SUPPORT DOCUMENT

Crazy paving or stepping stones?

Learning pathways within and between vocational education and training and higher education – Support document

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This document was produced by the author(s) based on their research for the report, *Crazy paving or stepping stones? Learning pathways within and between vocational education and training and higher education* and is an added resource for further information. The report is available on NCVER's website: <http://www.ncver.edu.au/publications/1722.html>.

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Appendix A: Literature Review

Introduction

This document describes the literature relating to the two projects: 'Learning pathways for young people' and 'Choosing VET: an evaluation of career development services'. These two studies spotlight two areas on the map of young people's transitions between education, training and employment. The one study investigates the policy initiatives which determine the pathways available to young people, examines the statistics which represent how pathway choices are taken up, and takes a close look at personal stories of young people making these choices. The second study examines the career services which facilitate these choices, and evaluates them from the point of view of the client. The focus of both investigations is vocational education and training (VET). What we are looking at is content and process in a journey: what are the pathways, how are these determined what and how do people choose from among the available options, and what does this mean in practice, at a personal level?

These themes are interwoven in the literature. As the focus on young people's transitions has developed, there has been an increasing emphasis on careers support to facilitate these transitions and maximise the outcomes for young people. This literature review, therefore, initially summarises the policy context of young people's transitions between education, training and employment. It then examines a selection of initiatives which are in place to create pathways for these young people, and focuses on the specific program options that are available to them currently. The review then picks up the thread of careers support from earlier, describes the services delivering this support and reports on current developments and issues in the provision of this service which are relevant to the end user.

Policy relating to pathways and careers support

Background

In his paper 'Youth pathways to promote lifelong learning' (McKenzie, 2000), the author stated that the term 'pathways' was first used widely with the publication in 1991 of 'Young People's Participation in Education and Training' (the Finn review), and was a powerful organising concept behind much education and training reform during the 1990s. Finn's image was a useful concept to describe the various combinations of education, training and employment people might undertake to achieve a related goal and had five main elements:

✧ a set of interrelated experiences providing for progression;

✧ a sense of continuity even when individuals cross institutional and sectoral boundaries;

✧ access to a range of different pathways and the ability to move from one to another without losing ground;

✧ a need for effective credit transfer and articulation arrangements to provide smooth bridges between pathways; and

✧ Signposts (information and career advice) at the start of each pathway and at each junction between pathways (p4).

McKenzie further stated that the primary age group to which much of this activity has been directed has been young people, aged from around 14 or15 to the mid to late 20s (p1) and that a pathways framework can assist young people in avoiding the pitfalls which might prevent their transition from secondary education to work, as identified by the OECD (McKenzie, 2000, p4). Young people were spending longer in the transition from compulsory education to work, partly due to the structure of the educational pathways available to them and partly due to the nature of the labour market and young people's attitude towards it (OECD, 2000, pp11-12)

The pathways available to young people in Australia when they left compulsory education in the late 1990's were summarised by Misko (1999) as:

1. Compulsory to post-compulsory school

2. School-to-university/higher-education

3. School-to-vocational education and training

4. Apprenticeship/traineeship

5. School to work

Apprenticeships focus on the skilled trades and related occupations and are limited to young people entering those occupations, whereas traineeships extend to a wider group of occupations, particularly in retail, clerical and service occupations (Robinson, 2001). However, Misko found that while one third of students went on to higher education and one quarter went on to VET studies, there was a declining number going into apprenticeships (countered by an increasing number going into traineeships) and a declining rate of year 12 retention rates, with the rate of unemployment for students inversely related to the number of years of post-compulsory schooling they had completed. Misko argued 'It would be a good idea to focus attention on how to develop the career or life aspirations of young people, rather than on what happens when we find that the development of these aspirations has been limited by insufficient training during the early years' (p.ix). This sentiment was echoed by Maxwell et al (2000) who argued for a greater diversity among VET providers and more flexibility in the training market to meet a wider range of motivations and provide new direction for young people.

In Australia, attending school is generally not compulsory beyond the age of 15 and a concern with students who leave school early is a recurring theme in publications. 'Leaving school early' (ANTA, 2001) referred to statistics gathered by the Australian Bureau of Statistics in 1999 when one in three boys and one in five girls left school before completing year 12, and pointed out the disadvantages in leaving school early in terms of employment, income and further education and training. At this time, the Australian National Training Authority (ANTA) was implementing a strategy to reinforce the economic and personal benefits of training, education and job-related learning, to develop explicit and well articulated post-compulsory options and pathways for young people and to provide information on available support services, including improving careers advice and online information services (p3).

There was concern internationally with enhancing the outcomes for students in their transition from school. Australia was one of fourteen countries which took part in the OECD's 'Thematic review of the transition from initial education to working life', which was launched in 1996 (OECD, 2000). Joint concerns of the participating countries primarily focussed on youth unemployment, the seeming divergence between policy and what was happening in practice, and assisting young people to meet the challenges of an increasingly complex world. This was within

a climate of increased interest in lifelong learning. The review recognised the initial transition from school as the first of many moves between combinations of work and learning that young people would experience throughout their lives and that the social, economic and educational contexts of the transitions were important. Six key features which characterise effective transition frameworks emerged from the thematic review:

1. A healthy economy

2. Well organized pathways that connect initial education with work and further study

3. Widespread opportunities to combine workplace experience with education

4. Tightly knit safety nets for those at risk

5. Good information and guidance, and

6. Effective institutions and processes

However, compared with other OECD countries, Australia's transition outcomes were mixed, with employment rates for 20-24 year olds above the OECD average and teenage unemployment worse than the OECD average; with early school leaving rates being comparatively high but with relatively large numbers of young adults achieving university level tertiary qualifications (Sweet, 2001b). The OECD report recognised some key principles driving policy and programme reforms in the vocational education and training sector in the UK and Australia, amongst which was the principle of multiple pathways and flexible delivery. Other principles were: the development of a national system; the award of qualifications based on competencies, rather than time spent in education and training, and a system driven by demand.

ANTA provided a response to the OECD's 1998 interim comparative report on the transition from initial education to working life (McDonald et al, 2000). In regard to learning pathways and qualifications frameworks, the response recognised that 'in order for people to learn throughout life, they need to be able to weave in and out of education and training and to build on their education, training and work experiences' (p2), and reported on the progress which had been made so far in providing for seamless transitions for learners in the vocational education sector via various frameworks, such as the Australian Qualifications Framework, the National Training Framework and the Australian Recognition Framework. The 1990's also saw the emergence of Vocational Education in Schools (VET in Schools), which refers to vocational programs that comply with the National Training Framework and which also form part of a senior secondary certificate, where the curriculum and assessment are based on designated competencies, and outcome standards are industry-based (Fullarton, 2001a). The ANTA response to the OECD report identified a particular need for a process for enabling VET in Schools to be counted towards a tertiary entrance score and for a credit transfer framework between VET and university qualifications to facilitate transition between the two sectors. In regard to information and guidance, it stated that 'It seems that the challenge is not to provide more information on courses, but to make it more accessible and understandable by users, and to develop guidance and follow-up services for all young people that integrate educational, labour market and social counselling' (McDonald et al, 2000, p14). Besides effective information services which were in place, such as the on-line sites Ozjac and Take-off, it referred to the development of a national on-line career information system initiated by the MCEETYA Career Education Taskforce.

However, despite the progress which was made generally in facilitating transitions and enhancing pathways for young people, it was generally felt that there was a gap between the intent articulated in policy and what was actually happening to young people. In 2001, the 'Understanding youth pathways' research conference provided a forum for discussing these key areas of educational policy and practice. In his paper describing the background to the conference, McKenzie stated that what was needed was 'a "system" of pathways (resulting) from an interaction between the pathways designs and reforms of policy makers on one hand, and the

decisions by young people and their families on the other' (McKenzie, 2001, p.vi). Many felt that while the pathways metaphor provides a convenient lexicon for policy decisions, pathways were often individualistic and the metaphor was not appropriate. Also, while young people had more differentiated itineraries, they did not necessarily have more control over them (Raffe, 2001, p5; Brennan, 2004 p51). Underlying inequalities and structural influences persisted, for example in rural Australia where 'adult and youth learning pathways in communities which comprise the majority of Australia's land area are in crisis in 2001 … it starts where the mobile phone reception ends' (Golding, 2001, p17). Furthermore, there was a group, the early school leavers, who did not appear on any pathway (Carter, 2001, p60). Overall, 'a picture emerges of transition pathways that serve the able, qualified and enterprising relatively well, but which are not as well suited to the needs of the less able, less qualified and less enterprising' (Sweet, 2001b, p50)

ANTA policy

The Australian National Training Authority was established in 1992 by the state and commonwealth governments to provide the framework for developing VET policy. The national strategy for vocational education and training from 1998 to 2003 was expressed in 'A Bridge to the future' (ANTA, 1998). The mission of the ANTA Ministerial Council, 'To ensure that the skills of the Australian labour force are sufficient to support internationally competitive commerce and industry and to provide individuals with opportunities to optimise their potential', was underpinned by five objectives. Objective 1 – equipping Australians for the world of work – included 'expanding pathways and options' as a key factor. It was claimed that this would create new opportunities for young people, not only to benefit from a wider range of VET options - at school, through a VET institution, on the job or in community based organisations - but to be able to combine these pathways, such as in a New Apprenticeship which combines school and on-the-job learning, rather than be constrained to one pathway or the other. Objective 2 – enhancing mobility in the labour market - also provided for seamless post-compulsory pathways so that students could move freely both within the VET sector and between VET, senior secondary schooling and universities, and recognised the need for comprehensive careers advice which enables clients to consider the full range of options. An evaluation of this national strategy will be prepared by ANTA in late 2004 (not available 4 Jan 05).

Bridging Pathways was the national strategy, co-ordinated by ANTA, for increasing opportunities in vocational education and training for people with a disability by employing best practice to achieve equitable outcomes for these people (ANTA, 2000a). It was estimated that the shortfall in the participation rate of people with a disability in VET was nearly 178,500 people in 1998 and, without changes to the system, would reach more than 215,000 people by 2005. The strategy had four goals, the first area of action being to 'open the door' for these people by improving pathways to VET and providing accessible information. Consequently pathways which assist people to enter vocational education and training, to undertake courses at all qualification levels and gain employment, if that is their goal, was one of the seven areas of focus. One of the strategies was to provide improved career guidance arrangements that allow people with a disability to make informed choices. Initial findings of the mid term review of the Bridging Pathways indicated that most achievements to date have been at a policy level with less evidence of improvements for people with a disability 'on the ground' especially in terms of employment outcomes. (ANTA, 2004f, p.4).

The technique of scenario planning was used to develop a greater understanding of the issues relating to future policy development and planning in the national VET sector: 'Focus on the future of vocational education and training' (ANTA, 2003b). The three scenarios, or alternative future environments, for Australia selected for the exercise were 'Oz Inc' with a focus on competitive private sector enterprises; 'Universal Training', with Australia as part of an Asian Economic Union and a strong customer focus, and 'Community of Learning', with an inward

looking, self-sufficient economy. The major drivers likely to shape the future of VET over the next twenty years were identified as:

✧ Globalisation

✧ Electronic connectivity

✧ The new economy

✧ New forms and organisation of work

✧ Demographic shifts

✧ Understanding of how people learn

✧ Social values

✧ Government decisions

The report reflected the current situation for young people aged 15-24, for whom changes in the nature of work had made transition a more complex process with a growing number of young people struggling to make successful transitions from school to work: although school retention had risen, there had been only slight improvement in successful transition rates to either post-school education or employment from a low of 78% in 1994 to 85% in 2000 (p20).

The report acknowledged that Australia will need to depend more on the skills of its people than on its natural resources, with commensurate pressure on vocational and further education and training. Amongst the eleven major challenges/opportunities identified in the report, those most relevant to learning pathways were:

1. the shift in the organisation of education from sectoral- to network-based organisation and the need for seamless learning;

2. the need for guidance to help people navigate through learning and working systems; and

3. the need for easy access to learning, perhaps around regional learning hubs.

The subsequent national strategy for vocational education and training 2004-2010, Shaping Our Future (ANTA, 2003f), was drawn up after extensive consultation and collaboration with state and territory leaders and government agencies, industry, regions and communities, training providers and learners. The strategy has a vision, four objectives, 12 strategies and an action plan monitored by key performance measures. The vision and objectives focus on clients, identified as Australian businesses, individuals and communities. In regard to pathways, the strategy recognises that, although pathways between education and training sectors have improved, barriers still exist, particularly between vocational education and training and universities. In particular, the report states that recognition of prior learning/current competence is not yet well used as a pathway. Strategy two - help clients navigate and interact with vocational education and training – has an outcome which states 'clients, particularly youth in transition and small businesses, find vocational education and training more understandable and enjoy easier access to information, career development, navigation and brokerage services' (p15). The relevance of this national strategy to career development is acknowledged in the issues paper informing the development of a national career development blueprint (McMahon et al, 2003, p2). Strategy three emphasises the employment outcomes from vocational education and training (ANTA, 2003f, p15). Strategy ten focuses on making learning pathways seamless through partnerships between VET and other education providers - schools, universities and community education organisations – as well as with the regional development, indigenous and community services sectors (p17). It also proposes co-ordinated policies relating to industrial relations, licensing, safety and training. The strategies articulated in Shaping our Future were found to be relevant to women's participation in VET and their employment outcomes, and are articulated in the ANTA policy document 'Women: shaping our future' (ANTA, 2004f).

The relevant key performance measure for these strategies relates to employment outcomes and benefits after training, and students' satisfaction with their training program. Specifically, the measure of success in regard to pathways is the proportion of students who improve their employment circumstances or continue on to further study, after completing VET. It was also stated that the evaluation of the 1998-2003 national strategy, 'A bridge to the future', be used as a benchmark for Shaping our Future, followed by a progress report in 2008 and a final evaluation in 2011.

The national priority actions for 2004-5 identified in the Action Plan (ANTA, 2003e) included developing a Pathways to Employment national pilot and other transition initiatives for indigenous Australians. Strengthening pathways for all young people, both within VET and between VET and employment, will be an area of continuous improvement rather than a priority for these years. ANTA's commitment to improving pathways and outcomes for young people was reflected in its 2004 national priorities for VET and in the allocation of Special Purpose funding for VET in Schools between 2005-6 (ANTA, 2003a). The seven national priorities for 2004, besides a priority to achieve agreed outcomes for implementation of the national strategies for people with a disability and for indigenous people, described the need to improve pathways between VET and the school and higher education sector for all people (p13). However, the nine annual priorities for 2005 included providing opportunities and better outcomes for young people as they move from school to VET and work (VET, 2004d).

The 'Principles and guidelines for improving the outcomes from vocational education and training in schools 2005-6' (ANTA, 2004c) supported the achievement of the National Goals relating to VET in Schools and the National Strategy for Vocational Education and Training 2004-2010 and, for the first time, incorporated monitoring and reporting on VET in Schools into the National VET Planning and Reporting processes. The guidelines stated that funds will be provided to school authorities for VET in Schools programs which are consistent with certain principles, relating to: recognising training delivered by registered providers; meeting industry and/or enterprise standards; pathways through Senior Secondary Certificates; ensuring dual outcomes; determining priorities for the delivery of VET in Schools; and using training packages (pp3-4). The principle relating to pathways provided for VET in Schools to contribute to qualifications defined by the AQF, including Senior Secondary Certificates or equivalents, and to providing multiple pathways which will articulate with further training, education and, where appropriate, employment (p4).

Anderson's study of 'Individual learners, choice and lifelong learning' (2003), explored the way in which people pursue further study in VET to both initiate and navigate new trajectories during the course of their working lives (p2) and found that individuals are ready and able to exercise more choice in regard to content, assessment and mode of delivery of their VET course. It deemed that the 2004-2010 national strategy supported this propensity, as it placed individuals alongside employers 'at the centre of vocational education and training', valued diversity among learners, and aimed to 'give clients more choices' in order to increase and support participation in lifelong learning (p8).

Training Packages are the bones of the National Training Framework (NTF) – the first packages being endorsed by the NTF Committee in 1997. ANTA has made available on the web a range of pathways charts showing how people can have vocational, career or learning pathways through the qualifications set out in the Training Package for each major industry (ANTA, 2003d). A review of Training Packages was commissioned by ANTA in 2003-4 (Schofield et al, 2004). The review stated that 'training packages are premised on notions of flexibility and access, offering learners entry and progression through a range of pathways … however, there are issues around the capacity of Training Packages to provide entry for the full range of learners … also concerns around the parity of outcomes from the range of pathways into and through Training Packages' (p2). There was a focus in the review on the need to broaden pathways into and from VET. It examined the equity advantages to retaining Certificate 1 and II as a pathway into VET, finding

that these qualifications needed to offer a broad skill mix in order to maintain learner choice and facilitate pathways. The review proposed that Training Packages be more broadly designed to provide a wider range of vocational pathways, not tied to a specific industry. It also suggested that VET in Schools could be less occupationally specific and that a more generic program, including employability skills could be useful in general preparation for work (p6). The report promoted increased articulation between VET and higher education, to facilitate pathways between the sectors both for Australian and overseas students – an important consideration if Australia is to be promoted as a knowledge economy.

ANTA's most recent published annual report (ANTA, 2004a) outlined the performance of the VET sector in 2003. It reported that, in 1999-2003 the proportion of students who used their VET training either as a pathway to further study or training had increased from 20% to 25%. Achievements against the national priority 'Improved learning pathways' included unprecedented growth in students participating in VET in Schools programs (95% of secondary schools and 202,900 students p49) and the development of guidelines for School-based New Apprenticeships. Learning pathways were improved by projects which enhanced credit outcomes for VET studies and improved pathways between VET and higher education.

In October 2004, the Prime Minister announced that ANTA is to be abolished from July 2005, its responsibilities taken into the Department of Education, Science and Training (DEST), and a Ministerial Council on vocational education will be established (DEST, 2004c). In his message in the December 2004 edition of the ANTA magazine, 'Australian Training', the CEO reflected on the success of the national training framework and the shared focus of DEST and ANTA on its continuous improvement (ANTA, 2004b, p3).

MCEETYA policy

The Ministerial Council on Education, Employment, Training and Youth Affairs (MCEETYA) was formed in 1993, comprising of state, territory, Australian government and New Zealand Ministers, to coordinate strategic policy at the national level, the development of national agreements, national reporting and collaborative use of resources. In 1999 the Ministers collaborated to provide a national framework for schooling which demonstrated their commitment to the improvement of schooling and educational outcomes for students. The 'Adelaide declaration on national goals for schooling in the twenty-first century' (MCEETYA, 1999) was a statement giving broad directions to guide schools and education authorities in providing students with 'the necessary knowledge, understanding, skills and values for a productive and rewarding life' (p1). The three goals in the declaration related to schools developing fully the talents and capacities of all students, to having a comprehensive and balanced curriculum with access to vocational education and training programs, and to schooling being socially just. In regard to pathways and career guidance the statement provided for students, when they leave school, having 'employment related skills and an understanding of the work environment, career options and pathways as a foundation for, and positive attitudes towards, vocational education and training, further education, employment and life-long learning' (goal 1.5), and 'all students will have access to the high quality education … that provides clear and recognised pathways to employment and further education and training' (goal 3.6). Besides the many references to vocational education and training in schools, the declaration pointed to the desired linkages and partnerships between education and training, the business sector and the community.

In 2000, the MCEETYA Taskforce on VET in Schools report 'New Pathways for Learning' (MCEETYA, 2000b) described the achievements of the national goals for schooling relating to vocational education and training. It presented a picture of growing participation in VET in Schools programs since 1996 and proposed a new vision for this program to embrace a broader range of initiatives and elements. It proposed the design of a new framework directed at

improving the transition of all young people from school to work and further study through seamless pathways and recommended that, during 2001-2004, efforts should be directed towards improving flexible pathways to enable students to obtain education and training qualifications, with seamless pathways from one qualification to another. Learning pathways were placed firmly in a lifelong learning perspective with a focus on employment outcomes. The Taskforce recommended an integrated approach to career information and guidance services, in order to assist all young people to secure their own futures by enhancing their transition to a broad range of post-school options and pathways.

