 engaged in full-time education and in full-time work in 1985 and 2004. The collapse of the full-time youth labour market has placed huge pressure upon the three education and training sectors. All systems have policies of increased levels of youth and young adult participation in education and training. With university enrolments plateauing in 2004 and an incapacity to raise apparent school retention rates beyond their 1992 peak of 82%, governments are now looking towards the TAFE sector to accommodate larger elements of both the school and post-school age cohorts. Tasmania has looked towards TAFE as one means of diverting high drop-out rates in year 10 under its State of Learning and Guaranteeing Futures (2005) policies, and Queensland and Victoria have recently adopted policies of guaranteeing all people a place in a public provider (school or TAFE) until the age of 20 to complete year 12 or equivalent.

TAFE's role as a general provider of education for the community is strongly felt at the agency and the institute/college level. There is variation across the institutes and colleges and some of the institutes located in the inner parts of the large cities have taken a more commercial approach. However, most of the directors of TAFE institutes and colleges stress their community role. While many are unhappy about the increased demand from school age students, they do accept a responsibility for this cohort. The patterns of enrolments reflect this across the country. School age and immediate post-school age enrolments tend to be higher in non-metropolitan areas where school retention rates and higher education participation rates are low. However, the patterns are not consistent as some urban regions have high levels of youth participation in TAFE. Furthermore, the youth guarantee frameworks that have been adopted by some states (Tasmania, Victoria, Queensland) may increase the school age demand for VET.

# Conclusion

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## Current and adaptive strategies

So is it possible to make a judgement about VET's current and adaptive strategies? This question needs to be prefaced with four points.

First, as has been argued in this report, the sector's focus upon skill needs is mediated by state and territory demands, as well as national social and economic policies and programs, and by the infrastructure of the TAFE sector and its historical remit as a community provider.

Second, the adaptive capacity consists of a largely open market of fee-for-service VET (accredited and non-accredited), predominantly in the private VET sector, and the multiple-level planning infrastructure of the formal state and territory training systems. The relationship between the market and profile elements of VET is determined almost totally by the patterns of realised demand for the funded and accredited VET programs, mostly in TAFE. That is, demand for non-publicly funded VET is secondary to the funded VET for reasons of access (availability, location, mode, timing) or quality. On the whole personnel within the planning regimes have little idea about this relationship. Approaches to the use of public funding to stimulate fee-for-service demand and to a lesser extent industry and individual investment in training in the form of fees and opportunity costs, do not have a significant presence within the planning regimes.

Third, the planning infrastructures are multi-level, use a range of data and are relatively interactive and dynamic. These approaches compare with the much cruder and mostly student demand-based approaches of the university and school sectors.

Fourth, however, the adaptive capacity of the VET systems at the point of delivery is almost totally dependent upon student contact hours. This has led, certainly in the past, to practices such as trading of profile across course/industry areas and providers, and even dumping of SCHs. When combined with the increased size of the TAFE institutes, their limited capacity to supplement public with private revenue, and their industrial cultures and tendencies towards path dependency, these mechanisms would appear to have limitations. In contrast authorities have used contestable and targeted funds to stimulate innovation in delivery.

So an answer to the question is ventured as follows:

- ✧ There is a comprehensive and relatively complex planning and resource allocation process for VET in Australia that is located at the national, state and territory and local (mainly TAFE) levels. A considerable amount of resources are directed towards this planning.
- ✧ The process is directed almost entirely towards publicly funded VET, which is mostly made up of TAFE profile for SCH, and there is a limited capacity to influence the fee-for-service market.
- ✧ There is a danger of the planning and funding systems becoming compliance-oriented and restricting provider flexibility and responsiveness. In some countries (for example, the UK [Leitch 2006]) there have been recent moves to reduce the planning processes in favour of greater market influences.

These conclusions are expressions of the tensions within the 'national VET system' that result from multiple demands, historical legacies and different economic and social contexts across the country.