The subsequent 'New framework for vocational education in schools' (MCEETYA, 2000a) had eight basic features which provided a basis for developing an effective framework for the broad area of transition, among which were 'explicit and well-articulated education and training pathways' and 'career information and guidance and access to student services (p17). The pathways were interpreted in terms of expanding vocational education and training in schools, and alignment with mainstream assessment and qualifications regimes (Allen Consulting Group, 2003, p10). Strategies for these related to recognition of VET courses for admission to university, and raising awareness of post-school VET pathways. In regard to the careers framework, careers education in schools was identified as an area of activity, with particular focus on developing guidelines, linking with wider community strategies and developing a personal learning and transition plan for each young person, including a mechanism for demonstrating and documenting their achievements. The framework also proposed improved access to career and labour market information and career and transition management by way of an improved Jobs Pathway Program, provision of models of careers guidance and transition services, and recognition of existing relevant community partnerships. Other features underpinning the new framework were community partnerships, lifelong learning skills and attributes, enterprise and innovation, individual assistance for students at risk, supportive institutional and funding arrangements, and monitoring and evaluation (MCEETYA, 2000a, p.17). The MCEETYA Taskforce on Transition from School was established in July 2001 to provide advice on a broad range of initiatives relevant to this transition, including VET in Schools, New Apprenticeships and careers services, subsequently commissioning a report on Careers Services in Australia (Miles Morgan, 2002).

In 2002 a survey was undertaken of over 2000 Year 10, 11 and 12 students in all states and territories, examining their experiences of school and career education, VET in Schools programs, labour force participation, and their future work, study and career plans. The *Young Visions* survey found that VET in Schools programs were generally well regarded by those who participated, however a major barrier to participation was the perception of VET in Schools programs as not being relevant to an academic pathway. In 2003 a follow-up survey (Helme & Polesel, 2003) was designed to report on the post-school destinations of the 2002 *Young Visions* participants, with a primary aim to assess the impact of a range of school programs (such as VET in Schools programs, career education/advice) and labour market experience (such as Structured Workplace Learning, work experience, part-time work) on their post school pathways. The study found that early school leavers, students from non-metropolitan locations, those from low socioeconomic backgrounds, Indigenous school leavers and those with learning disabilities had poorer outcomes in terms of employment, further education and training, pointing to a need for improved transition support for a broader range of young people. Early leavers who had participated in VET in Schools programs had more positive outcomes, though VET in Schools was not generally perceived to be compatible with a university destination. School leavers who had gone on to further education and training were generally very satisfied with the careers education and advice they had received from school, and work experience was found to have a significant impact on their career decision making. Families and other external contacts were also found to be important factors in this process. These internal and external sources of careers support were found to be less effective for those who entered the labour market directly from school, or for those who did not have the same external networks. Information and advice about

university and TAFE destinations was rated more highly than advice about apprenticeships and traineeships and this more highly than career information about jobs. Although apprentices and trainees were satisfied with their jobs and the quality of their training, other school leavers going directly into work generally entered low skilled/unskilled jobs or were unemployed.

A significant review, undertaken at state level, in regard to pathways for young people was the Ministerial Review of Post Compulsory Education and Training pathways in Victoria (The Kirby Review), released in 2000. This review challenged some of the traditional notions upon which post compulsory education and training was built: separate sectoral arrangements with central administration; pathways that were linear, relatively static and rigid; and the separation of education and training from industry, employment and community links (Keating, 2001). The review identified three broad goals relating to the provision of education and skills, the development of social capital and the improvement of educational outcomes and associated transitions. The review concluded that 'pathways' are uncertain, that the term now lacks precision and that the traditional notion of linear and planned is mostly inaccurate and sees pathways as a series of learning platforms that allow young people to 'progress' to a further worthwhile destination' . However, 'to some extend the Report lacked details of what should be done to improve 'pathways' for young people' (p23).

In view of the various reviews, both nationally and internationally, in respect to improving young people's transitions, in 2003 the Business Council of Australia reported on progress so far in respect to the major transition features identified in the New Framework for Vocational Education in Schools (Allen Consulting Group, 2003). Strong progress was reported in providing explicit and well articulated pathways (more flexible options to expand choice and smoothly link to outcomes); moderate progress in developing supportive institutional and funding arrangements (coherent policies) and monitoring and evaluation (data collection on success rates); slow progress in developing lifelong learning skills and attributes (such as positive attitudes to learning and employability skills), in providing individual assistance for students at risk and providing career information and guidance and access to services. In regard to pathways: VET in Schools was identified as the main feature, though this was reported to vary widely across the States, with moderate success in school-based New Apprenticeships; further cross collaboration between governments was identified as a major challenge; the progress in local community partnerships was promising and 'shows potential to mature into a major feature of transition infrastructure' (p3), but lacked accountability; and careers education, information and guidance systems were expanding but in an incoherent, unco-ordinated fashion, though the report alludes to the development of a national blueprint for careers information, guidance and counselling. Pathways available to young people after compulsory education were reported as general education, apprenticeships or school-based vocational education, or combinations of these. However, it was claimed that success depended on young people having a wide and flexible choice of pathways and on there being close connections between these choices (p7). In regard to guidance systems, besides relevant information and careers education, self-directed self assessment, work experience and community involvement were seen as key factors.

The Business Council of Australia's report summarised progress in respect to transitions throughout Australia up to 2003. While VET in Schools and school based new apprenticeships were significant pathways available nationally to young people, it reported that the states had undertaken a number of initiatives. In New South Wales, the major initiatives were the establishment of forty district offices to support schools and five multi-campus senior colleges, changes to the HSC and the introduction of a range of programs to help students who were at risk. Developments in Victoria were based on The Kirby Review: in addition to new goals for post compulsory achievement set by the Premier, a re-organised Victorian Qualifications Authority and a new Vocational Certificate in Applied Learning, programs included Managed Individual Pathways and Local Learning and Employment Networks (LLENs), which reflected the individual and partnership themes in policy development. Queensland introduced a raft of

reforms in response to the 2002 White Paper on 'Education and Training Reforms for the Future', again with a focus on community commitment (eg District Youth Achievement Plans) and individual instrumentality via individual student plans. Here too, structural alternatives, such as multi-path colleges, were being investigated and changes in respect to post compulsory schooling and certification will take effect in 2006. The 'Futures Strategy' in South Australia had a multi-dimensional focus, with increased cross-agency collaboration. Again, focus was on the individual and the community, via individual transition plans and seventeen school clusters or FoCIS (Focus on Connected Integrated Services). Western Australia developments were directed towards improving retention rates, and addressing barriers impeding access to pathways for students. In addition to facilitating recognition for vocational and general education attainments across various providers, significant institutional changes in Western Australia have seen the alignment of two departments administering education and training and the organisation of schools into clusters. Tasmania has focussed on pathways planning, alignment of the TAFE and school qualifications framework and on community business partnerships. Activities in the Northern Territory included a 'School to Work Strategy' and a range of initiatives for indigenous and non-indigenous, rural and remote young people. The ACT was introducing programs at middle school through to senior school level via Pathways Plans and pre-apprenticeship programs and is reviewing the delivery of career advisory services.

In 2004, MCEETYA produced a set of general principles relating to young people's participation in government planning and decision making (MCEETYA, 2004), building on the commitment to young people expressed in the 'Stepping Forward' declaration (MCEETYA, 2002). The principles relate to empowering young people, valuing diversity, making their engagement purposeful and encouraging them to engage in the policy process. Although not specific to any single area of policy, it does demonstrate the importance placed on the contribution of young people and includes a statement of commitment by the Australian governments to enhancing the engagement and participation of young people in government decision-making.

Commonwealth Government policy

While MCEETYA has the responsibility for school education, the Commonwealth government has the responsibility of national leadership (Allen Consulting Group, 2003, p11). The Prime Minister's Youth Pathways Action Plan Taskforce, set up in 1999 as a result of a key recommendation from the Prime Ministerial Youth Homeless Taskforce Report 'Putting families in the picture', was required to consult and advise on the scope and direction of a five year plan with a focus on improving support for all young people in their transition to independence and on strengthening pathways for those who do not go straight from school to further education and training or full-time employment, and those not fully engaged with their community (Eldridge, 2000). In its 2001 report, 'Footprints to the Future' (Prime Minister's Youth Pathways Action Plan Taskforce, 2001), the taskforce made a national commitment to support young people in achieving their goals. The taskforce pointed out young peoples needs come 'joined up' but that services and support, on the other hand, come from separate and separately accountable jurisdictions – ones which can also be in competition with one another for scarce resources and recognition (Figgis, 2001, p29). Twenty-four recommendations were underpinned by the principle that education and training are the foundations for effective transitions and the need for relevant career and transition support. Other themes related to the need for collaboration in assisting young people through focused local partnerships and a more co-ordinated and collaborative approach to the delivery of youth services. Subsequently, the Enterprise and Career Education Foundation was established to support vocational education in schools and to encourage relevant partnerships between business, schools and the community. A key initiative arising from these recommendations was the Career and Transition (CAT) programme, implemented in 2002 to test ways of delivering proactive career and transition services for all young people, and the Partnership Outreach Education Model (POEMS) which was designed to

test the delivery of flexible education models for young people who were disconnected or at risk of becoming disconnected from school.

Following the release of 'Footprints to the Future', in 2001 a MCEETYA subcommittee on young people's transitions was charged with developing practical options for strengthening transition pathways for young people who were disconnected or at risk of becoming disconnected. 'Stepping Forward: improving pathways for all young people' was the relevant Ministerial declaration of commitment to young Australians to provide a common direction for improving social, educational and employment outcomes for all young people, particularly those most at risk. The Action Plan associated with this declaration presented five tables, one for each of the five key areas for action agreed by the Ministers (MCEETYA, 2002). The five key areas were:

1. Education and training as the foundation leading to pathways for effective transition for all young people

2. Access to career and transition support

3. Responding to the diverse needs of young people

4. Promulgating effective ways to support young people and

5. Focused local partnerships and strategic alliances

The intent of the action plan was to promote a holistic approach to assisting youth in their move towards independence and a commitment to greater cross-collaboration and cooperation.

In respect to the tertiary sector, DEST published an issues paper in 2002, Varieties of Learning (DEST 2002b), which explored the complex relationship between universities and VET institutions. While acknowledging the strengths provided by the unique differences in the mission, structure and profile of the two sectors, it recognised that the delineations had become blurred in recent years. Continued growth in this interface presented some key issues relating to (pp21-33):

✧ credit transfer

✧ articulation/joint courses

✧ dual sector universities

✧ multi-sector campuses

✧ infrastructure sharing in regional areas

✧ research collaboration

✧ qualifications

✧ the impact of future demand on both sectors

The paper described the need for clear and easy, and equally valid, pathways to accommodate a flexible and adaptable workforce within a lifelong learning framework. 'The challenge is to develop in Australia a national system that underpins educational choice' (p11). Possible ways forward included:

✧ promotion of joint courses

✧ enhancements to credit transfer and articulation

✧ multi-sector campuses and sharing of infrastructure

It went on to suggest the development of joint higher education programmes, claiming that such an arrangement 'could also significantly increase student choice' (p10, p48).

The similarities and differences between the VET and HE sector were further explored by researchers. In their paper on 'Australia's Tertiary Education Sector' Karmel and Nguyen (2003) pointed to the ways in which the VET and higher education sectors were quite different, but found that they were not clearly distinct, as dual sector qualifications, cross sectoral provision, and the considerable number of people who have attended both sectors, all meant that in many ways it was better to think of Australia's tertiary education sector as a whole (p12). In his paper on transfer between the VET and HE sectors Moodie identified inconsistencies in credit transfer arrangements and argued that increasing student transfer between VET and HE 'will raise difficult policy issues for governments' (p52), but also found that 'the sterile dualism of vocational and general education can be overcome by considering vocational education and training's role in preparing students for a vocation and a career (rather than) the sector's current unitary role of preparing students for work '(Moodie, 2004, p56).

In 2004, DEST commissioned a report providing an overview of local initiatives which assist young people, aged 15-24, in a range of transitions - into work and study, independence and healthy lifestyles (Figgis et al, 2004). The report provided 48 illustrative examples, covering urban and regional areas and addressing a wide range of programs clustered into eight categories:

1. Expanding general education to include vocational preparation

2. Fostering entrepreneurial skill, knowledge and habit of mind

3. Changing the educational 'climate'

4. Supporting youth in transition from youth services agencies

5. Supporting youth in transition through community-based resources

6. Mentoring

7. Providing careers information and advice

8. Creating alliances…blurring boundaries

Having drawn a landscape of transitions, composed of locations where young people find support and ways that these locations can be linked to provide the required support and advice, the report identified gaps in the landscape. The most obvious gap was intervention for individuals aged 19-24 who may not know what they want to do, not qualify for, nor probably need, existing welfare/employment services but who are not connected to a *supportive* institution. 'The landscape of support for youth in transition is currently targeted at the younger half of the transition cohort and particularly on youngsters in well known 'at risk' categories' (p32). The report identified a need for tracking and monitoring the trajectories of young people during their post-school years. The report also found that programs are often localised and not replicable to another group and that there is an 'apparent neglect of parent support groups' (p32). However, in summary 'it has to be said that what is decidedly *not* missing in this landscape is any lack of concern, imagination or effort to provide support for youth in transition' (p33).

DEST commissioned Access Economics to develop projections of the future demand for publicly funded vocational education and training (DEST, 2004d). This analysis built upon and extended a forecasting model for VET demand developed by Access Economics (the 'VET demand model'). The report found that VET policy initiatives implemented over recent years had encouraged greater participation in publicly funded VET; that this trend would likely continue as a result of current policy initiatives, based on recent extensions of training packages; and that further policy initiatives were difficult to project, and so were absent from the forecasts. With an unchanged fee structure, annual average growth in VET hours from 2003 to 2010 was projected to be 2.2% per annum, while growth in VET students from 2003 to 2010 was 1.8% per annum. Those rates were both considerably slower than those recorded over the past decade.

Projections, allowing for increases in fees introduced in 2004, were 1.9 and 1.6 for VET hours and VET students respectively.

Estimates took account of
- the gross number of people entering an occupation to replace those who retire, or those who leave for some other reason (normal turnover)
- the trend towards greater part-time and casual employment
- Productivity growth
- VET policy initiatives

The House of Representatives inquiry into VET in Schools (House of Representatives Standing Committee on Education and Training, 2004) described a successful VET in Schools system as well as structured workplace learning (SWL) and School-based New Apprenticeships, and outlined the progress made in developing vocational education as a pathway from school to work. The report investigated individual needs and pathways and found that, while there was considerable diversity in the range of pathways available to young people, there was more work needed on the selection decisions undertaken by young people (p258). While processes such as dual recognition of general and VET qualifications in schools assisted students greatly in making the transition to post-school options, the Committee suggested that TAFE-run senior high schools, such as Bradfield College in the Northern Sydney Institute of TAFE, might also be effective. In regard to careers information and guidance, the Inquiry deemed that all students needed to be introduced to general concepts associated with employment, the world of work and career planning and to be encouraged to begin considering their post-school pathway earlier than the post compulsory years (p218). It also found that the wide range of career programs and service providers could be better co-ordinated, to avoid duplication and enable easier navigation for young people, and made a recommendation to this effect (Recommendation 40).

The Inquiry differentiated between outputs and outcomes of the vocational education and training system and the need for more information on outcomes: outputs referring to qualifications, skills and competencies; outcomes referring to students gaining their first employment, improving job prospects or increasing employment income. In regard to VET and HE pathways, national outcomes indicated that TAFE graduates had higher employment outcomes after graduation than university graduates and were employed in a broader range of occupations and industries, but with lower incomes. It suggested that problems in adapting to the transition to the university sector could be mediated by an alternative learning experience, such as a VET qualification, that could lead to a degree program. Recommendation 41 stated that 'research be conducted at a national level into immediate and longer term post-school outcomes of students to better evaluate the effectiveness of VET in assisting students into career pathways' (p272). Since the report, in order to support the greater than 70% of school students who do not go directly from school to university, the Minister for Education, Science and Training has announced more than $4.5 million in funding for career and vocational education in schools and launched the National Skills Shortages Strategy (DEST, 2004f).

Since the 2004 general election, the Prime Minister has announced: the forthcoming abolition of ANTA with its functions being subsumed into the VET division of DEST; the establishment of a new ministerial post for VET, reporting to the Minister for Education, Science and Training, and a new Ministerial Council on VET; its intention to establish an Institute of Trade Skills Excellence and 24 technical colleges focusing on the trades; and its intention to directly fund group training companies to deliver pre-vocational qualifications and school-based apprenticeships (Wheelahan, 2004). In November 2004 the Commonwealth government announced that the technical colleges would be established in 2006 to fulfill its election commitment, with the aim of addressing skill shortages in trades and correcting a perceived imbalance in perception of the relative value of VET and HE qualifications (DEST, 2004e). Further reforms which involve VET, including the private sector becoming a provider of HE qualifications, associate degrees, provide 'hitherto unparalleled scope for private providers to

enter the HE market' with nine providers already approved as HE institutions and possibly another 40 seeking Ministerial approval. However, 'If the government wants to have some say over the way the HE market develops it will need to bring TAFE into the policy framework' (Wheelahan, 2004). These reforms are seen as stimulating the HE market which arguably will introduce a wider choice of pathways for young people. The government also announced the creation of an Australian Network of Industry Careers Advisers to extend existing career advice and work experience arrangements, to support better transitions to education, training and work for young people (VECCI, retrieved 25 Jan 05).

International policy

A concern with young people's transitions reflected in the OECD's comparative review (OECD, 2000) was reflected in the literature of other international and national organisations. These highlight the advantages of vocational education in extending and improving the pathways for young people but also the need for career guidance to assist this process.

In 2002 the United Nations Educational, Scientific and Cultural Organization (UNESCO) and the International Labour Organisation (ILO) presented their major policy statements, building on the goal agreed by the international community (at the World Forum on Education, Dakar 2000) 'to ensure that the learning needs of all young people and adults are met through equitable access to appropriate learning and life skills programmes' (UNESCO/ILO, 2002, p2). This publication set out the general principles, goals and guidelines to be applied by each individual country according to its socio-economic needs and available resources with a view, amongst other goals, to enhancing the status of technical and vocational education (p8). Amongst 100 recommendations, recommendation seven stated that technical and vocational education should begin with a broad base which facilitates horizontal and vertical articulation within the education system, and between school and the world of work (p10), and recommendations 55-62 referred to the provision of guidance as a continuous process spanning the entire education system, preparing students and adults for the real possibility of frequent career changes, which could include periods of unemployment and employment in the informal sector (p35).

The second report on vocational education and training policy in Europe (Bainbridge et al, 2003) stated that learning for employment, through better quality education and training, was at the heart of the European Union's strategic goal that, by 2010, Europeans will live in the most competitive and dynamic knowledge-based economy in the world with more and better jobs and greater social cohesion. This would be achieved by developing and reforming vocational education and training policy to improve systems, make access to learning easier and raise skill levels (p3). A major aim was to reduce the number of young people with inadequate educational qualifications by encouraging them to stay on in education and training beyond compulsory schooling and ensuring they have the capacity and core skills to adapt to changes in demand (p18). However, by raising the levels of educational attainment there was an acknowledged danger that jobs traditionally regarded as unskilled or semi-skilled would not be filled, therefore member States were looking at raising their status by introducing qualifications for these occupations (p20).

The challenge in Europe is to provide a system which equips people to move from education to employment in any of the member countries. Educational trends across Europe at this time were listed as: from compulsory to voluntary learning; from extrinsic to intrinsic motivation; lifelong learning; the integration of learning, working and leisure, and the integration of vocational and general education (Du Bois-Raymond & Blasko, 2003, p35). However, a publication giving an overview of the school to work transition for young people in Europe acknowledged that, while smooth transitions were desirable, they had become more varied and less standardised, and investigated the national contextual differences which influence these transitions (Muller & Gangi, 2003.) The dimensions of educational systems affecting these transitions were found to

be related to different levels of educational attainment, the general education-vocational education mix, the mix of school based and work based vocational training and the flexibility of pathways. Analyses of transition patterns between European countries revealed that a considerable proportion of cross-national variation is to be found in three country clusters: Germany, Austria, Denmark and the Netherlands; the southern European countries and the remaining European countries (p18).

An additional problem in regard to transition policies is that they are often framed from the perspective of the individual sector responsible for the sector eg education and training, labour market, welfare, youth, which results in a number of single policies which are disconnected both from each other and from the individuals they are targeting. This topic is covered in a collection of essays which analysed the potential of a more holistic approach to policy, or Integrated Transition Policies, in Europe (Walther & McNeish, 2003, p4). It was proposed that policies start from the reality of the 'yo-yo' pattern of young people's transitions and trajectories, rather than from the perspective of transitions as a linear passage with a possibility of full employment. A number of dilemmas which undermine the effectiveness of transition policies were identified, for example the tension between employability and competence, the recognition of informal learning and balancing flexibility and security (Du Bois-Raymond & Blasco, 2003). In regard to balancing flexibility and security in young adults' transitions, not only was there a requirement to provide a 'qualification pass' giving evidence of all their experiences, both formal and informal, but a need to fit work opportunities into their lifestyles (Stauber, Kovacheva & van Lieshout, 2003).

In the UK, the Tomlinson Review Group was asked by the Secretary of State for Education and Skills to propose reforms to the curriculum and assessment arrangements for 14-19 year olds, as it was believed that the existing system had produced educational outcomes that compared unfavourably to those of other similar countries (p3). The recent Tomlinson Report (NASUWT, 2004) proposed a unified framework of diplomas which offer clear and transparent pathways through the 14-19 phase and progression into further and higher learning, training and employment. It was believed that, by combining vocational and academic learning under the diploma framework, the artificial distinctions between achievements in so-called vocational and academic learning would be eliminated (p8). It was also recommended that support should be provided for all learners in planning future career and employment choices (p5).

In his paper on 'Improving pathways in the United States from high school to college and career', Stern described new pathways which combined vocational and academic education (Stern, 1999). These were seen to have the benefits of providing the academic skills required for people to go on to college either immediately or at a later stage and providing work skills necessary for employment at whatever stage this option is taken up. This was seen as necessary in the mobile, relatively unregulated labour markets in the United States. The three major elements of the pathways were: combining academic and vocational curriculum in high schools; connecting secondary and tertiary education through federally funded 'Tech Prep' programs; and school-supervised work-based learning. Combining the academic and vocational curriculums has led to a number of pathways which include: providing guidance for students to select 'career clusters' leading to broad fields of work; urban career magnet schools or programs to draw students city wide into specific vocational areas; career academies, which are occupational groupings within high schools; and whole high schools being subdivided into occupationally focussed sub-schools. Tech Prep programmes linked high schools with two-year colleges or a four-year college and university, with the addition of a baccalaureate degree to the existing associate degree or certificate, though problems have been found with articulation, transfer and access. Career exploration and planning was a significant element of the work-based learning activities, allowing students to sample a range of work options which enable them to develop a broad range of generic skills, including career awareness, and make better career decisions. The new pathways, overall, have led to increased university enrolment among low-income and minority students however evaluations of the career academies, in particular, have found they are more successful in

preparing students for college than immediate entry into the labour market. It was considered that the overall benefits of these integrated pathways were to leave students' options open with enhanced opportunity to return to further education at a later stage. These initiatives have been supported in federal and state legislation however, in the 'relatively disorganised policy-making environment for US education' (p203), local control has required a significant level of co-ordination to create coherent pathways.

The current situation in Australia

ANTA's 'Annual National Report of the Australian Vocational Education and Training System' for 2003, reported in its December 2004 magazine (ANTA, 2004b), gives information about the VET system's performance against annual national priorities. It reported strong or improving progress in the number of VET graduates employed or in further study after completing their training (90%), an increase of 2.1% since 2002 in the number of people participating in publicly funded VET, with one third of employed persons in Australia holding a VET qualification. Challenges were the poorer post-training employment outcomes for students from equity groups and a 6.1% decline in the efficiency of the government funded VET system since 2001 (p27).

However, a recent analysis of the VET system, with a focus on issues relevant to large enterprises, undertaken by the Business Council of Australia found that the VET system including the policy framework, administrative systems and training practices of the VET sector fell short of serving the increasingly complex skill development needs of large enterprises (Allen Consulting Group, 2004). This was supported by Cornford, in his paper 'Can we do it better next time? A critical review of the effectiveness of Australian VET policies of the 1990's and the need for policy change', where the author referred to the report of the 2003 Senate inquiry into present and future skill needs, 'Bridging the skills divide', and to the Business Council of Australia report 'The vocational education and training system: key issues for large enterprises (BCA, 2004), which have 'clearly signalled that VET policies generally are failing to meet the needs of business and Australian society' (Cornford, 2004, p87).

Despite the various policy initiatives undertaken in recent years, the 2004 report on how young people in Australia are faring (Dusseldorp Skills Forum, 2004) found that the transition from education to work was not becoming any less troubled for young Australians (p37). In May 2004 the proportion of teenagers not in full-time study or full-time work (15.5%) was the highest for the last six years and 22% of young adults (20-24 years old) were not in full time education and were either unemployed or wanting work or working part-time. There was little sign of improvement despite relatively strong economic conditions and some policy initiatives. The report found that youth pathways were more exposed to economic volatility than previously. Also, policy interventions that focus on the transition of young people from school to work and further study and from further study to work may be more important in Australia than in other countries, because the interface between education and the labour market is relatively 'loosely coupled' in Australia and the pathways are more individually constructed (pp37-38). However, the report anticipated that since the 2004 general election there will be an opportunity to build on the momentum of the last few years, to align Commonwealth-State youth transition policies, to ensure personal transition support is available to all young people who need it and to put in place effective local programs connecting young people to education and to work (p3).

Selected initiatives facilitating learning pathways

Although the focus is on learning pathways within and beyond VET for young people, some examples of school to VET and /or employment initiatives are included

Pathways within and between the vocational education and training and the higher education sectors

Although the Commonwealth Minister for Education and Science recently stressed that students needed greater options to move between vocational education and training (VET) and university (Maiden 2004), a number of initiatives have been undertaken to enhance pathways within and between the VET and higher education sectors. These have included offering joint programs by institutions in different sectors, sharing of facilities, dual sector universities and providing bridging programs for those who may not currently meet entrance requirements. However, a significant initiative has been in the area of articulation, recognition of prior learning (RPL) and credit transfer.

Articulation, recognition of prior learning and credit transfer within and between the vocational education and training and higher education sectors

Articulation which has been a focus internationally (see for example, Haas 1999; Kintzer 1999; Scott 2001) is the development of pathways between programs such that students receive maximum credit for studies they have undertaken thus facilitating movement between levels of education/training. Credit transfer refers to the provision of course credits for prior formal recognized studies and thus the awarding of advanced standing to the student. Recognition of prior learning refers to status being given on bases of previous formal studies and/or non formal learning acquired through various means (Haas 1999, p. 5).   In the VET sector, RPL has been a particular focus since the early 1990's and has undergone a range of definitions. However, Bateman & Knight (2003) quote a recent Australian Quality Training Framework (AQTF) definition of RPL as "the recognition of competencies currently held, regardless of when or where the learning occurred….competencies may be obtained in a number of ways. This includes through any combination of formal or informal training and education, work experience or general life experience" (p. 9).

Recognition of the need to implement articulation and credit transfer arrangements is not a recent development. In 1964 for example, a United Nations Educational Scientific and Cultural Organisation (UNESCO) and International Labour Organisation (ILO) statement on technical and vocational education and training pointed to the need to organise technical and vocational education so that every person could continue their education to develop their potentialities (UNESCO/ILO 1964, para 14). Also Jarvis (1995) has noted developments on credit transfer in the USA in the 1960's (pp. 224, 225). Furthermore, in Australia in the 1960's it was common for senior technical college students to study a certificate that articulated to a professional diploma and sometimes technical college diploma graduates could articulate to relevant university courses with advanced standing (Haas 1999, p. 12).

In the 1980's in Australia, a decade of considerable change in post compulsory education and training, governments, government authorities and some institutions actively promoted the development of articulation and credit transfer arrangements (Parkinson 1985, p.38, Parkinson et al 1986, p.2). At the time a majority of higher education institutions admitted students on the basis of successfully completed relevant technical and further education (TAFE) (a major component of the VET sector), middle level programs and many were prepared to grant some advanced standing in programs for these prior studies (Parkinson 1985, p. xiii). These

arrangements were at the local level between individual institutions as no national policy framework was in place at the time. However there were some concerns about this practice including a lack of status given for prior TAFE studies by some higher education institutions, a lack of consistent policy in higher education institutions in making assessments for status, and a high frequency of TAFE graduates having to repeat work in higher education which had already been undertaken at TAFE (Parkinson et al 1986, p.137). These concerns were amplified by the Government. The Commonwealth Minister for Education noted in 1986, the TAFE, College of Advanced Education (CAE) and university sectors had developed various barriers making movement from one sector to another difficult (Parkinson et al. 1986, p.1). These concerns were raised again in a Commonwealth Government discussion paper in 1987 (Ramsay et al 1997, p. 11).

Some in the higher education sector were opposed to enhancing pathways between TAFE and higher education institutions, particularly the universities. Objections included, perceived differences in conceptual complexity and required intellectual effort, between TAFE and higher education courses and differences in the teaching and learning environments in the two sectors, creating difficulties for transferring students (Parkinson et al. 1986, pp. 193-196). There are still objections by some in higher education to enhanced pathways particularly since the introduction of Training Packages in VET with their emphasis on competency based rather than curriculum based approach in courses. Wheelahan (2001) for example, in her evaluation of Personalised Access and Study policy at VUT in 2000 noted that staff felt Training Packages hindered articulation (p. 4).

In the late 1980's the Commonwealth Government initiated major reforms to the higher education system, including the creation of the Unified National System (UNS). One of the Government's aims with its reforms was to provide a national framework to enhance cooperation and collaboration between the two sectors (Dawkins 1988). In particular there was a desire to ensure more consistent articulation and credit transfer arrangements within and between the sectors for both social equity and efficiency reasons.

In this environment credit transfer guidelines were developed by the Australian Vice Chancellors Committee (AVCC) and the Australian Committee of Directors and Principals of Colleges of Advanced Education (ACDP). These were endorsed by the Commonwealth Government and entry of universities into the UNS was dependent upon acceptance of the guidelines (Ramsay et al. 1997, p.12). Hence no longer were credit transfer policies an option for universities. However, this was not the case for VET as no credit transfer or articulation requirements of the TAFE sector were published by the Government. Its emphasis was one way, ie TAFE to higher education. It was concerned to ensure smooth "upward" pathways between the two sectors. Movement from university to TAFE was not of central concern to policy makers at the time.

With the Government's reform package in place, greater national emphasis was given to enhancing pathways and to the need for consistency in articulation and credit transfer arrangements. In 1989 for example, the Department of Employment Education and Training (DEET) and the National Board for Employment, Education and Training (NBEET) published a discussion paper which included strategies to enhance the implementation of procedures to improve articulation and credit transfer practices from TAFE to universities (Ramsay et al 1997, p. 12). Subsequently the Finn Review of 1991 recommended on the importance of improved articulation between compulsory school and post compulsory education sectors. The Baldwin Report of 1991 then noted the need for higher education institutions to be more flexible in their recognition of prior learning and experience. The report also outlined the Commonwealth Government's aims of developing a national credit transfer agency which would assist in providing a national framework for credit transfer and skills recognition. The Carmichael Report and the Mayer Committee also argued for improved credit transfer while the establishment of the Australian National Training Authority (ANTA) in 1993 gave further national emphasis to the debate to enhance pathways between the sectors (Golding 1999b, p.7).

In the early to mid -1990's, policy and procedures on recognition of prior un-credentialed learning were also formulated. So the nature of prior learning being considered for admission to, and for advanced standing in, universities was being broadened to include un-credentialed learning as well as credentialed learning. The range of providers also expanded across the VET sector to include both government and non-government organisations. There was considerable variation in university structures and arrangements for considering industry based training including non credentialed learning and the granting of credit by universities for un-credentialed learning was low and inconsistent (Ramsay et al 1997, pp. 16, 20). However, by 1994, Department of Employment Education and Training (DEET) reports concluded that most states and territories had credit transfer arrangements, at least in some fields of study, and arrangements seemed to cater for the needs of most students (Burns 1997, p.15).

Alba et al. (1993) in research into the effectiveness of credit transfer arrangements in New South Wales, found that TAFE students seemed to have an inadequate understanding of university policies regarding credit transfer and that the amount of credit given for prior TAFE studies varied between universities (p.14). In contrast, in an examination of the experiences of TAFE students moving to university in 1994 and 1995 in two of Victoria's multi-sector universities, Trembath et al. (1996) reported that students generally found it easy to get information on articulation and credit transfer (pp.19,20). Ramsay et al. (1997) in their South Australian study reported that almost three quarters of the students were satisfied with the credit transfer process (p.98). Criticisms included inconsistencies in the amount of credit granted, duplication of work required when credit was not granted, lack of knowledge about the process by some staff, and the provision of unclear and inconsistent information about credit transfer (p.99). Cohen et al. (1997), in their New South Wales study in 1996, indicated that a number of students in their last semester at TAFE raised concerns over the appropriateness of credit transfer arrangements (p. xvii). Recent research by Harris et al (2004) supports these findings. As Fooks (1997, p.2) has argued, countries such as Canada and the United States of America have made more progress in developing solutions to the issue of advanced standing in universities for prior VET level studies than has been the case in Australia.

In the early 1990's not only was the focus on articulation, credit transfer and PRL for students moving from VET to higher education , there was emerging interest on the need for similar arrangements to enhance pathways for students moving from higher education to VET. The Organisation for Economic Cooperation and Development (OECD) for example, had reported on the movement of university students seeking largely vocational qualifications from institutions that were not universities (OECD,1991). Researchers in Australia began investigating movement in this direction (Golding and Eedle 1993, Golding 1995, Harris et al. 2004, Millican 1995). Recent research has highlighted the significant flow of students in both directions between sectors (e.g. Albrecht 2004, DEST 2002b, Pitt 2001, Golding 1999a, Harris et al. 2004, Moodie 2004a, Werner 1998). However, some caution is needed in drawing conclusions on the quantification of movement as there are concerns over the accuracy and completeness of data on national statistical systems to track students moving between sectors (Harris et al 2004, Karmel & Nguyen 2003, Moodie 2003, Moodie 2004a, Ramsay et al. 1997 Teese & Polesel 1999, Teese and Watson 2001). Never the less, the national collections assist in determining general trends in mapping movement.

As part of the national training reform agenda, a competency based VET system was introduced in 1990 with RPL and credit transfer being key features (Bateman & Knight 2003, p. 7). Then in the mid-1990's as part of the revised national training agenda in VET, RPL was identified as a key component of training packages and the Australian Quality Training Framework (AQTF). (Training Packages are sets of nationally endorsed standards and qualifications for recognising and assessing people's skills. They describe the skills and knowledge needed to perform effectively in the workplace, but do not prescribe how an individual should be trained. Teachers

and trainers develop learning strategies - the "how" - depending on learners' needs, abilities and circumstances).

Bateman & Knight (2003) reported -"one of the standards which registered training organisations must satisfy is the provision of recognition services to students to ensure existing knowledge and skills are formally recognised so that students do not have to repeat what they have already studied or learnt" (p. 38). But the take up of RPL by training organisations has been less than desired. There is evidence that learners were encouraged to repeat units of competence rather than have their credit transferred or RPL being implemented (ANTA 2003d, p. 19). The processes are complex, labour intensive, time consuming and costly for the training organisations (Bateman & Knight 2003, p. 11, ANTA 2003d, p. 33). And this assessment of the take up of RPL mirrors concerns at the national forum on credit transfer and skills recognition in 1994 (Ramsay et al 1997, p. 20). ANTA (2003e) in *Shaping our future* also noted that RPL was not yet well used as a pathway to a qualification and further training (p. 11).

Burns (1997) reviewed early 1990's research and concluded that advanced standing for up to a third of a degree was commonly granted to those going from TAFE to university and who had applied for credit (p. 16), an outcome confirmed by Ramsay et al. (1997) in their study of commencing students at the University of South Australia who had previously undertaken TAFE studies or had acquired learning outside the formal tertiary or secondary education sectors. From 1993 to 1996 there was a gradual increase in the amount of credit given on the basis of prior TAFE studies. Despite problems in the accuracy of recording credit data on the student information system, it was found that the most common amount of credit given to commencing undergraduates was approximately one year of the university degree (p.59).

In a recent study it was reported that the incidence of RPL and credit transfer in VET increased with increasing AQF level. Of diploma and higher level students in VET, 10.6% in 1999 and 9.7% in 2000 had RPL subject enrolments and a further 6.3% and 6.5% respectively had credit transfer enrolments. Compared with students in AQF certificate level 1 and 2 programs, 2.5% and 2.3% for RPL and 1.6% and 1.5% for credit transfer (Bateman & Knight 2003, p. 5).

Credit given by universities for prior TAFE studies also tends to be for the higher level awards. In his 1994 Victorian study, Golding (1995) reported that two thirds of the credit given by universities for those with a TAFE background was for prior Associate Diploma studies and almost one fifth was for Advanced Certificate studies (p.19). Trembath et al. (1996) also noted that those respondents with prior TAFE studies at Associate Diploma level were found to have been more likely than those with lower level TAFE studies to have applied for and received credit for their TAFE studies (p.21).

The development and implementation of policy fostering greater collaboration and cooperation in the 1990's was being shaped by a range of critical factor such as globalisation; the growth of a knowledge based economy, rapid technological, social and economic changes, changes in the workplace and the organisation of work and the growing trends for lifelong learning (DEST 2002b, paras.14-19; Eltis 2002, p.77, 80). These have also been influential internationally where greater emphasis is being given to learning throughout life in a number of countries (see for example ILO 2002, OECD 1996, UNESCO 1996,). Such factors, policy initiatives and their implementation along with those of various reviews have resulted in stronger relationships between VET and higher education in Australia. This was not only in the areas of articulation and credit transfer, but also in areas such as joint award offerings and shared campuses.

However, there are still issues. ANTA emphasised in the late 1990's that seamless post secondary pathways would be developed so that students could move freely within VET and between VET, senior secondary schools and universities (Robinson & Misko 2003, p. 10). As one of its national strategies for 2004 – 2010, ANTA has included an emphasis on implementing seamless pathways (ANTA 2003e, pp. 15 – 17).

Differences in the teaching environments in VET and higher education and support mechanisms for students

A further initiative to enhance pathways between the VET and higher education sectors has been to address some of the concerns raised in the 1980's and subsequently about the different teaching and learning environments. This concern has again surfaced strongly with implementation of competency based education and training packages in VET.

Students who move inter-sectorally often face significant challenges in adapting to the initial teaching and learning environment which they face as they commence their courses in the new sector. These include differences in teaching styles between the two sectors, differences in content of courses (the more theoretical nature of university courses) and differences in management of their own learning. And these differences can impact negatively on the ease of mobility for students.

Trembath et al. (1996) quoted a study by Ling and Devlin (1993) who investigated the experiences of students moving from TAFE to higher education and reported that, although there were differences in delivery between the two sectors, students felt that TAFE studies had been helpful in preparing them for university, a finding supported by Alba et al. (1993, p.14), Golding et al. (1996, p.77), Ticknell and Smyrnios (2004, p. 68) and Wheelahan (2001, p. 3). Cameron et al. (2000) noted that those going from TAFE to university commonly found difficulties with the academic standards required of university studies (p. 36), a point also made by Dickson (2000, p. 2) and Ticknell and Smyrnios (2004, p. 69). Trembath et al. (1996) in a study of two multi sectoral institutions in Victoria reported that most who shifted found the university program to be more theoretical, the workload heavier and more difficulties in consulting lecturers/tutors (p. 20). Similarly, Dickson (2000) in an analysis of the first year experiences of a group of TAFE Child Studies graduates who had enrolled in an Early Childhood teacher education degree at a New South Wales university, found differences including those in teaching styles between the sectors and the theoretical knowledge at university compared with the vocational knowledge at TAFE (p. 2). Many of these outcomes from research by Dickson and Trembath et al mirrored those highlighted in an earlier national study by Parkinson et al. (1986).

Harris et al (2004) reported from their investigation into student movement in both directions between the VET and higher education sectors that most students found the actual transition between sectors relatively easy with the VET commencers (with prior higher education achievement) finding it easier than the higher education commencers (with prior VET experience) (p. 8). However students found the educational experience in their new sector to be quite different. Amount and level of work required in their course, assessment processes, teaching styles and theoretical versus practical content for example were factors where differences were noted (p. 39). And these findings support those cited above.

In a report on a pathways project focussing on TAFE business students moving into university business/law programs at a Victorian multi-sectoral university, the Victoria University of Technology, Conroy et al (2000) proposed that there was a major dysfunction between the theoretical and practical underpinnings of the university and TAFE curricula respectively (p.3). This point has also been strongly made by Moodie (2003) who has argued for example, that the implementation of Training Packages in VET has inhibited systematic efforts to map curricular to higher education since the Packages are based on competencies, the development of which industry takes a leading role. Statements of achievement related to Training Packages record only workplace skills assessed in a real or simulated workplace, a potential difficulty for universities in assessing TAFE studies as bases for admission. The emphasis on competencies rather than curriculum in VET is different from the curriculum bases in universities. This may present difficulties for students in adapting to university studies. Students moving from university to VET may similarly face difficulties in adapting to a competency-based approach (Golding 2002, pp.21-23). Anderson (2004) in an analysis of research related to choice in further education in the

United Kingdom and Australia, has suggested that national policy in both countries "…has given undue emphasis to the development of narrow job-specific skills and competencies at the expense of broader personal/social development needs, interests and aspirations of adult learners" (p. 17). This is an issue.