They also are a result of the limitations of a training market that is mostly reliant upon supply-side initiatives. In turn this is partially because of the limited success of demand-side initiatives such as vouchers (Haukka et al. 2004).

So finally is there an optimal adaptive model for VET to meet current and future skill needs. Any ventured answer to this question needs to be qualified with the different regional and infrastructure contexts across the country. However, upon the basis of the state and territory approaches and initiatives and the regional case studies the following are possible elements of a 'best model':

- ✧ Multiple, interactive and responsive planning. The nature of the training market means that, while a large percentage of delivery is localised, a significant element is for a broader market and even some national markets. Therefore, the multiple-level planning arrangements that have evolved need to continue and be refined. The levels should be interactive in the flow of information and responsive to this information, rather than restricted to compliance. As well, the agencies involved should go beyond the suppliers, at all levels. At the local level the providers should go beyond the TAFE institutes/colleges, which in many if not most systems appear to have a monopoly status at this level.
- ✧ In this regard, as the case studies (Walstab & Lamb 2008) have indicated, a localised capacity for planning and cooperation between providers and other agencies and stakeholders and for the integration and dissemination of information can improve adaptability.
- ✧ The use of multiple data sources at all levels in the planning and allocative processes is important.
- ✧ The practice of some systems in gaining reconnaissance on regional and industry sector and occupational needs is a useful approach. The location and characteristics of demand or needs are both important, as is the nature of the relationship between them.
- ✧ It is important to have providers that are geared to both current and potential market demand. This is a major challenge to the VET sector and suggests that internal structures should be geared to this need. However, the current funding arrangements based upon SCHs would appear to militate against internal structures with a high degree of flexibility; and a high degree of external autonomy to establish market or client relationships.
- ✧ In a similar manner, and as also indicated by the case studies, localised markets that include a range of providers such that competitive conditions are created are likely to be more responsive and adaptive to skill needs and demands.
- ✧ More flexibility should be built into the funding allocations. This implies mechanisms beyond SCHs and more funds allocated for contestable programs and private RTO-delivered programs.

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- Walstab, A & Lamb, S 2008, *Participation in vocational education and training across Australia: A regional analysis*, NCVER, Adelaide.

# Appendix 1:

## Skills consortium publications

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The following is the complete list of titles produced by the National Institute of Labour Studies, Flinders University and the Centre for Post-compulsory Education and Lifelong Learning, University of Melbourne, through the research project, A well-skilled future: Tailoring VET to the emerging labour market.

*Forecasting future demands: What we can and cannot know*

Sue Richardson and Yan Tan

*Future skill needs: Projections and employers' views*

Diannah Lowry, Simon Molloy and Samuel McGlennon

*Demographic impacts on the future supply of vocational skills*

Yan Tan and Sue Richardson

*Skill acquisition and use across the life course: Current trends, future prospects*

Bill Martin

*What is a skill shortage?*

Sue Richardson

*Changing forms of employment and their implications for the development of skills*

Sue Richardson and Peng Liu

*Changing work organisation and skill requirements*

Bill Martin and Josh Healy

*Social area differences in vocational education and training participation*

Richard Teese and Anne Walstab

*Participation in vocational education and training across Australia: A regional analysis*

Anne Walstab and Stephen Lamb

*Current vocational education and training strategies and responsiveness to emerging skill shortages and surpluses*

Jack Keating

*Matching supply and demand: International perspectives*

Jack Keating

*Impact of TAFE inclusiveness strategies*

Veronica Volkoff, Kira Clarke and Anne Walstab

*A well-skilled future*

Sue Richardson and Richard Teese



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The consortium, *A well-skilled future: Tailoring vocational education and training to the emerging labour market*, comprises researchers from the National Institute of Labour Studies in South Australia and the Centre for Post-compulsory Education and Lifelong Learning in Victoria. Its program of research aims to investigate future work skill needs and work organisation arrangements, and their implications for vocational education and training.

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