However, efforts are being made to assist students in dealing with many of these differences in the teaching and learning environments in the two sectors. Student support staff, such as study skills advisors, assist in dealing with the transition. Further there are suggestions on addressing the different curriculum bases. Rumsay (1997 cited in Conroy 2000), has noted an ANTA funded project investigating assessment practices in VET and higher education which included suggestions for addressing the competency based non graded assessments in VET and thus assist students in articulating to higher education. These included optional supplementary assessment of theoretical knowledge relevant to higher education being incorporated into specific TAFE courses; optional additional competency units relevant to progress in higher education being provided and summer schools jointly conducted by VET and higher education whereby staff from both sectors could offer a curriculum that gave students practice in language and academic skills needed in higher education (p. 3). Implementation of such proposals and further development of existing support mechanisms could assist in smoothing pathways.

Joint courses: Agreements between VET and universities that outline pathways for students

Joint course initiatives involve institutions collaborating in the development of courses frequently in complementary areas of study eg hospitality and tourism. Ticknell and Smyrnios (2004, p.50) refer to such programs as formal articulation programs. The components of the course are taught and assessed by the respective institutions, a place in the university course for those VET students who satisfy university entrance requirements is available and advanced standing is built in. Often these courses have multiple exit points and students may be enrolled concurrently in both institutions. These initiatives are made at the local level between institutions in different sectors but with Commonwealth Government encouragement and support. The University of South Australia (UniSA) like many other universities has arrangements for joint awards (UniSA, 1998). One which has been in existence for many years is in the area of hospitality and tourism where students study for a diploma in VET and then complete the final year of a degree at UniSA and hence gain a university qualification. Deakin Univerity and Box Hill Institute of TAFE in Victoria have recently established an arrangement for joint courses. Ticknell and Smyrnios (2004) refer to a TAFE institute/university formal degree articulation program in accountancy in Victoria between 1989 and 1993 (p. 51). Students were selected by the TAFE institute on the basis of their year 12 score (often too low for university entrance), and undertook a specially designed course of study at TAFE using the advanced certificate in accountancy as a framework. Subjects in the certificate were undertaken in greater depth and breadth than normally applied and students who passed all subjects were guaranteed a place in the second year of the university's bachelor of business course (p. 51). This formal articulation program thus provided students whose year 12 score was too low for entry to university a second chance and thus was a gateway to university.

A further example is when applicants to UniSA programs who have achieved a particular Tertiary Education Score, but have not gained entry to their preferred university program, are able to complete diploma programs in certain areas offered by the South Australian Institute of Business and Technology (a UniSA partner institution) and on gaining an appropriate score in the program are guaranteed a place in the second year of relevant UniSA programs. Such programs are not unique to UniSA and are offered in a range of partnership arrangements between various institutions and universities.

Bridging programs

Some universities, for example Flinders University offer foundation courses designed to provide access to university studies to people who would otherwise not have such an opportunity. Other universities such as the University of South Australia have arrangements with institutions to provide special bridging courses to university. The UniSA preparation for adult learners (PAL) course is one year in length (or part time equivalent) and is offered by for example senior secondary colleges and provides an alternative entry point for adult students to many UniSA undergraduate programs.

Appointments of pathways officers

An initiative at the local level has been the appointment of pathways officers. An example of this is at the Central Coast campuses in New South Wales which is a partnership between the University of Newcastle, Hunter Institute of TAFE and the Central Coast Community College. The officer assists in ensuring smooth learning pathways.

Dual sector universities

There is a range of dual sector universities which can enhance pathways. A number of these are in Victoria eg RMIT University (RMIT), Victoria University of Technology (VUT), Swinburne University of Technology (SUT) and the University of Ballarat. Also eg Charles Darwin University in the Northern Territory.

VUT provides an example of a university with policies to enhance pathways between VET and higher education. VUT merged with the Western Melbourne Institute of TAFE in the late 1990's. In 1997, it introduced a Personalised Access and Study policy that was designed to underpin learning pathways within the university (Wheelahan 2001, p. 1). The personalised access part of the policy is designed to find an appropriate place in one of the university's accredited TAFE or higher education programs for applicants. The personalised study part of the policy is designed to support student learning through a range of measures including the development of flexible learning pathways (Wheelahan 2001, p. 2). In an evaluation of the implementation of the policy in 2000, it was found that Pathways made a difference, with students generally positive about their experiences and staff generally supportive of the framework including its facilitation of articulation. It was also noted that the profile of the university had changed as a result of the implementation of the policy (Wheelahan 2001, pp. 3,7).

Universities registering as Registered Training Organisations

A number of universities have registered as Registered Training Organisations (RTO). An RTO is an organisation registered by a state or territory recognition authority to deliver training and/or conduct assessments and issue nationally recognised qualifications in accordance with the Australian Quality Training Framework which provides nationally agreed standards to ensure the quality of VET services. An RTO, as part of its delivery and assessment strategies for a particular qualification, is required to provide information on pathways. Such information is documented and might include students undertaking a program with advice on employment and/or training options including where for example components of a qualification might be counted towards another qualification (ANTA 2002a, p. 38)

Shared campuses – co-locations of institutions from different sectors sharing facilities

Some institutions in different sectors have arrangements in place to share campuses. Such relationships are developed at the local level – often with support from the Commonwealth

Government, and can for example, operate on a stand alone basis for example in regional areas or in the form of networks (DEST 2002b, para. 61)

An example is the Central Coast campus at Ourimbah which comprises the University of Newcastle, Hunter Institute of TAFE, Central Coast Community College and the Central Coast Music Conservatorium. It provides seamless learning pathways that are offered in many areas with entry and exit points appropriate to the skill level and needs of the students.

Pathways between school, further education and training and employment

In addition to specific pathways initiatives within and between the VET and higher education sectors, there are a number within and between the schools and VET sectors and employment.

In 1997, on average, 79% of young people in their teenage years in OECD countries attended school and continuation to upper secondary education had become the norm (OECD 1999, p. 10). A study in France, Germany and the USA reported that young people with less than upper secondary education experienced high levels of unemployment in their first five years after initial education and it was acknowledged that school to work and life transitions were complex with growing levels of uncertainty for young people (Kennedy 2001, pp. 37, 38).

To smooth the transitions for young people, programs such as VET in schools, new school based apprenticeships and enabling courses have been implemented.

VET in Schools

Many young people now have the opportunity to be involved in vocational education and training while at school with these programs being designed to broaden offerings and give them another pathway to further education, training and employment. VET in schools programs comply with the National Training Framework and are part of the Senior Secondary School Certificate (Kosmopoulis 2002, p. 6).

The Taskforce on Vocational Educational Education and Training in Schools of the Ministerial Council on Education Employment Training and Youth Affairs (MCEETYA, 2000b) reported that in late 1996, the ANTA Ministerial Council agreed to allocate $20m of VET funds to State and Territory authorities for school authorities for the period 1997 – 2000 for the development and delivery of vocational programs. These programs were to meet certain conditions including that they relate to, or provide, VET certificates within the AQF and senior secondary certificates endorsed by state/territory Boards of Studies and articulate with apprenticeships/traineeships, employment and further training (p. 14). Subsequently in 1999, a set of common and agreed goals for schooling in the twenty first century were endorsed by MCEETYA. These contained a number of references to the provision of pathways between schools, tertiary education and training and employment. Transition from school including pathways, and for those most at risk was also a focus of the National Youth Pathways Action Plan Taskforce set up by the Commonwealth Government in 1999 (MCEETYA 2000b, p. 16).

As part of national longitudinal surveys into Australian youth, an analysis of school experiences and post school education and training and employment activities from a sample of students who were in year 9 at secondary school in 1995, completed year 11 in 1997 and year 12 in 1998 and for whom data were available two years after completing year 12, was undertaken (Fullarton 2001b). Despite data limitations, the analysis revealed that participation in VET in schools subjects was highest for students in the lowest achievement quartile, was lower for non- English speaking background students, was higher for students whose parents had only completed secondary school, , was higher for those whose parents were in manual occupations and was slightly higher in rural areas. It was also higher among those with lower satisfaction levels and engagement with school and was more likely among those who saw school providing them with

the opportunity to learn things that would be useful in adult life (but less likely among those who saw themselves as successful at school) (Fullarton 2001b, pp. vii-ix).

In the first two years after leaving school, unemployment rates were found to be similar for those who had participated in VET in schools subjects and those who had not done so and it was concluded that involvement in the program seemed to be more likely to provide a pathway to employment than into further education and training (Fullarton 2001b, p. x). Participation in VET in schools for two years appeared to facilitate achievement of positive employment and educational outcomes (especially for young males), although it was less likely to provide a pathway to university study (Fullarton 2001b, pp. x, 54). For many participants in VET in schools programs, there were positive outcomes in relation to transition from school to further education and training and work.

The Taskforce on Vocational Educational Education and Training in Schools (MCEETYA 2000b) also had noted some significant achievements relating to the VET in schools programs. These included a national set of principles to guide the development of the programs, development of policies and procedures for the implementation of the National Training Framework within the secondary school sectors, a significant increase in the numbers of students undertaking training as part of their senior secondary studies (60000 in 1996 and 136710 in 1999) and approximately 90% of secondary schools providing programs (p. 20). (ANTA noted that in 2004, over 95% of secondary schools that offered senior secondary programs offered VET to senior students (ANTA 2004e)). Other achievements to 1999 included mechanisms to enhance pathways into tertiary education by enabling VET related assessments to contribute to tertiary entrance scores (MCEETYA 2000b, pp. 20 – 24). However, in this area it noted that there was more to be done including further development of seamless pathways from one qualification to another. The Taskforce recommended a framework for transitions that included eight features among which was - explicit and well articulated pathways (MCEETYA 2000b, pp. 29-30)

In 2003, the Allen Consulting Group reported on transition programs. They quoted an OECD report of 1999 which highlighted key components of successful inclusive transition systems including well organised pathways that connected initial education with work and further education, workplace experience combined with education and good information and guidance (Allen Consulting Group 2003, p. 7). The Consulting Group also noted the dramatic changes in transition needs of students in Australia in the last two decades with the restructuring of the youth labour market and indicated that high levels of institutional flexibility and cross sectoral coordination were essential for enhanced transition (Allen Consulting Group 2003, p. 4). Widespread transition activity around Australia was reported. Initiatives such as the Goals for Schooling in the Twenty First Century agreed by Ministers in 1999 which included reference to vocational education in schools and desired linkages and partnerships between education and training, the business sector and the community were highlighted as was the response to these goals. A "New Framework for Vocational Education in Schools" for example was agreed in 2001. This supported the expansion of vocational education and student support services in schools and included several features which had been drawn from the 1999 OECD transition review (Allen Consulting Group 2003, pp. 9-10). Also noted was MCEETYA's proposed Integrated Action Plan of 2002 that would support implementation of an effective approach to youth transitions (p. 10).

In reporting on progress with transition strategies using the six features of the framework extracted from the 1999 OECD review, the Allen Consulting Group noted that there was strong progress in relation to "explicit and well articulated pathways". VET in schools was being offered in around 90% of secondary schools, but with school based new apprenticeships forming a very small percentage of enrolments with these skewed across states and territories and industry areas. Progress was however, slow in for example, the area of incorporating enterprise and vocational learning into all levels of schooling to improve transition outcomes and in career information and guidance. (Allen Consulting Group 2003, pp. 19 - 22).

Since the introduction of VET in schools programs, considerable progress has been made with the majority of secondary schools offering such programs with some very positive education, training and employment outcomes. A recent overview of VET options for young people has further confirmed this progress (Woods, 2005).

Enabling courses

A further initiative to smooth transitions for groups of young people particularly those at risk, has been through the development of enabling courses. In the VET sector, these courses are lower-level preparatory and pre-vocational courses including literacy and numeracy courses, bridging courses, pre-certificate courses and pre-employment courses (Phan & Ball 2001, p. 8)

 The 1998 enrolment patterns of those who had been in enabling courses in 1997 and the overall profile of the 1998 enabling course enrollees were investigated by Phan and Ball (2001). They reported that in 1998, these students comprised over 5% of total students in VET in that year (p. 37). This is similar to the figure of 6% in public VET courses later reported by Dawe (2004, p.1). Indigenous students, those from non-English speaking backgrounds those with a disability, students from lower than average income families and / or those who had left school prior to starting senior secondary school were more likely to be enrolled in enabling courses (Phan & Ball 2001, pp. 8, 37). This profile was also supported by Dawe (2004, pp. 6, 7) in her later research.

After undertaking their enabling course, approximately one third of those studying in the next year were in a higher level course with a large percentage also enrolled at the same level as their prior enabling course.   Positive outcomes included gaining employment (Phan & Ball 2001, pp. 6, 37).

 Dawe (2004) extended an aspect of the research by Phan and Ball by investigating why some students who had successfully completed an enabling course, re enrolled in the same course or in one in the same or a different area or indeed a more advanced courses at the same level of qualification when it could be expected that such students would enrol in a higher level qualification.   The researcher noted that TAFE staff had pointed out that for a number of these students, an important objective of the courses is to increase their self esteem, confidence and motivation for further study and employment. Sometimes students who had completed an enabling course and were looking for employment were encouraged to continue in the same or a similar course for these reasons. Others might have a voluntary or paid job, but return to acquire more advanced skills in, say, literacy or numeracy . Never the less for many, their return to the same or different courses at the same level of qualification was a positive outcome (Dawe 2004, p. 7).

Strategies to enhance pathways to further study or employment from such courses have been suggested by Dawe (2004). These included, customising curriculum and employing more flexible assessment practices, providing more support in building students' confidence and in becoming independent learners, providing pathways to employment by for example, arranging work experience as part of the course and encouraging students to use their skills and knowledge in a voluntary capacity in the community, in campus-based business enterprises or in small cooperative businesses for thecommunity (pp. 32, 33).Though implementation of strategies such as these will further enhance pathways, evidence from evaluations shows that the enabling courses have many positive outcomes for students, particularly those who face multiple learning barriers.

School based new apprenticeships

School based new apprenticeships are yet a further program to enhance pathways from school to further education and training and employment. Their objectives include "increasing the range and diversity of transition pathways open to students, including the development of employment

skills;"…."promoting more seamless transitions from schooling to further vocational or university study and/or employment" and are designed to provide opportunities for young people to gain quality VET qualifications and engage in employment while undertaking the senior secondary certificate (ANTA 2003c, p.1, 3). In 2001, enrolments in these programs comprised around 2% of total VET in schools enrolments and 3% of total new apprenticeships (ANTA 2002b, p 1). 12300 students commenced school based new apprenticeships in 2003, thus being full time students and part time employees (Woods 2005, p. 7).

In an evaluation of the program it was reported that the pattern of enrolments between states and industry sectors was skewed with, for example, most commencers in 2001 being in Queensland and over half of the commencers in that year being in the retail and hospitality sectors (ANTA 2002b, p. 1). In a further investigation into learning and training of new apprenticeship students (Smith & Wilson 2003), the authors reported that those in the program were more likely not to be living in a capital city and less likely to aspire to university study than other students, most were found to be in traineeships rather than apprenticeships and seemed to be disproportionately drawn from lower socio – economic groups. Primarily students participated to gain the associated qualification or to gain specific industry experience in a particular area (p. 1).

It has been argued that the implementation of the scheme was complex. This factor coupled with the seemingly low levels of employer awareness and the unfamiliarity of schools with the training sector inhibited growth. However, the program is seen as having many benefits with the potential to deliver strong outcomes to a wide group of young people (ANTA 2002b, p. 6). It is a program that contributes to the enhancement of pathways from school for groups of young people.

Selected state initiatives

The Allen Consulting Group report into transition programs (2003) highlighted a number of state initiatives to strengthen pathways. Many of these include VET in schools and school based new apprenticeship programs.

In New South Wales, transition initiatives included VET in schools, five multi campus senior colleges giving a flexible curriculum including TAFE and university courses, gateways program (for those who may not complete year 12), and links to learning – community based education and training initiatives (pp. 12, 13). In Queensland reforms were instituted in "Education and Training Reforms for the Future: A White Paper" released in late 2002. A focus was on achieving a seamless set of options for students in post compulsory years. (Allen Consulting Group 2003, p. 15). A strategy in South Australia has been targeted at supporting year 12 students (or their vocational equivalent) in transition to independent adult life. Its main elements included improved career and transition services. Southern Futures in South Australia is a regional network that facilitates strategic, collaborative partnerships between education, training, industry and community groups to support young people and adults in their transitions between different levels of schooling and post – school pathways. Southern Futures operates as a virtual college which facilitates and brokers innovative programs delivered by VET providers and schools within a region and promotes learning as a lifelong process (ANTA 2003d, p. 32). Strategies to improve retention rates, VET in schools and identification of barriers impeding access to pathways are some of the Western Australian initiatives while pathways planning is a key feature in Tasmania the Northern Territory and the Australian Capital Territory. VET in Schools is also a feature (Allen Consulting Group 2003, pp. 16-18).

In Victoria, direction has been given by the Kirby Review, "The Ministerial Review of Post Compulsory Education and Training Pathways in Victoria". Recommendations from the Review included the core theme of consolidation of the post compulsory phase with greater integration and collaboration among education providers and the community. The Victorian Government accepted Kirby Review and set goals including increasing , the level of participation and achievement in education and training in regional and rural Victoria and among groups where

participation was low, and making participation in post school education near universal ie the norm in Victoria (Department of Education Employment and Training (Victoria) 2000). To meet goals for young people there was a need to improve transition from education to work or further training through linkages between schooling, employment and further education and training and strengthened links between all sectors of education and training, business and the community. Relevant targets were set.

A major initiative has been the establishment of Local Learning and Employment Networks (LLENs), The networks should improve the delivery of programs for individuals including young people and work cooperatively to increase the range and quality of programs. In particular the Government had the expectation that networks would improve and expand programs for those young people most at risk of dropping out and having poor educational outcomes (Department of Education Employment and Training (Victoria) 2000). Also they would build links with industry and other organizations in order to improve and better coordinate employment opportunities and expand experiences of young people. Pathways and outcomes would be monitored.

Further initiatives in Victoria have seen the establishment of a Victorian Qualifications Authority (VCA) with functions including the support of articulation. It has developed a Credit Matrix as a new approach to describing and recording achievement in qualifications. The matrix resulted from consideration of ways in which the qualifications system could be organised so that people could build on what they know and can do and progress smoothly from one qualification to another. It will ensure for example, that learning already achieved does not have to be repeated and allow for the design of more flexible qualifications. (VQA 2005). Development of the matrix is on track and is due for implementation in 2005 (VQA 2004)

The Victorian Certificate of Applied Learning (VCAL) is another innovation designed to smooth pathways from school to further education, training and employment for young people and was introduced in 2002. VCAL which encourages cross- sectoral collaboration, is an accredited senior secondary school qualification undertaken in years 11 and 12 and is based on "hands on" learning or applied learning. Students who choose the VCAL are those most likely to go on to training at TAFE, do an apprenticeship or get a job after completing school. Credit can be given in traineeships/apprenticeships for VCAL studies. VCAL includes four compulsory strands – literacy and numeracy skills; work related skills (including work experience, apprenticeships traineeships); industry specific skills (here various modules from a range of VET certificates can be completed and experience gained in a range of vocational areas); personal development skills (such as voluntary community work, community based projects, etc). VCAL students develop an individual learning program in consultation with teachers and counsellors and these must include curriculum components from the four compulsory strands and other curriculum units eg from VET certificates, Victorian Certificate in Education. It is flexible and has three levels – foundation, intermediate, senior with students entering at the level that matches their needs and abilities. Assessment of VCAL subjects is also flexible – e.g. students demonstrate achievement at their own pace and can have more than one opportunity to demonstrate success in a learning outcome.

It has been a successful innovation and in 2003, 222 schools, TAFE institutes and community education organizations delivered the certificate to over 5000 year 11 & 12 students (VQA 2003 p. 2).

Career development services for young people

Overview

It is generally acknowledged that both the concept and reality of a career have changed significantly and exponentially, consistent with social and economic changes, over the last century. Significant elements in an individual's career have expanded, from an often unequal bi-partisan relationship between employer and employee, to a multi-elemental construct incorporating various 'systems' (Patton & McMahon, 1999), acknowledging not only social and economic elements, but embracing extended personal and expanded environmental elements.

Hence career development, or one's successful progress through the career construct, inevitably requires a more complex development program. Career development has been defined as 'an ongoing process of planning and action directed towards personal work and life goals' (Patton & McMahon, 2001). In regard to these goals, there are 'important implications for the levels to which young people should aspire as the penalties for low education, training and skill levels appear to be growing' (Selby Smith, 2002). Career indecision has been described as a developmental problem in the career maturation process and is related to lack of information about self and world of work (Earl & Bright, 2004, p16, cite Chartrand et al). Consequently, young people will not only require accurate information, but may need guidance and assistance in developing important skills such as adaptability and decision-making, in order to navigate a pathway through the complexity of the modern 'career'. Hence information and decision making are critical, although not the only elements, in the process of career development.

In Australia, the level of post-compulsory educational participation has grown rapidly in the last 2 decades (OECD 2002) with consequent expansion of the student profile. Recommendation 15 of the Prime Minister's Youth Pathways Action Plan Taskforce (2001) referred to 'the diversity of young people's personal and community circumstances' in reference to young people with a disability, from culturally and linguistically diverse backgrounds and in rural and remote communities. These, together with young people not connected to formal education & training or employment, were identified as having high support needs. This diverse population is an additional complexity to consider in the career development process.

Although career development has become recognised as a lifelong activity, the point of entry remains a significant transition point which may have a long-term influence. The Prime Minister's Youth Pathways Action Plan Taskforce (2001) sought 'better ways of supporting young people and their families in the changeover from being students at school to having an independent adult life'.   At this transition point assistance is required to extend young people's perspective, beyond the immediate next step of the process, to embrace the concept of a career and all its possibilities, in other words to embrace career development.

What career development activities are needed to negotiate a complex construct by a complex population at a critical stage in the process? The OECD report on the transition from initial education to working life stated that well-organised information and guidance is an essential feature of effective transition systems (OECD, 2000). In a dynamic environment, up to date, accessible, relevant information is essential, and there is a multitude of information and sources available. However, while information is an essential component of career development, the purpose of the acquisition of information is to make choices and decisions, a skill which may develop with practice (and error) but which can be coached and nurtured – an essential skill at this early stage. In the young person's personal system, parents are seen as a major influence, both in acquiring information and in aiding decision making. However the individual needs to search all systems for support in their career development.

As well as the personal support systems available to students, there is a wide pool of career related services/arrangements/agencies in both the public and private sector, not only through the educational institution of the student such as school or VET provider but through government programs and the private sector. However, the OECD review team found that career education initiatives were 'patchy and diffuse', resulting in uneven servicing of this population throughout Australia (OECD, 2002). In the formal education sector, at the critical point of transition, career services were reported to be inconsistently provided in schools with uncertainty where career education should be placed in the curriculum; were insufficient in TAFEs, where there is 'no systematic information available on the extent and nature of these services'; were uneven in universities where 'the role and level of resourcing' of career services varied considerably, with a move to downsizing and electronic forms of delivery. In summary agencies were diverse, variable, uncoordinated and unaccountable.

To respond to the complexity both of career options and of the target population, a wide range of career development services is required. Individual agencies may offer specific career services but not embrace the range of services required to fully equip young people - for example Job Network providers focus on job acquisition rather than guidance and skills training. Information is acknowledged as being an essential *element* of career development yet, while it may be available, it may not be targeted or reaching its audience. For example web based systems may offer information but not how to deal with it, or offer ways of dealing with issues without offering up-to-date information to support these decisions (MyFuture is seeking to fill this gap). Notwithstanding such measures, individual assistance in charting paths is still required but is often lacking. Whereas there is a need for access to professional career and transition support which makes available to young people information that is accessible and well presented, backed up by guidance and follow-up services which integrate educational, labour market and social support (PM's Youth Pathways Action Plan Taskforce, 2001), this appears to be inconsistently provided. A recent announcement by Brendan Nelson of $4.5 million to strengthen careers advice (DEST, 2004j) acknowledged some of these factors and committed to the setting up of a national careers 'phone helpline to provide more tailored guidance.

There are identified gaps between client need and service provision. It was acknowledged that a wider range of careers activities is required in schools, that young people need to take a broader view of the career options available and a longer view of career paths across the lifespan (OECD, 2002). While students need to broaden their options to include VET, perceiving it as an inferior destination compared to the HE sector (Maxwell et al, 2000), the OECD found that the focus on VET in Schools was at the expense of other broader careers activities. Whereas there is a need to service a diverse population, there is a perspective that Commonwealth programs at the transition point, such as Job Pathways and the Career Counselling Programme, focus on 15-19 year old who have dropped out/are at risk of dropping out of the education system, resulting in a remedial rather than a proactive approach to career development (though a new program for 'mainstream' students is now being provided, minimally, by the Career and Transition Pilots scheme). Accessibility criteria for the various programs should be investigated to ensure that all young people, including those at a disadvantage, are serviced. In summary there is no overview of the match between the needs of this complex population and the services being offered and taken up.

Lastly and most importantly, while programmes are seen to be inconsistent, both in breadth and response to need, there is great variety in the skills and qualifications of careers personnel in both the public and private sector. There is a requirement for a skilled and qualified careers profession which is more accountable in respect to service provision, and more closely monitored (OECD, 2002). While these factors are covered by the Career Education Quality Framework this is not enforced. The Minister for DEST has also committed to an accreditation/professional development/scholarship/careers forum package to support the professional development of

career practitioners with a strengthening of the Career Industry Council to oversee these projects (DEST, 2004j).

In effect we have a career development system which has two major elements – young people and the agencies. The need of the former is complex as are the responses of the latter to that need. This study aims to explore the gap between these two elements and what is required to optimise the outputs of the career development system for young people.

The context

In 2001, Patton wrote that two major influences were impacting on the nature of educational and career services both in Australia and worldwide – changes in our understanding of 'career' and changes in the theoretical paradigms which influence the practice of career services (Patton, 2001). The environmental changes which influenced the meaning of 'career' have included: demographic shifts; international competition; the globalisation of the workforce; changes in organisational structure; the emergence of the 'knowledge worker'; the spread of information and communications technology; the changing role of women in the workplace; lifestyle changes; the diversity of the workforce; and changes in the pathways from school to work (Arnold, 1997; Collin & Watts, 1996; Grubb, 2002a; Haines et al, 2003; Hirsh & Jackson, 2004; ; Jackson et al, 1996; Patton, 2001; Storey, 2000).

A major effect of the changes in the workplace has been the move from a 'job for life' situation within one organisation, to one where people can anticipate having 12-25 jobs in up to 5 industry sectors (Jarvis, 2002), and where periods within and outside paid employment, which may include casual work, short-term contracts and job sharing, may be linked by periods of learning and retraining. At the same time, there has been a growing concern with the place of work in an individual's total life experience. Consequently, the term 'career', which was once synonymous with vocation or occupation, has most recently been replaced by the term life/career (McMahon et al, 2003, p4). Career has become the 'lifelong process of growth through life, learning and work' (Haines et al, 2003, p9) and the term 'career development', which once focused on occupational choice, is now 'the process of managing learning and work over the lifespan' (McMahon et al, 2003, p4). However, there is an opposing view that the career has not really changed, that the stable, traditional career was an aberration, that the career is merely adapting to current circumstances and is only appearing to change, perhaps due to bad human resource practice in organisations (Kelly et al, 2003).

The responsibility for managing one's career has moved from the organisation to the individual, who will need to proactively manage their own career (Ackah & Heaton, 2004; Arnold, 1997; Arnold & Jackson, 1997; Chen, 1998; Collin & Watts, 1996; Hall, 1996; Hall & Moss, 1998; Jarvis, 2002; McMahon et al, 2003 Opengart & Short, 2002; Packer, 2000). There are a wide array of factors which shape the development of career competence and a range of complex systems, communities or phenomena, such as educational institutions, family and political decisions, which can influence one's career (Amundson et al, 2002; Arnold, 1997; Audrey Collin, cited by Arnold & Jackson, 1997, p3; Haines et al, 2003; Patton & McMahon, 1999). If individuals are to construct satisfying life careers for themselves within changing environments they need to continually learn (Patton, 2001).

Lifelong learning embraces all these systems and influences, and 'takes account of multiple transitions' (McMahon et al, 2003, p6). Career development learning can be intentional or unintentional, and both are important. In addition to these learning skills, in view of changing requirements, both in the individual and in the environment, new skills – or attributes - will be needed, such as adaptability, flexibility, self-initiation and collaboration. Also, in a constantly changing environment and in order to create balance in their lives, people need to develop resilience. Not only do people need to develop knowledge and skills but understand how to use them - the focus being on the learning process rather than the content. Thus, within a lifelong

learning context, the mission of career guidance has widened, with consequent relevance to education policy (Haines et al, 2003; Herriot, 1992; Hall & Mirvis, 1996; Kelly et al, 2002; Lucas, 2002; McMahon & Tatham, 2001; OECD, 2003; Opengart & Short, 2002; Waterman et al, 1994; Watts, 2000).

In this complex, ever changing environment, career development services play a role in assisting individuals to manage and construct their own careers across the lifespan, and supporting them in 'the learning of skills, interests, beliefs, values, work habits, and personal qualities that enable each client to create a satisfying life within a constantly changing work environment' (McMahon et al, 2003, p9, citing Krumboltz & Worthington). Consequently, as people change and develop throughout life, they need access to career development services throughout their lives and for more than one transition (Collin & Watts, 1998; Jackson et al, 1996; Watts, 1996). Instead of a 'once in a lifetime' career decision, within the process of career development there are points at which individuals are faced with decisions throughout their lifetime. Furthermore, it was proposed that individuals are capable of managing their own career development and career decision making in their response to environmental input. Overall, this means that career development services must be forward thinking and help their clients respond to the changing environment. Also, within a broader systemic environment, the services must be much more personalised to assist people with their own individual decisions.

Selby-Smith, in his article reviewing the economics of vocational education and training in Australia, recognised that the balance of responsibility for career development was moving to the individual who had expectations of work-life balance. He considered that the implications for career development were that people would need a better understanding of industry changes and up-to-date information. He also determined there was an increasing emphasis on higher level qualifications with higher status attributed to academic, rather than vocational, education. He concluded there was a need to change the cultural attitudes and expectations of those involved in the career development of young people, including parent, students, teachers and career advisers, to embrace VET as a career option (Selby Smith, 2002).

In regard to young people, it has been suggested that a blueprint for career development will provide a tool for facilitating pathways policies and help identify the career development services needed beyond the completion of apprenticeships and traineeships, provide a mechanism for operationalising the employability skills framework, and provide an equitable framework for career development.   It has been proposed that a blueprint would also provide a mechanism for identifying the professional skills required in career service providers and provide minimum standards for career development learning (McMahon et al, 2003).

A number of attempts have been made to provide theoretical schemata for careers practitioners which would cope with changing variables over the lifespan. Rogers and Creed examined four career theories and their relevance to the school to work transition for adolescents: social cognitive career theory; person-environment fit theory; developmental theory and social learning theory. The authors described the strategies of the four theories and developed a list of common themes which formed the basis for students to make a successful and adaptive transition. These stressed the importance of self knowledge, occupational knowledge and decision making skills, explored in a developmental framework with guidance from experienced counsellors and support from positive relationships (Rogers & Creed, 2000). Meyers proposed a theoretical model to assist career counsellors in working with clients in managing their career development within organisations, taking both the individual and the organisational perspectives into account, as well as environmental and economic influences (Meyers, 2000). Meyers also described the work of Dawis, who reduced the major theories into an 'individual differences' model with three facets - individuals, variables and points of time lead typology, traits and learning curves (short-term) and developmental stages (long-term) respectively.

In addition to the changing meaning of career and career development, changes in the theoretical paradigms for careers practice have affected service delivery (Patton, 2001). The practice of career development has evolved from a 'trait and factor' matching process, which was suited to a more stable work environment, to a constructivist, holistic approach which is more suited to the constantly changing environment which is part of an individual's total life experience (Collin & Watts, 1998; Grubb, 2002). In attempting to embrace the contextual factors relevant to career practice, new theoretical directions have included ecological, biographical and hermeneutical approaches, which utilise context, interpretation and narrative in professional practice (Chen, 1998). Patton and McMahon (1999) reviewed these theories, from Parsons in 1909, through content theories such as 'trait and factor' and process oriented developmental theories, to career development theories which combine both process and content. The authors proposed an integrated theoretical paradigm, systems theory, which embraces both process and content of career development and takes account of various critical systems: the individual, the social and the environmental/societal (Patton & McMahon, 1999, pp10/11). Within systems theory, the services themselves are part of the system. Patton & McMahon (1999) proposed that training should be viewed as a learning system, career education as a career development learning process and career counselling as a therapeutic system (p190).

Definitions

Although the roots of career development can be traced back to the beginning of the twentieth century with the work of Parsons (1909-1989), the career 'industry' as such has suffered from a lack of professional cohesion and could arguably be considered an 'immature' profession. One of the hallmarks of this immaturity is the inconsistency in the vocabulary used to describe its various activities. While practitioners within the profession arguably might have a common understanding of the terminology, there is much confusion in the public arena which, in turn, reflects on the credibility of the profession.

In its review of career guidance policies (OECD, 2002) the OECD commented on the strengths of the career guidance field in Australia, especially in respect to committed individuals and the links between research and practice demonstrated in the *Australian Journal of Career Development* (p22). One of these authors, Patton, identified the problem of terminology in her paper on career education and provided some clarification about definitions within the field, in respect to major careers activities (Patton, 2001, p14). Definitions were also sourced in other major publications.

An important general feature of the terminology is the use of 'career', rather than 'careers' in composite terms such as career adviser, career development etc. The preference among practitioners is for the singular, although outside professional practice, the plural is still used arbitrarily and capriciously. It is posited that the plural form places career within the organisational context where a change of organisation meant a change of career and where the task of guidance was to help people choose between careers. The singular form, however, places career much more as a personal construct within the individual's whole of life experience, thus empowering the individual (Collin & Watts, 1996). The tension between these two career orientations, organisational and individual, and the consequent changing nature of career management in organisations, is a significant issue examined by authors (Baruch & Peiperl, 2000; Doyle, 2000; Eaton & Bailyn, 2000; Hall & Mirvis, 1996).

While the term 'career' was historically used to describe a particular occupation or one's advancement through a particular organisation, and had middle class, male connotations, the term career subsequently was used, not to refer to a particular occupation, but to a sequence of occupations, both paid and unpaid, which an individual undertakes in a life time. The definition most commonly used in the literature is that coined by Arnold in 1997, 'a career is the sequence of employment-related, positions, roles, activities and experiences encountered by a person' (Arnold, 1997). In its evolution, several adjectives have been appended to 'career', in an attempt

to describe it appropriately. These have included terms such as 'boundaryless career', attributed to Arthur, 'portfolio', attributed to Handy, 'postcorporate career', coined by Peiperl and Baruch, and 'protean' attributed to Hall. Other common descriptors are 'subjective career' and the counterpoised 'objective career'.(Ackah & Heaton, 2004; Arnold, 1997; Arnold & Jackson, 1997; Amundson et al, 2002; Hirsh & Jackson, 2004; Jackson et al, 1996; Kelly et al, 2003). More recently, within a wider lifetime and lifespan context, 'career' includes life roles and leisure activities, and the term 'life/career' is becoming used more frequently. The definition used for the development of the Australian Blueprint for Career Development was the 'lifelong process of growth through life, learning and work' (Haines et al, 2003, p9), though the evaluation feedback for the prototype was that this might be too broad a definition to be described by 'career', and a definition such as 'personal management, learning and work' might be more suitable. (McMahon et al, 2003; Miles Morgan, 2002, p15; Miles Morgan, 2003; Arnold, 1997, Chen, 1998; Hall et al, 1996; Jackson et al, 1996)

Gysbers used the term *development* 'to indicate that individuals are always becoming' (cited by Patton & McMahon, 1999, p211). In their book proposing a systems theory framework for career development, the authors traced the history of the term 'career development' back to 1951 and attributed it to Ginsberg and his associates (Patton & McMahon, 1999, p4).   While the term 'career development', in the linear, organisational based career, inferred upward progression, in the modern environment it more commonly describes the way a career unfolds from a personal perspective, which may not necessarily be perceived as positive (Arnold, 1997). Patton & McMahon favoured a definition of career development as a lifelong process which 'encompasses the individual, the environment, interaction, and change as the key elements' (p4). This broad definition of career development as 'an overarching term for describing this complex process of managing life, learning, and work in the 21st Century' is used in the development of the Australian Blueprint for Career Development (Haines et al, 2003, p9). However, while the term is commonly used in Canada and the USA, it is not a commonly agreed term in Australia (McMahon, 2004a, p13).

The career development process can be facilitated by a career intervention. This intervention is sometimes called 'career management', which is an attempt to influence a person's career development (Arnold, 1997, p19). The term 'career management' is often used within organisations to describe career development activities which meet organisational needs, whereas activities designed to meet the needs of individuals are often referred to as 'career planning' (Bernes & Magnusson, 1996). However, McCowen describes the self-managed process as career development (McCowen, 2000).

It is claimed that, in the organisational literature, career development is 'an ongoing process of planning and action directed towards personal work and life goals … (it is) the outcome of the individual's career planning and organisation's provision of support and opportunities' (Patton & McMahon, 2001, p2, cite Simonson, 1997). Career development, then, can be self initiated or the result of support from an external agency, such as an employing organisation or career development service (Hall & Moss, 1998). Career development services refer to a wide range of programs and services provided in many different jurisdictions and delivery settings. A career development practitioner is an overarching term for any direct service provider who plays a part in facilitating career development (Haines et al 2003).

Career interventions can be delivered through various mediums, which are often grouped together as career education, information or guidance (CEIG) or information, advice and guidance (IAG). 'Career education' usually refers to the classroom activities undertaken in schools. It includes a range of teaching and learning activities by which people learn to plan, prepare, develop skills, and acquire knowledge to assist in post school career options, and maximise their effective participation in working life. It contains three major elements: self awareness/preparation; opportunity awareness relating to the world of work; and decision and transition learning to enable skills transfer and career planning. 'Career information' assists

individuals to make and implement informed choices about their career development. It includes: information about employment, education and training trends and opportunities; labour market issues, information about industry sectors and job and occupational descriptions; details about courses and qualifications; and information about costs, remuneration and financial assistance associated with educational and vocational options. It can be communicated via print, electronic and personal contact resources, including computer-based delivery systems, the Internet, print and media materials, interviews, presentations and classroom activities.

Guidance implies movement – 'career guidance' is delivered by qualified practitioners who support a person's movement towards understanding their specific career options. It is a comprehensive program which may include career information, education and counselling and may be delivered in a variety of ways – individually or in groups. (Collin & Watts, 1998; Patton, 2000; Patton, 2001; Haines et al, 2003; Miles Morgan, 2002). In her scoping paper prepared for the National Standards and Accreditation of Career Practitioners Project, commissioned by DEST, McMahon elaborated on the definition of career guidance as an overarching term to include information, guidance and counselling services 'intended to assist individuals, of any age and at any point throughout their lives, to make educational, training and occupational choices and to manage their careers' (McMahon, 2004a, p4).

Career education, information and guidance can all be components of 'career counselling', which is an activity conducted by a qualified practitioner either on an individual basis or in small groups. It involves personal exploration, training in career management skills, providing targeted information and assisting individuals to personalise this information, and assisting individuals to plan their careers and manage their transitions. 'Career advising' is usually a more informal activity, which may be undertaken by a wide range of personal and professional practitioners who may be qualified, but not necessarily in the area of career counselling, and usually will not provide the in-depth personalised assistance provided by a career counsellor (Patton & McMahon, 2001; Haines et al 2003; McCowen, 2000; Miles Morgan, 2002).

It follows that career development programs can include education, information and guidance and can be delivered by service providers fulfilling an educational, informational and guidance or counselling role.

It is apparent that there is still some confusion about the terminology employed in the career industry and authors try to lay these misconceptions to rest and clarify the terms. For example, Patton said that career education is not: expert forecasts of the job market to help people make perfect choices, a battery of tests leading to the perfect occupation, remedial help to help people find or hold a job, or information about job applications (Patton, 2001, p14). In the draft Australian Blueprint for Career Development the authors also drew attention to some commonly misused terms where: career assessment is sometimes limited to the idea of testing rather than inclusive of non-standardised, formal and informal assessments and self-assessment; career is narrowly used as a synonym for a profession; career information, career education, career counselling and career development are inaccurately used as synonyms; job, occupation and career are used as synonyms; and work is limited to paid work rather than inclusive of unpaid and paid contributions (Haines et al, 2003, p17):

However, McMahon found that problems in terminology still persist as *career industry* and *career development industry* are used interchangeably and the terms *career* and *careers* are both used in describing positions and practices, for example *career adviser* and *careers education* (McMahon, 2004a, p13). One of the goals of the Quality Standards project was to agree on the overarching terms for the Australian career industry and how they should be defined. An additional task was to identify the nature of the work, that is the programs and services, undertaken by career practitioners.

Development of policy frameworks in Australia

Early efforts to provide a framework for career education in schools were embodied in 'Career Education in Australian Schools' prepared by a joint working party of the Ministers of Education in all States and Territories, and the Commonwealth, following a proposal by the Commonwealth Minister for Employment, Education and Training (AEC, 1992). It advocated careers support for young people being secured both 'within the curriculum' and 'stand alone' (p3), and both within schools and within the community. The 1989 Common and Agreed National Goals for Schooling in Australia provided the basis for four national goals of career education described in the document. The elements of these were (p6-9):

- learning about self in relation to work
- learning about the world of work
- learning to make career plans and decisions
- implementing career decisions and managing work transitions.

A framework which described the outcomes - knowledge, skills and attitudes - which could be typically expected of students was developed for years K-12. Outcomes were also specified at school and 'system' level as well as evaluative arrangements for the student, the school and the education system.

The 1998 Principles for Career Education and Advisory Services, endorsed by MCEETYA, recognised the role that careers services play in helping people to become lifelong learners and responding to a changing labour market, the need for comprehensive, current and accurate career information, stressed the need for adequate monitoring and review mechanisms and for strategic linkages between the education and employment sectors, and the principle that all education and training pathways are equally important and valid. This message was encapsulated in seven principles relating to career education and advisory services (Miles Morgan, 2002, pp23-24).

However, in their review of career activity in Australia, McCowan and Hyndman found that despite the need for a quality career advisory system being recognised in more than 20 reports over the previous 5 years, by 1998 there was still no current commitment to supporting a national system (McCowan & Hyndman, 1998).

The 'Adelaide declaration on national goals for schooling in the twenty-first century' (MCEETYA, 1999) focused on providing students with 'the necessary knowledge, understanding, skills and values for a productive and rewarding life' (p1). Goal 1.5 was that, when students leave school, they have 'employment related skills and an understanding of the work environment, career options and pathways as a foundation for, and positive attitudes towards, vocational education and training, further education, employment and life-long learning'. Following the Adelaide declaration, the Careers Education Quality Framework (CEQF) was designed (by the Career Education Foundation of Victoria (CEFV) and the Enterprise and Career Education Foundation Ltd (ECEF), subsequently absorbed into DEST) as a tool for assessing and developing career education programs in schools (Willett, 1999). The CEQF comprised seven checklists and a scoring system for creating a profile of a school's career education program. The CEQF was based on the Australian Business Excellence Framework and had seven categories, two of which referred to the quality of career information and careers personnel. It was adopted as the reporting basis for a National Innovation in School Careers Programmes Award set up by the Australian Career Service (a joint initiative of the Good Guides Group and the Curriculum Corporation). However, participation was voluntary.

Goals and objectives for career education and guidance for young people were articulated in the New Framework for Vocational Education in Schools (MCEETYA, 2000a). The framework located career education *within* vocational learning as part of student support services. It emphasised readily accessible, well-organised, accurate, comprehensive and current information as well as professional career and transition support services being made accessible for all young people in the local community.

The report of the Prime Minister's Action Plan Taskforce, Footsteps to the Future (2001), noted that career information and guidance in schools had received considerable criticism in community consultations. It found that there was a lack of quality career information and guidance for young people and that problems were unrecognised until they had reached crisis point. The taskforce considered that, for career education services to be of high quality, they needed to be offered by people with appropriate skills/qualifications and be an integral part of the curriculum. It extended the focus of career education within schools beyond being solely concerned with the transition from school, by recommending that every young person should receive professional and on-going career and transition support from Year 8 and that school principals should be responsible for following up young people's transition outcomes for 18 months after leaving school. It recommended career and transition support be available through and beyond school, with access to the broad range of community services and specialist support available externally. It proposed a framework for career and transition support which included (p33-36):

- a learning pathways plan
- professional career and transition support
- mentoring
- responsibility for following up on students post-school
- additional assistance for those needing additional support
- brokering to effect workplace learning

The OECD's review of the transition from initial education to working life (OECD, 2000) indicated that career information, guidance and counselling services were a key to successful transitions, but found that they were not well organised or given sufficient priority in Australia. Furthermore, while the topic had been touched on in a few other OECD reports, it had not been treated comprehensively in OECD publications (Sweet, 2001a). Subsequently, the OECD initiated a review of career guidance policies in fourteen member countries. Specific issues addressed in the review related to delivery models, costs & benefits, the roles of stakeholders, staffing, financing, quality and, also, the soundness of the data used to evaluate these elements.

The OECD 'Review of Career Guidance Policies' (OECD, 2002) mapped the career guidance field in Australia. The Ministerial Council on Education, Employment, Training and Youth Affairs (MCEETYA), comprising relevant ministers at both Commonwealth and State level, was identified as the main co-coordinating body for guidance services for young people in the transition from school. In regard to this jurisdiction, the review found that the main focus of careers related activity was on the development of opportunities to undertake VET pathways and, also, on those aged 15-19 who were at risk of not participating in education, training or employment. However, the review considered that the emphases on VET pathways and on 15-19 year old students who were deemed 'at risk' were sometimes included at the expense of other, broader careers activities and that a proactive, rather than remedial, strategy to support young people beyond this initial transition would be more beneficial.

In general, the review found that guidance policy for the school sector in Australia was weak. Consequently the level, range and quality of guidance services varied greatly in both private and public schools. Career education was randomly located within the curriculum. Careers staffing within schools ranged from a full time equivalent Career Adviser in NSW secondary schools to none in some schools in Western Australia, and South Australia was not reported at all. In general there was a lack of accountability in regard to the quality of the guidance available. Career information for young people at school was mainly available via the Job Guide and the OZJAC computer-based information system, which have since been made available on-line; the National Career Information System provided a comprehensive web-based career information service; and an Australian version of the Real Game, a Canadian career and life skills programmed, had been introduced and co-coordinated by the federal Government.

Within TAFE 'no systematic information seems to be available on the extent and nature of these services' (OECD, 2002, p10), which appeared to have shrunk and were receiving low satisfaction

ratings from students. The review suggested that ANTA, as a Commonwealth statutory authority providing a national focus for vocational education and training, adopt a stronger leadership role in career guidance. At universities, there was great variety in the level of service and the delivery methodology, with a move to make service delivery web based or to incorporate elements into the academic experience by way of unaccredited courses or portfolio systems. The review suggested that TAFEs and universities review their efforts in regard to the career development of their students.

Outside the education system, there were three main ways that young people could get career guidance. Firstly, it was found that Australia had a larger private sector offering career guidance than some other OECD countries with some 250 agencies and 600 individuals or organisations offering career guidance as part of their service provision. Second, career services were sometimes provided by Job Network agencies, as part of the process to assist people in finding employment. However these agencies were paid on outcomes, irrespective of the ways of achieving them, which often did not include career guidance. Third, Career Information Centres provided some services, notably information. However, there were no formal qualifications required of staff in any of these three areas and, again, there were quality issues relating to service delivery.

In summary, the OECD Review of Career Guidance Policies found that key areas found to be wanting in Australia related to policy, professional standards and the lack of national strategic vision. The gap between policy and practice was recorded by other authors. Patton found that, since the first national career education conference in 1977, and despite the many government policies and reports regarding career education, there was little evidence of these being translated into practice in 2001(Patton, 2001, p15).

The Australian response to the OECD request for information required for the 'Review of career guidance policies' was co-ordinated by Miles Morgan Pty Ltd. This organisation also published a report describing important information which had been collected in preparation for the Australian response, but which had not been required by the OECD, 'information in respect to the gaps and opportunities in relation to career information, guidance and counselling services to assist policy makers in the future', from the user's perspective, 'Career Services in Australia: Supporting people's transitions across the lifespan' (Miles Morgan, 2002, p4). This report reflected on the career related aspects of various government policies and the outcomes of these policies, in practice. For example, in respect to the 1992 Principles, it was considered that these had played a role in career education in schools but the extent to which it had been actively implemented was unknown (p22). Similarly, in respect to the 1999 Adelaide Declaration, the review found there was a gap between policy and practice as there was no requirement for States/Territories to report on their progress for career-related goals.

In the 'Career Services in Australia' report, the three policy initiatives considered to be the most relevant to the provision of career development services were the MCEEYA Career Principles of 1998, the New Framework for Vocational Education in Schools and Footprints to the Future. It was considered that these policy initiatives emphasised key principles for career information, guidance and counselling services in support of successful transitions for young people (Miles Morgan, 2002, p32). While it stressed the need for comprehensive career guidance and current, relevant career information, it underlined the role of community partnerships and policy frameworks to support this activity.

The authors considered that, in respect to the 1998 Principles, there had been significant growth in respect to career-related information, making it available, comprehensive, current and accurate, through the Career Information Industry Partnership Programme, the ANTA National Industry Training Advisory Bodies (ITABs), the National Career Information System (NCIS), the DEWR Careers internet site and Job Outlook, and local products prepared by the States and Territories (Miles Morgan, 2002, pp24-25). Developments in TAFE Counselling Services had made them

more responsive to client feedback. There had been considerable progress in the development of partnerships and strategic linkages, particularly through the Jobs Pathway Programme and within the school and university sectors. It reported greater awareness of VET pathways through the success of VET in Schools and the efforts of organisations involved in VET such as ANTA, the Group Training Companies, private Registered Training Organisations (RTO's), New Apprenticeship Centres, employers, industry associations and ITABs. However, there was not a corresponding change in perception of a VET pathway being equally valid as one through higher education, VET in Schools was not adequately linked to career planning for students and, most relevantly, the 'fundamental value … of career education and advisory services has not yet been recognised in a consistent way across all jurisdictions and sectors' (p25).

In regard to The New Framework for Vocational Education in Schools, while the OECD review noted the risk that career education would be 'subordinated to other areas of the framework' (OECD, 2002, p16), the Miles Morgan authors found that this framework had stimulated new interest in career education, guidance and counselling. They also found that it affirmed many of the principles for career education expressed in the 1998 statement and provided an opportunity for linkages between vocational education and career planning (Miles Morgan, 2002, p28). Many jurisdictions had put a variety of 'systems, structures and strategies' in place to support the framework and to achieve local goals (p28).

An historical account of vocational and career education in Australian secondary schools since the 1920's found that vocational guidance had changed over the years with the changing perceptions of human needs and development (Dixon, 2002). While this paper took a narrower view of vocational and career education, as involving the development of students 'to make the appropriate occupational choices' (p43), it did describe the changes in Australia over time. It reported that, in the 1930's to 1960's, there was a focus on promoting vocational guidance in an effort to align students with various occupations. Through to the 70's there was a focus on secondary education being preparation for the tertiary sector with few other options available. However, in the 70's there was growing awareness of career development being a broader process involving personal growth, but was accompanied by an 'ad hoc' approach to career education throughout the 1980's and into the 90's. The author identified a more structured integration of career and vocational education in the twenty first century with the development of the New Framework for Vocational Education.

The Prime Minster's Youth Pathways Action Plan Taskforce had found that career and transition services were inconsistent around Australia (DEST, 2004b). Their report 'Footsteps to the Future' led to the development of the MCEETYA Action Plan, 'Stepping Forward: improving pathways for all young people'. Following on from this, in 2003 MCEETYA agreed to support a framework for assisting young people in their transitions both within school and from school to post-school transitions. Consequently, the Career and Transition Services (CTS) framework (MCEETYA, 2003) attempted to bring together a range of existing strategies by various agencies and embrace them under a common framework. The focus was on responding to young people's needs and on the support of schools, the community, agencies and local support networks to achieve this. The framework was targeted at young people aged 13-19, plotted a deliberate career journey, and consisted of the following ten elements:

1. A learning pathways plan

2. A transition plan and portfolio

3. An exit plan

4. Follow-up support

5. Career education

6. Brokerage: VET, Structured Workplace Learning (SWL) and vocational education

7. Career information, guidance and counselling

8. Brokerage: replacement or referral

9. Individual support approaches

10. Monitoring and tracking

The CTS framework argued that career education has an important role to play both within and after compulsory education. It referred to career information, guidance and counselling services in a wide range of settings and sectors which support young people in their transitions, and acknowledged the various informal and non professional sources from which students also draw information and guidance. However, it also stated that: 'career and transition services … should be delivered by professionally trained and committed staff able to access an extensive school-community network' (MCEETYA, 2003, p3).

Following the publication of the CTS framework, a number of Career and Transition (CAT) pilots were put out to tender in 2001 and implemented in 2002. The Miles Morgan report found that the CAT pilots which were in place at the time their report was published were more comprehensive than existing States and Territories initiatives and offered an opportunity to integrate Commonwealth and State programs, but this had not yet been achieved, as responsibility for integration of the projects was with local level service providers (Miles Morgan, 2002, p31). Between April 2002 and April 2003, 37,000 young people participated in the pilots with 24,000 implementing individual Learning Pathway Plans. In March, 2004, a House of Representatives Inquiry found that there were 23 pilots but there were elements of these which overlapped or were similar to some state and territory initiatives, which had been developed in response to the Framework for Vocational Education in Schools, and recommended that the jurisdictions work together to avoid areas of duplication and maximise use of resources (House of Representatives Standing Committee on Education and Training 2004, p209). In August 2004, there were 20 CAT pilot programs: 5 in Queensland, 4 in Victoria, 3 in NSW, 3 in Western Australia, 2 in NT, 2 in South Australia and 1 in Tasmania (DEST, 2004a). These programs varied in the number of schools involved but were usually regionally based partnerships and involved several of the elements described in the framework. An evaluation of 23 pilots in 2004 reported on their success in terms of their impact on students, schools, parents, local community agencies and industry and, in particular, the achievements of Learning Pathways Plans (DEST, 2004b). However the evaluation found that tracking methodologies had not been fully explored and staffing of CAT Advisers seems to have been variable, prompting advice regarding the minimum skills, knowledge and attributes required for these positions. Most relevantly, the evaluation found that few of the pilots had differentiated between immediate transition support and the longer term career development of the young people involved.

Despite the articulated need for career guidance for young people expressed in many policy documents, the review of transition programmes undertaken by the Business Council of Australia reported on slow progress in the provision of career information and guidance and access to services and found that career education, information and guidance systems were expanding but in an incoherent, uncoordinated fashion (Allen Consulting Group, 2003).

In 2003 the Transitions branch of the Department of Education, Science and Training was funded by the Australian Education Systems Officials Committee (AESOC) to convene a forum to discuss strategies for schools and industry to work together to ensure that all students have access to a comprehensive range of career materials in order to make well-informed decisions about future career directions as highlighted in previous government reports (the 1999 National Goals for Schooling in the 21st Century, the 2000 New Framework for Vocational Education in Schools, the 2001 Footprints to the Future & the 2002 Stepping Forward: improving pathways for all young people) (DEST, 2003, p3). Identified issues for this 'Leaders in Careers' forum were the effective delivery of career education by qualified staff, the need to address industry

shortages, recognition of the career opportunities afforded by vocational education and the need for co-operation between industry, schools and parents. At the forum, an action plan was drawn up to provide strategies to achieve objectives relating to raising awareness of these issues, opening up communication channels, improving community perceptions, monitoring work experience programmes and supporting the implementation of the CTS framework. A key objective was to provide desirable, effective and user-friendly career information to students and others who influence their career choices, through strengthening communication between school, parents, industry and business.

Commissioned by the Transition from School Taskforce of MCEETYA, a prototype for an Australian Blueprint for Career Development was produced in 2003 and was still under development in 2004(Haines et al, 2003). It drew on the Canadian Blueprint for Life/Work Designs, itself modelled on a framework developed in the USA, and was developed in collaboration with relevant Canadian and USA agencies. It was claimed that the development of a national blueprint for career development supported policy initiatives articulated in the National Goals for Schooling, the New Framework for Vocational Education in Schools, the Employability Skills Framework, as well as State/Territory curriculum initiatives (Haines et al, 2003, p92-94). In addition, it was claimed that the blueprint could inform thinking related to the development of the ANTA national strategy for vocational educational and training 2004-2010, which promoted a whole of life approach and recognised that such an approach 'goes beyond vocational education and training' (ANTA, 2003f, p. 15). Clearly, it was stated, career development learning could complement and extend what was already being provided by the VET sector (McMahon et al, 2003, p12). A main aim of the blueprint was to facilitate consistency in the delivery of career development services for clients at all developmental stages during transitions from one educational institution/agency to another, so that individuals could have their needs addressed seamlessly and with consistent service quality. Concerns with tracking people's career development across all transitions, institutions and locations was an issue raised in the evaluation of the prototype and it was suggested that a 'careers passport' might be a way of enabling this (Miles Morgan, 2003). The blueprint would also would provide a common language for career development initiatives and enable governments to monitor access to services more effectively. In June 2005, MCEETYA agreed to trial the Blueprint in a variety of settings and environments. DEST will chair the trial and manage it

The draft blueprint was an integrated national framework for career services and programmes that specified the competencies that all Australians need to build their careers. Eleven career competencies were grouped across three key areas – personal management, learning and work exploration, and career building – and expanded through performance indicators which followed a four-stage learning taxonomy. Career competency 5 was 'locate and effectively use career information', and career competency 8 was 'make career enhancing decisions'. The blueprint was relevant to people at all ages and had four developmental phases, which were not necessarily congruent with age, and could be used when working with groups with special needs. Phase III was for students in senior/post-compulsory school and Phase IV was for adults. There was also a three-phase strategy for designing, developing and implementing comprehensive career development programs which could be adapted to the local environment and standards.

The development of the blueprint paralleled and sometimes dovetailed with developments in the employment sector. A multi skilled workforce has been identified as an essential requirement for Australia to respond to globalisation and position itself competitively in the knowledge economy (DEST, 2002a, p1). The Business Council of Australia (BCA) and the Australian Chamber of Commerce and Industry (ACCI) sought support from DEST and ANTA to develop a comprehensive framework of employability skills. Building on the Mayer Key Competencies developed by the Australian Education Council in 1992, and with substantial industry input, the 'Employability skills for the future' project (DEST, 2002a) sought to establish a clear definition of employability, and guidelines for the assessment, certification and reporting on performance of

the relevant skills. The definition of employability skills used for the project was 'skills required not only to gain employment, but also to progress within an enterprise so as to achieve one's potential and contribute successfully to enterprise strategic directions' (p3). The resulting framework identified 13 personal attributes, or non skill-based behaviours and attitudes, and eight key skills, which were further broken down into elements which are appropriate for a particular job. The recommendations of the report referred to the implementation of the framework in educational institutions. The Allen Consulting Group was subsequently appointed to develop a strategy for the universal recognition of these skills in schools, VET, higher education and the community (Allen Consulting Group, 2004).

In their paper informing the blueprint (McMahon et al, 2003), the authors referred to the difference in the competencies expressed in 'Employability skills for the future', and the 'meta-competencies' in the career development frameworks produced in Canada and the USA, in that the former had an employment focus and the latter a focus on lifelong career development. However, while the competencies of the former included some that were not industry or trade related, it was claimed that meta-competencies cut across occupational skill sets and could be universally applied – an advantage in an environment where the requirements of workplace are for a changing skill set. In the blueprint, the explanation for the relationship was that the Employability Skills framework described what employers required of their employees and the Blueprint enabled students to personalise and act upon their knowledge about these skills as part of their career development. Career practitioners were encouraged to make linkages between the two as appropriate to local conditions or standards (Haines et al, 2003, pp94-95).

The gap between policy and practice was a theme articulated in reviews and publications over several years (McCowan & Hyndman, 1998, Patton, 2001, Allen Consulting Group, 2003). In fact, nothing much seemed to have changed: the failure of policy to meet the needs of young people was still evident in recent times. The House of Representatives inquiry into vocational education in schools (House of Representatives Standing Committee on Education and Training, 2004) found that, in relation to career education in schools (pp210-212):

- it was very much a poor cousin to the major curriculum areas
- its location in the curriculum varied widely
- state and territory policies varied considerably
- staffing varied widely, both in terms of number, qualification and nomenclature and, in effect, were often untrained
- decisions about the provision of careers advice tended to be taken at the individual school level, culminating in a range of delivery and approaches, especially in respect to staffing
- there was a focus on vocational education and training at the expense of careers advice (pp 216-17, 222-223)

In summary, 'the Committee is concerned, not only that the provision of career education is so inadequate and so inconsistent, both between jurisdictions and within jurisdictions, but that this situation has been recognised and allowed to continue for so long' (p216). Recommendation 29 stated that 'careers education be a mandatory part of the core curriculum for the compulsory years of secondary schooling. It should include a clearly defined and structured program, distinct from VET programs.' The Inquiry found that, 'given the diverse and complex nature of possible pathways for students leaving school' (p236), a well-trained career education teacher can prepare students effectively for their career transitions. Consequently, Recommendation 30 stated that 'all secondary schools have at least one full-time professional careers adviser, with appropriate specialist training, who can provide a dedicated career education service within the school and work with the VET coordinator', with other recommendations concerning their appropriate training (Recommendation 31) and professional development (Recommendation 32). In addition, a national system of reporting was recommended (Recommendation 33), to ensure consistency, transparency and accountability in the delivery of career education.

Since the release of the report of the inquiry into VET in schools (House of Representatives Standing Committee on Education and Training, 2004), the federal government has announced a number of initiatives to strengthen career advice for young people (DEST, 2004j), calling on the States and Territories to support career education in schools and vocational education pathways (DEST, 2004f), for career education and career advice programmes to help young people make better career choices (DEST, 2004k), and to provide year 12 students with information about post-school study options, particularly through vocational education and training, as part of a commitment to provide a broad range of career opportunities for school leavers, particularly the 70% who do not go directly from school to university (DEST, 2004i).

The federal government has also announced its intention to extend the role of 216 Local Community partnerships to provide an Australian Network of Industry Careers Advisers to support young people aged 13-19 in their transition through school and from school to further education, training and work (The Nationals Federal Election '04 Policies web page, retrieved 25 Jan 05). This statement recognised that career advice to secondary students is often ad hoc and that they need comprehensive and professional advice from industry experts and qualified careers advisers to help them understand their options and ensure they have access to career information, advice, support and planning through individual Transition Plans. It also supported the introduction of a national accreditation system for career practitioners.

In 2004 DEST supported the Career Industry Council of Australia (CICA) to undertake the development of national quality standards and an accreditation process for career practitioners. A draft scoping paper identifying key issues was prepared (McMahon, 2004) and discussed at the National Forum for Career Practitioners, in August 2004. Following this, the scoping paper will be revised, and then a national consultation process will be undertaken by CICA and Miles Morgan Australia. McMahon described the attention paid, in various reviews, to the issue of quality standards relating to the training and qualifications of career practitioners and defined quality standards as the systems and procedures developed by career practitioners and stakeholders in the career industry that:
  ◆ define the career industry, its membership and its services
  ◆ recognise the diverse skills and knowledge of career practitioners
  ◆ guide practitioner entry into the industry
  ◆ provide a foundation for designing career practitioner training
  ◆ provide quality assurance to the public and other stakeholders in the industry
  ◆ create an agreed terminology for the industry
  (p57, adapted from the *Canadian standards and guidelines for career development practitioners Code of Ethics)*

The need for comprehensive career advice, guidance and development has been expressed in all ANTA policy documents (ANTA, 1998; 2000a; 2003b; 2003f). The most recent annual report for the VET sector (ANTA, 2004a) reported on the updating of the National Training Information Service (which contains detailed information on VET courses, qualifications, Training Packages, competency standards and Registered Training Organisations), to align it more closely with business and user requirements (ANTA, 2004a, p65). The report also described career development initiatives within vocational education and training undertaken at state level: NSW was committed to enhancing young people's capacity to make informed decisions about careers; Western Australia to implementing career development strategies to assist individuals to respond effectively to changes in the world of work, the influence of globalisation and their own changing career aspirations; the Northern Territory was committed to preparing young Territorians for the workforce (by providing for closer links between schools and industry and better career advice). It also reported on industry initiatives such as the development and distribution of modern careers materials by the industry-led National Industry Skills Initiative. The 2003 ANTA report also described the transfer of the functions and contracts of the former

Enterprise and Career Education Foundation to the Department of Education, Science and Training, in September 2003, which had ensured continuity in the delivery of relevant programmes such as Structured Workplace Learning and the national network of Local Community Partnerships.

Career development agencies – who are they?

Agencies providing career development services can be grouped, for convenience, as follows: the school sector, the tertiary sector and services for adults. These groupings are supported in the literature. In its review of career guidance policies in Australia, the OECD described the key features of the guidance system, which it grouped in the following sectors: school, transition from school, TAFE, Universities, JobNetwork providers, private guidance sector, other services for adults and information provision (OECD, 2002). Also, the Career Services in Australia report (Miles Morgan, 2002), provided an overview of career services in Australia, and described the agencies involved in providing career services in these sectors in the following order:

- Government agencies: Commonwealth agencies, such as the Department of Education, Science and Training (DEST), the Department for Employment and Workplace Relations (DEWR), the Australian National Training Authority (ANTA), the Defence Force Recruiting Organisation (DFRO) and Family and Community Services (FaCS); State and Territory governments and statutory authorities.
- Schools: government, Catholic and independent
- VET and universities: TAFE institutes; Registered Training Organisations (RTO's); National Industry Training Advisory Bodies (ITABs); VET oriented organisations and networks such as Group Training Companies, New Apprenticeship Centres, Structured Work Placement Coordinators funded through the ECEF; universities.
- Private sector: career services providers, products, employer associations, individual employers, industry and professional associations, unions.

In addition, the design of the draft Australian Blueprint for Career Development also supported a sectoral analysis of career development services. Career development is acknowledged to be a lifelong process and the draft accordingly identified four developmental phases across the lifespan. These were not necessarily tied to age, rather - the authors stated - they were 'needs based', depending on the stage of development of the individual (Haines et al, 2003, p23). Nevertheless, they claimed it was possible to work with the phases according to age as follows:

- Phase I for students in K-Primary School
- Phase II for students in Middle School
- Phase III for students in Senior/Post-Compulsory School
- Phase IV for Adults

The agencies were also described by Watts, in his address to the National Forum of Career Practitioners, as including services in schools, universities and colleges, training institutions, public employment services, companies, the voluntary/community sector and in the private sector (Watts, 2004b, p2).

Consequently, the agencies which support career development may be located both within and external to the education system, in both the public and the private arena.

Within these agencies, there are a number of practitioners involved with direct service delivery, with a range of occupational titles. It was proposed that the Australian Blueprint for Career Development could be used by anyone responsible for programs or products that facilitate the career development of individuals (Haines et al, 2003, p11), such as:

▪ adult educators	▪ employment services providers	▪ program developers
▪ career counsellors	▪ guidance officers	▪ recruitment officers
▪ career educators and researchers	▪ human resource professionals	▪ school counsellors

▪ career resource developers/publishers	▪ labour market information specialists	▪ staff training officers
		▪ staffing officers
▪ community based educators/trainers	▪ life skills coaches/facilitators	▪ transition advisers
	▪ outplacement consultants	▪ VET in Schools coordinators
▪ curriculum developers	▪ primary and secondary school teachers	▪ work experience coordinators
▪ education and training administrators		

Career practitioners in Australia are represented in various associations. For example, the Australian Association of Career Counsellors (AACC) is a national organisation of practitioners who provide career services for people seeking to enter the workforce or change worklife direction. Its members work in education, employment, rehabilitation, human resources, government service, community settings and private practice, and have a 'locate a counsellor' web page for the public to source career guidance in the private sector. The association has divisions in each state, has links to career services within universities, TAFEs, private institutions, secondary education and vocational training, as well as to six careers associations, three professional associations and affiliated sites overseas (AACC, 2004). Many associations are now represented by the Career Industry Council of Australia (CICA), formed in 2003 with funding from DEST. The aim of CICA is to promote a career development culture within Australia. In 2004 it represented 12 associations covering secondary schools, TAFEs, universities, the public and private sector, specialised groups working with elite performers and rehabilitation clients, employment services, community organisations, and private practice (CICA, 2004). However membership of most relevant professional associations is voluntary and there are many practitioners who do not belong to any such body.

There is a key concern with the qualification of practitioners (Miles Morgan, 2002; OECD, 2002; DEST, 2003; DEST, 2004b; House of Representatives Standing Committee on Education and Training 2004; McMahon, 2004a; OECD, 2004a). In her address to the National Forum of Career Practitioners, McMahon summarised the situation in Australia where membership of Australian career practitioner associations varies from no entry requirements to career or occupation specific post-graduate qualifications with supervised work experience, with none having requirements for continuing professional development (McMahon, 2004b). A challenge for defining the profession is whether it should include professional level staff only or everybody working in the industry, and whether the profession should be cross-sectoral. These are defined by Watts as being the vertical and the horizontal dimensions of the profession (Watts, 2004a). Levels of staffing for careers work, even within the education sector which is purported to be more comprehensively serviced, vary greatly with recommendations for staffing not implemented. Following the forum, the scoping paper will be revised and made available to stakeholders and a national consultation process will occur. The purpose of the quality standards for career practitioners is to provide a quality industry, providing quality service which can effectively execute policy initiatives (McMahon, 2004a).

In addition to the formal source of careers support there are informal sources. In 2004 a framework for career education, ReCaP, released by DEST (DEST, 2004h), provided a resource for practitioners, defined as 'careers teachers, teachers from a range of departments in a school, VET teachers and coordinators, counsellors and community-based organisations'. However, ReCaP also stressed the shared responsibility and involvement of parents, who were encouraged to be involved in career education in schools and be informed about transition issues and career pathways, as well as the community and industry in fostering a culture which values all occupations, pathways and aspirations and assists students to make informed decisions about career options, pathways and school subjects. The *Transitions* web site (DEST, 2004g) also suggested young people can get career advice from local community members, parents and

relatives, older brothers and sisters and business owners by networking, at open days and through sport and creative pursuits.

In the literature, parents are identified as a key source of information and guidance for young people (Grubb, 2002b). A review of studies that have investigated the relationships between family process variables and various aspects of young people's career development, has found that a range of these variables are associated with developmental advantages. Also, research has indicated that the involvement of parents in their children's career development is highly desirable (Hughes & Thomas, 2003, p43). Another study which investigated the relationship between young people's post-school plans, family background and orientation towards lifelong learning, recommended that a national youth mentoring strategy be implemented to support families, communities and schools in enhancing compulsory school retention and completion rates, or for the identification of alternate pathways. It also recommended that businesses and educational institutions co-operate to provide mentoring and career counselling that involves more than information, and stresses self evaluation and career planning (Beavis et al, 2004, pp9-10).

In effect, there are a wide range of agencies involved in the career development of young people, both formal and informal. This is a key driver behind the development of quality standards for the training and qualifications of career practitioners. The variability in all aspects of the field in described in the paper informing the discussion of quality standards for the profession: 'The Australian *career industry* is characterised by diversity in terms of its client groups, the sectors in which it operates, the nature of career services provided and the training and qualifications of its practitioners' (McMahon, 2004a, p2)

Career development agencies - what do they do?

Career development services exist in a number of **sectors** and are provided by a broad range of **agencies** and by a variety of **practitioners**, besides informal sources. The actual **services** delivered may be broadly grouped as information and guidance, as employed by the OECD in their international review of career guidance policies and other major authors (OECD, 2000; OECD, 2002; Miles Morgan, 2002). Information and guidance may be provided in a number of **settings** which include educational, counselling, experiential, and testing via a variety of **mediums**, both personal and impersonal. These mediums were described in the draft blueprint as *processes* and included: outreach, counselling, assessment, classroom instruction, career information, work experience, referral, consultation, placement and follow-up (Haines et al, 2003, Appendix b). The overall picture is described in the definition of career guidance used in recent international reviews conducted by the OECD, the European Commission and the World Bank (OECD 2004b, p10):

> Career guidance refers to services and activities intended to assist individuals, of any age and at any point throughout their lives, to make educational, training and occupational choices and to manage their careers. Such services may be found in schools, universities and colleges, in training institutions, in public employment services, in the workplace, in the voluntary or community sector and in the private sector. The activities may take place on an individual or group basis, and may be face-to-face or at a distance (including help lines and web-based services). They include career information provision (in print, ICT-based and other forms), assessment and self-assessment tools, counselling interviews, career education programmes (to help individuals develop their self awareness, opportunity awareness, and career management skills), taster programmes (to sample options before choosing them), work search programmes, and transition services.

School services

Within a lifelong framework, the early shaping of career development skills may be critical to future success. Research has revealed that young people's early interactions within school and work settings play a major role in shaping an individual's long-term career development (Feldman, 2002; Watts, 2002). The transition from school to work is also a critical point in young people's careers. The general finding from a review of the literature from 1995-2000 was that this transition was 'characterised by complexity and multiple pathways that could result in confusion, indecision and, in some instances, apathy' (Prideaux & Creed, 2002). The authors advised the need for coherent career service delivery across all States of Australia to assist these students (Prideaux & Creed, 2002).

However, it appears that career development has been inconsistently and, often, inadequately provided within the school setting, as identified in major relevant policy documents (Prime Minister's Youth Pathways Action Plan Taskforce, 2001; OECD, 2002; DEST, 2003; House of Representatives Standing Committee on Education and Training, 2004). Patton and McMahon cited a 1997 study by McCowan and McKenzie which found that 'in real terms … career education has received scant attention in the major curriculum reforms across Australia' and go on to say that, despite various policy initiatives, there has been a decline in real support for career education, and careers personnel in schools have had their time devoted to careers work reduced (Patton & McMahon, 2001, p6-7).

The 2002 report on Career Services in Australia found that the current services for Australian school students included some or most of the following, but as separate services rather than as part of a career development program (Miles Morgan, 2002, p36): individual counselling; information libraries; ICT based services such as *The Real Game*; seminars; visits; fairs; referral to government funding programmes such as the Career Counselling Programme; access to business-enterprise programs facilitated by various organisations; and career education functions in schools facilitated by the Enterprise and Career Education Foundation. They also had access to nationally available programmes and products (Miles Morgan, 2002).

The Miles Morgan report also recorded a wide range of programmes available in schools across the States. For example, in the ACT career education was part of the school curriculum, the ACT Government Schools Plan 2002-2004 provided for mentoring programs, participation in Commonwealth programs such as 'Get Real' and had a plan for students at risk. New South Wales had dedicated career advisers in schools and a designated Vocational Learning Team (in the VET in Schools Directorate) with responsibility for career advisory services. The Northern Territory had a designated Project Officer (Vocational Learning) and a career counsellor in each school. Queensland had guidance officers in schools and School Transition Officers for students with disabilities in transition from school. In Victoria careers provision was up to individual schools, though most had a staff member responsible for careers, and had a number of targeted services such as a Youth Employment Line for those aged age 15-24, a careersthatgo.com.au website with a focus on science, technology and maths, and a New Realities programme focussed on ICT and girls. At the time of the report four regional networks were trialling the development of a Career and Transition Management Framework. Tasmanian schools had a whole-of-school approach to career education and career guidance was very closely aligned to counselling, and transition and course counselling in senior secondary colleges had a main focus on students at risk. Career guidance in Western Australia was at the discretion of individual schools, had a focus on students at risk, and had a number of programs such as a Career Choices Expo, an Access Career programme and a mobile Career Counselling and Information Service (Career Plus). The report found that provision of career services in Independent and Catholic Schools typically mirrored patterns of State/Territory government schools, and varied widely (Miles Morgan, 2002, pp36-67).

However, the Miles Morgan report also found that, despite the goals regarding career education, information and guidance expressed in the 'New Framework for Vocational Education in Schools' and 'Footprints to the Future', and developments undertaken at state level, there was a lack of assurance that students would have access to career guidance delivered by qualified staff at the particular school they were attending (Miles Morgan, 2002). This was echoed in 2003, when 'parents, students and other concerned individuals have made it clear that random, isolated career interventions for students are no longer adequate to prepare them for the changing nature of life learning and work (Haines et al, 2003, p87). The Miles Morgan authors suggested that career education become a cross curriculum subject, which would have impact on the training of teachers and their professional development and would require a significant marketing effort by 'career development champions' within school (Miles Morgan, 2002, p64). The report also proposed that community partnerships should be an additional resource for the career guidance needs of young people. Furthermore, there was a 'widespread national agreement that schools can no longer do the careers job on their own' (p59) and suggested that career services in schools may need to be outsourced either wholly or in part.

International and national review teams found that career education and guidance in Australian schools was being subsumed and marginalised, often in favour of VET in schools programs (OECD, 2002; Watts, 2002). It appears that vocational education and career development were often confused. McCowan described the overlap between vocational learning and career development and explained that, while vocational learning focuses on developing an understanding of work, career development focuses on the lifelong process of self-managing learning and work (p20). He proposed that, in effect, the former supports the latter within a career development framework of self awareness, opportunity awareness, transition learning/implementation and decision learning/planning, though career development has a major focus on the area of decision making and choice (McCowen, 2000). This contrasts with the New Framework for Vocational education which locates career education within vocational learning (MCEETYA, 2000a).

The House of Representatives inquiry also found that the focus on vocational education and training in schools was at the expense of broader careers advice. The inquiry team identified problems with the delivery of career education in schools. It found there were two aspects of career education which were vitally important: broad teaching about careers and various career pathways, and one-to-one student-specific careers advice or counselling. Other issues in respect to career education in schools were its place in the curriculum – as a stand-alone subject or embedded in other courses - and the allocation of staff to manage and teach that program (House of Representatives Standing Committee on Education and Training 2004, p209).

Three significant programmes for young people within the school sector, which were identified in the OECD Review of Career Guidance Policies (OECD, 2002), are still available. The Jobs Pathways Programme provides career guidance to students, at eligible schools, who are 'at risk' and, also, to some young people who have left school but not engaged in any post school education, training or employment activity. Disengaged young people who meet specified criteria are also eligible to participate in the Career Counselling programme, delivered by qualified careers professionals and accessed through Centrelink. The third major programme available to this group of young people are the Career and Transition pilots which provide professionally trained career and transition advisers to work with schools.

The recently released *ReCaP* website (DEST, 2004h) updated the list of Australian government supported career and transition programmes for young people, to include the following: the Jobs Pathway Programme, Job Placement, the CAT pilots, Partnership Outreach Education Model (POEM), School-based New Apprenticeships, VET in Schools, Structured Workplace Learning (SWL) and Local Community Partnerships, Vocational and Educational Guidance for Aboriginals Scheme (VEGAS), Enterprise Education in Schools, Career Information Centres and services provided by DEWR and FaCS.

The Miles Morgan report pointed to the valuable contribution made by employers in respect to information provision and to vocational learning programmes in the education sector. Employers contributed career information resources in specific industries, participated in careers events as well as playing an advisory role in the development of vocational learning programs in schools, Training Packages within the VET sector and academic course accreditation within the tertiary sector (Miles Morgan, 2002).

Tertiary services

In regard to the tertiary sector, the Miles Morgan report found a wide variability in career service delivery. At that time of the report all universities had a dedicated career service though this was variable in respect to the services offered, the level of resourcing and line of reporting. All university career services offered career information, guidance, counselling and graduate employment services but were moving towards on-line and group delivery and towards embedding career development into academic programs. However, at the time of this report, only 3 universities were offering fully accredited units in career management. Most career services were staffed by qualified personnel but were a fringe service, under-resourced and understaffed, and 'do not enjoy the sort of status in most universities that would be consistent with the motivations of many students and their parents for career improvement or self enhancement'(Miles Morgan, 2002, p69, citing the 2001 GCCA response to the Higher Education Review). It reported that, while the 1991 national Koder report on career services in higher education had recommended staffing of one professional and one support staff per 3,500 eftsu, only five had achieved this in 2000. Given sufficient resources most university career services would elect to extend their services to include prospective students, offer targeted services to groups with special needs, distance education and international students, provide more help to students in subject selection, and liaise more with academic staff, employers and other local level services (Miles Morgan, 2002, p70).

The report pointed to the difficulty in getting data on career information, guidance and counselling services in TAFE and found that, in the VET sector in general, this function was devolved to training providers, with increasing commercialisation of services through paying clients using commercial career packages. Services offered at TAFE colleges by counsellors and advisers generally included career planning, career development, educational counselling, pre-course counselling, post-course counselling, job information and job-seeking skills, self-directed searches, vocational testing and assistance with decision-making. In addition to career counsellors, some TAFE institutes had Job Placement Officers to assist students with employment, work experience, industry placement, job seeking skills/strategies, interview techniques, resume writing, job applications, personal presentation, providing information on labour market trends and liaison between students and industry/employers. Many services also offered computer-assisted career planning and some had limited career libraries (Miles Morgan, 2002).

Pressures on TAFE colleges to commercialise their activities prompted a research investigation into the fee-for-service careers services offered by 40 counsellors at 16 TAFE institutes in Queensland (Doratis, 2000). Sixty-eight percent of the respondents either had fee-for-service activities in place or were planning to do so, with an overall preference for computer assisted career guidance tools. Challenges for the career services were in designing suitable packages, time constraints, public perceptions that government services should be provided free of charge, managing pricing structures which accommodated both internal and external clients, commercial competitiveness in an open market, maintaining standards and equity issues. Perceived benefits were the increased value placed on the services by clients and by the institute, and the professional development opportunities involved in offering additional services to clients.

The Miles Morgan report stated that 'while TAFE and university career services evidently struggled for resources in the 1990s, and are generally restricted to current students, they still

represent the nearest thing we have to a decentralised national network of professionally staffed career services for lifelong learning' (Miles Morgan, 2002, p74). It advocated a Statement of Entitlement for students and recent graduates and suggested that university services in particular would benefit from wider networking with other agencies.

The authors made a strong case for designing careers for all young people, not just those at risk. 'The aim should be all young people have 'guaranteed' access to career guidance, which involves accurate information, education, and individual pathways planning and support beyond their senior schooling' (Miles Morgan, 2002, p60). They supported the proposition that career services should be prepared for universal need primarily, then extended to suit targeted groups, following the findings of an examination of the Connexions Service in the UK, citing Watts, where the reverse had occurred. They also argued that claims that the current system favoured those who were headed for tertiary education were flawed as one third of first year tertiary students were reported to be unprepared and ill informed (p64). The report recommended that the terms of reference of the MCEETYA Transition from School Taskforce should be extended beyond school to aid career development and transition support across the lifespan (Miles Morgan, 2002, p76).

Services for adults

The 2002 review of career services in Australia found there were few careers resources, apart from the Commonwealth Career Information Centres, for adults not involved in the initial transition from compulsory education - 'in effect, it is … students and the unemployed, a minority of the working age population, who carry any entitlement to career guidance services in Australia' (Miles Morgan, 2002, p7) - and concluded that there should be career services available for people negotiating all possible pathways. Patton and McMahon also referred to the vast literature which documents the dearth of services available for adults and individuals who are unable to access services attached to schools, colleges and universities and cited many texts (Patton & McMahon, 2001, p5).

In 2002, publicly available *programs* through Commonwealth agencies focused on the unemployed, through some 200 Job Network providers, Centrelink and schemes to help people start their own business. However, these concentrated on finding jobs for people with special needs and few of these agencies provided career guidance. Jobseekers who met certain criteria could be referred to the Career Counselling Programme, delivered through Commonwealth Rehabilitation Service (CRS Australia) and staffed by qualified career counsellors. In contrast with the patchy provision of publicly available programs, there were a number of excellent career information *products* available nationally including publications such as the Job Guide and Job Outlook, resource programmes such as Take Off, websites such as SkillSearch and surveys such as the GCCA graduate destinations survey and the student outcomes survey (SOS), which were both sources for the Good Universities Guide (Miles Morgan, 2002).

A review of career development research in Australia and New Zealand from 1995-2000 examined, amongst other topics, career development training for adults (Prideaux & Creed, 2002, pp32-33). Research findings were mixed. In general, typical occupational skills and personal development training provided for unemployed people had demonstrated only temporary improvements in the wellbeing of participants, yet specific career guidance programs for the long term unemployed and for adults with a disability had positive outcomes including expanded work options, increased knowledge of self and improved self-confidence. One program evaluation reported on the discrepancy between the need for quality career counselling and the paucity of suitable training for career practitioners, and two studies found positive responses to in-house career development programs, though the absence of senior career advisors was noted. General findings from the literature were that the evaluation of career development training for adults required more scrutiny in order to improve the situation for groups such as the unemployed and

those with disabilities. Also, there was an identified requirement for more career counselling services and adequate training for its practitioners.

The ReCaP resource for career practitioners identified the following publicly available programs for adults: unemployed people who met certain criteria could be referred to the Career Planning Programme, provided by the CRS; the Career Information Centres offered guidance and information; a number of programmes which could be accessed through Centrelink; a number of on-line sites provided by the Department of Employment and Workplace Relations (DEWR); and a number of other nationally available career resources listed on the ReCaP website (DEST, 2004h).

There is a vast literature on the role of the organisation in the career development of their employees. The move from the organisation-based, job-for-life career to one which is based more on the individual has created tensions within organisations to meet the goals of both (Ackah & Heaton, 2002; Amundson et al, 2002; Doyle, 2000; Hall & Moss, 1998; Herriot, 1992; Jackson et al, 1996; London, 2002; Peiperl & Baruch, 1997). Hall and Moss described the struggles organisations have in adapting to the new employer-employee relationship and attempts to explain this new relationship through different employment 'contracts' - psychological, social, relational, transactional and protean. These authors proposed ten steps to facilitate employees' career development in the new environment. Starting with the organisation's acceptance that individuals own their own career, organisations were guided in ways they can support the employees' development by the provision of information, support from expert career practitioners, and short term career planning and opportunities which can be embraced within the organisational goals (Hall & Moss, 1998; Hall and Associates, 1996).

In their study of career management practices in UK organisations, Baruch and Peiperl found little evidence of 'boundary spanning activities and careers transcending organizations' and ongoing tensions between the organisational and individual focus of career management, with many organisations being at a crossroads in this respect (Baruch & Peiperl, 2000, p363). They found there was a paucity of models to describe career management within organisations and embarked on the development of such a model. From their study of seventeen career management practices of 194 organisations, they proposed a clustering of practices which would help provide a framework for human resource and line managers. Nevertheless a 2000 study of the demand for information, advice and guidance in the UK found that employers were the most common source of provision (MORI, 2001).

Services for all

While there is a growing awareness that career development should be a lifelong activity, this has proved difficult to accommodate within the various policy jurisdictions. Consequently we have a list of activities which may encompass various life stages but do not provide a coherent and continuous program. This is the motivation behind the creation of a blueprint for career development.

A program approach to career development was advocated in a book by Patton & McMahon (2001) which presented several examples of programs. It described the need to move from a perception that career services are only required at transition points in an individual's life to being a lifelong requirement in a broader interpretation of career as a whole-of-life experience. It argued that a program approach provides a better mechanism for supporting individuals in their ongoing career development and provides the opportunity for contextual issues to be considered. The authors found that current programs suffered from various impediments including: 'negative perceptions about the aims and value of career guidance, absence of policy guidelines and approved programs, restricted time and lack of expertise of appropriate personnel and inadequate professional development of other staff, lack of commitment and support from decision makers, inadequate resources and funding, absence of monitoring and reporting of outcomes, and lack of

internal communication in the organisation' (Patton & McMahon, 2001, p11). The book provided some good practice examples of career development programs from school age to retirement, in Australia and overseas, and with a range of special groups. Programs covered in the book included: a career development approach to vocational rehabilitation for people with a disability; a career Choice Cycle Course applied to a group of yr 10 students in a government high school; a career education program which had been integrated into a K-12 school; an on-line career workshop developed as compulsory requirement for students wanting to enrol on a work experience program at the University of Calgary; a career development program within a large public sector organisation; programs for special groups: athletes, dancers, unemployed workers, people with disabilities and finally a consultant's perspective on outplacement programs in Australia.

Within a lifelong career development context, the challenge is in funding services to meet public need and demand. There is obviously a role for the private sector. In his analysis of the roles of markets in the provision of career information and guidance, Grubb argued that the provision of these services by the private sector is a fallback position if a country has not formulated and implemented appropriate policy. He identified two successful private markets - in the provision of career information and self-help materials, and in executive placement and outplacement - but found that, in general, other private markets usually fail because 'they are too abstract, too varied in their characteristics, too interdependent with other dimensions of schooling and training and other personal and economic characteristics, too uncertain to be able to predict their effects' (Grubb, 2002a, p25). He saw a continuation of the current tiered system of service provision - mainly through the public sector with outplacement and publications provided by a small private sector.

While the difficulties in articulating public programs across various jurisdictions and between the public and the private sector are manifest, the subjective nature of the new career provides additional challenges to service provision. The shift in responsibility to the individual for taking charge of their own career development is a characteristic of the modern career (McMahon, 2003).   Selby-Smith also observed that the balance of responsibility for training and skill formation was shifting from the employer to the employee and that workers needed to develop the skills to handle this (Selby-Smith, 2002). Anderson found that, in their career choice, people were adopting the individualistic orientations that agencies and governments were advocating as a response to the challenges of globalisation and related changes (Anderson, 2003). It was argued that this trend will put further demands on effective career development services to assist people in managing their own careers (McMahon, 2003). There is a consequent need for career guidance services to be cast within a learning framework, providing career development programs which include both content learning and process learning, and training skills which are transferable (Patton & McMahon, 2001). Watts argued that lifelong access to career counselling was an important ligature for maintaining social cohesion between individuals and social structures. In order to be universally available, it should be available both within and external to the education and employment sectors. Arguably, this would provide the neutrality essential to the career counselling process (Watts, 1996; Watts, 2000).

Elements of career development

No discussion of the elements of career development would be complete without mention of the work of Parsons (1909-1989), who is credited with being the founder of vocational guidance Parsons stated:

'In the wise choice of a vocation there are three broad factors

1. A clear understanding of yourself, your aptitudes, abilities, interests, ambitions, resources, limitations and their causes

2. Knowledge of the requirement and conditions of success, advantages and disadvantages, compensation, opportunities and prospects in different lines of work

3. True reasoning on the relations of these groups of facts'

(Malach-Pines 2003)

These three 'elements' – self knowledge, knowledge about the world of work and the decision making process relating to this knowledge – have been at the core of many career guidance theories since that time. Various theories have focused on one or a combination of these three elements – sometimes referred to as theories of content and process. More recent developmental and contextual theories have attempted provide a framework for career guidance which copes with the great variability in people's lives, within a constantly changing environment. (Brown et al, 1996; McCowan, 2000; Malach-Pines, 2003; Patton & McMahon, 1999).

The draft Australian Blueprint for Career Development is a complex model which aims to cope with the breadth and depth of career development across all human situations. However, at its most basic level the Blueprint is divided into three key areas, similar to those proposed by Parsons: personal management, learning and work exploration, and career building (which includes decision making). The most recent resource for career practitioners, ReCaP, adopted the definition of career development used in the Australian Blueprint as being 'the process of managing life, learning and work over the lifespan' (Haines et al, 2003, p9) and stated that this process of developing a career needs to involve at least the following steps (DEST, 2004h):

- preparing/reviewing needs as an individual
- identifying preferences and experiences
- exploring and researching options
- deciding
- summarising, reviewing decisions
- planning, describing steps
- doing – implementing the plan but staying alive to opportunities

Career development processes involve learning the skills to do this effectively within the individual's frame of reference. This frame of reference can include contextual issues as well as personal issues, as career development may be viewed as an ongoing lifelong process of interaction between the individual and the systems in which he or she operates (Patton & McMahon, 2001, p14).

Within the framework of career development as a lifelong process, the trigger for moving on in that development is the series of decisions the individual needs to make at various times. Patton cited Watts who emphasised that careers are now based on a series of iterative decisions as individuals explore new pathways both between and within work and learning, and that the appropriate take-up of new pathways depends on sound career decision-making (Patton, 2002, p57). While career decision making has been viewed as a cognitive rational process, essentially reflecting Parson's description of 'true reasoning on the relations of these two groups of facts', this perspective is challenged by modern career theorists who claim that the cognitive rational approach is often not undertaken by people and that there are elements of chance, emotion and environmental factors in play which influence the decisions people make. (Grubb, 2002a; Grubb, 2002b; McMahon & Tatham, 2001).

There are many challenges for young people making career decisions. Spierings stressed the fluidity of decision making in young people, and how quickly their ambitions and ideals can change (Spierings, 2001, p23). Various attempts have been made to describe the process for young people. For example, a theoretical model of career decision making for young people was developed by Hodkinson and colleagues (Hodkinson et al, 1996). 'Careership' challenged the rational decision making process and proposed that young people made 'pragmatically rational'

decisions about job placements, which were determined both by external opportunities and subjective perceptions. The model embraced social interactions with influential others and took account of changes over time, when career paths can take turning points which are linked by periods of routine.

A constructivist approach to career decision making enables people to construct their own career identities, a process which is especially important for young people in the early stages of their career development. Carpenter & Inkson's study of seventh formers found that young people were well adapted to modern career paradigms, in that their choices were inner directed, they anticipated occupational rather than hierarchical progression within their careers and expected discontinuity of employment. However the researchers found gender differences, with girls' attitudes being more attuned to the new environment than boys (Carpenter & Inkson, 1999). A study of 700 new entrants to Scottish further education colleges found that, although students' prime reason for undertaking further study were linked to employment, the students had a clear sensitivity to the experience of lifelong learning (Connelly & Halliday, 2001).

A research study by Albion into the career-choice difficulties in year 11-12 students found that young people, regardless of their gender, experienced similar difficulties when making career-related decisions (Prideaux and Creed, 2002, pp26-27). However, an individual's readiness to make career decisions may not always be related to age. The concept of career decidedness, career indecision and career maturity are strong themes in the literature relating to career development theory. Prideaux and Creed defined career maturity as the extent to which individuals are able to make career-related choices independently or, citing Super, the 'individual's readiness to cope with the developmental tasks (for) that stage of development (Prideaux & Creed, 2001).

The ReCaP resource for career practitioners stressed the shared responsibility of parents, the community and industry in fostering a culture which values all occupations, pathways and aspirations and assists students to make informed decisions about career options, pathways and school subjects (DEST, 2004h). Parents are a significant factor in the early stages of their children's career development, by assisting them to making career decisions and providing a model for their children's early decision making. In their study of decision making of pupils as they completed compulsory schooling in England, Foskett and Hesketh found that their decision making was long term and reiterative. They found that these school leavers made decisions within the frames of reference defined by their parents – which the authors called 'framed fields of reference'. They also described a concept of the composite consumer – being parent plus child – in this process, though the role of parents was secondary to that of their children. The researchers also suspected there was some unconscious, subliminal or covert parental influence at play in the process. (Foskett & Hesketh, 1997).

The concept of career maturity would indicate that, in general, young people's need for support in the career development process would decrease with age, with a corresponding increase in independent decision making. A study by Albion in 2000 found that students transiting to tertiary study had unrealistic aspirations and that counsellors should try to help students guard against adopting an inflexible approach to their career decision-making and should point out the shortfalls of unrealistically high hopes and expectations (Prideaux & Creed, 2002). However, a 2003 study into South Australian students' reasons for choosing tertiary study found that the choices were mostly individualistic with family influences not seeming at all significant and employer influences being greater for those moving into higher education than those moving into VET (Harris et al, 2005). Also, another research study suggested that people begin to exercise choice in VET in a more individualistic and consumer-like manner when they enter the 20-24 years age group (Anderson, 2003).

Young people's developing career maturity is not facilitated by inadequate information. Earl and Bright cited Chartrand when saying that career indecision is a developmental problem in respect

to the career maturation process relating to lack of information about self or the world of work, the two other major elements of the career development process (Earl & Bright, 2004).

A review of articles relating to the decision making process in the transition to tertiary study described Hesketh's 1998 study which found that students were inadequately informed as to their career options, were poor at predicting their tertiary entrance scores and that the tertiary entrance system in Australia drove the career choice process (Prideaux & Creed, 2002). Hesketh found that there was a need for more extensive career information to be available to students generally, and specifically when they had to choose from the tertiary offers they receive. Also, despite the emerging individualistic tendencies noted in a South Australian study, 30% of commencing HE students and 19% of commencing VET students found it difficult to get careers guidance to help them make a decision, and more students found it difficult to get information about the employment prospects from their study program than about the program itself (Harris et al, 2005).

The source of information used by young people appears to change with maturity. The tendency appears to be to move from relying on from easily accessible information sources, such as family and friends, to career practitioners and media based sources. A Queensland study of senior students' views on career information found that people were the most commonly used source of career information, followed by publications and personal research. The article cited studies by Wilks and Orth (Patton & McCrindle, p32) which had found that adolescents rated parents' information as more useful than friends, whereas other work by Warton and Cooney found that, although family and friends were the most frequent resource used by young people, the career adviser and teachers were found to be the most useful, with studies by Lokan, Fleming and Tuck finding that this perception increased as the students grew older. In their study, Patton & McCrindle found that preferences were also dependent on gender and whether the students were going on to tertiary study. In this study, also, parents were found to be the least accessed source of people-based information (Patton & McCrindle, 2001).

Also, although Foskett and Hesketh's 1997 study had proposed the concept of the 'composite consumer' to describe the parent/child decision making entity, they also found that 71% of the students relied on formal official information sources, rather than informal, and trusted their career teachers and other teachers more than their parents as sources of information. The authors described this as a great increase in consumerist approaches by the pupils, compared to earlier studies (Foskett & Hesketh, 1997). Anderson also found that individuals rely more on formal than informal sources of information and that the preference for people choosing VET was to use the Internet as their main information source and choice-making tool (Anderson, 2003). He also recommended improvements in the quantity, quality and accessibility of VET information to match the choice making preferences of individuals who were taking a more consumerist and individualistic approach to choosing VET courses and felt sufficiently informed to make these choices. Consequently, Anderson advocated students having a wider choice in aspects of their courses.

The revolution in information technology (IT) has been a major influence on the information gathering stage of career decision making. So all pervasive is the IT phenomenon that the term 'informationalism' has been coined to describe the globalisation of the economy (Young & Collin, 2000, p 6 cite Castells). While discussion may revolve around the degree to which occupations are influenced by informationalism, it is certainly true that functioning in today's society without basic information processing skills would be very challenging. While accurate, current and accessible information is necessary to the decision making process, it has to be recognised as relevant, interpreted, absorbed and assessed by the individual in order to be relevant to career decision making. An 'information dump' is inadequate, but increasingly common (Grubb, 2002b, p9). This places increasing demands on the design of computer based systems as well as their integration with other mediums of service delivery, such as counselling

(Grubb, 2002b, p9; Grubb, 2002a; May, 1998; Gati et al, 2001; McMahon & Tatham, 2001; Watts, 2002).

Major features

The essential features of career guidance systems were described in the OECD's career guidance handbook for policy makers. It stated that these systems should be flexible and accessible over the lifespan to meet the needs of all people with attention to key transition points, should be provided by agencies which were independent and included relevant stakeholders, should include the mediums of individual guidance and programmes, and should include elements which developed people's career management skills and career planning skills, and provided access to information and work experience opportunities (OECD, 2004b, p64). This placed career development firmly within a lifelong learning framework with the individual cultivating the skills required to perpetuate their development with support from professional, flexible and effective career development services.

Other countries

The need for good information and guidance to facilitate young people's transition to working life, identified in the OECD's comparative review in fourteen countries (OECD, 2000), was elaborated in a subsequent review of policies for career information, guidance and counselling launched in 2001. The outcomes for Australia were published in the 'OECD Review of Career Guidance Policies: Australia Country Note' and are discussed in the section above relating to the development of policy frameworks (OECD, 2002). In particular, the review examined how career guidance services can help countries to advance lifelong learning objectives and assist in the implementation of active labour market policies. The gaps between policy goals and national career guidance systems in these countries were presented in the report 'Career guidance and public policy: bridging the gap' (OECD, 2004a). The report argued that the evidence for career guidance contributing to public policy in respect to improving employment and educational outcomes and enhancing equity was strong, as were the short term learning benefits for the individual. The authors recognised that, if career development is acknowledged as a lifetime activity, then career guidance systems must be supported by policy makers to broaden their role in terms of the population they service and the way these services are provided, with a shift in focus to embrace career management skills as well as information provision.

Regarding the career services within the education sector of the fourteen countries participating in the review, the report found: there were limitations to the career services provided by schools where career guidance was focused on the immediate transition from school and did not take a wider career development perspective; tertiary career services were 'generally lacking' in terms of size, focus and quality; and career guidance in adult education was generally closely linked to the institution and was often not impartial. The report suggested that local partnerships, with shared responsibility and a developmental approach to career guidance could most effectively assist young people, especially those at risk of becoming disengaged, and that the tertiary sector should be encouraged to offer impartial, comprehensive career information and guidance. It argued that policy makers need to decide whether career guidance is placed as a stand-alone service or as part of broader guidance services, though in this case the career guidance needs of the many tended to be squeezed by the personal and study needs of the minority (OECD, 2004a).

The authors found that, in these countries, there was a dearth of career services for those outside the education sector, where career guidance was mainly offered through employment agencies, but again the perspective was short-term and was often delivered by under-qualified personnel. Career services for the employed were often web-based and might be available to those employed by larger organizations, where they were often linked to outplacement, but often were not available in small and medium sized organisations. While there were a multitude of career services

being offered in the private market, these were unlegislated. In effect 'services paid for by individuals or employers tend to be geared towards professional and executive level; those purchased by public bodies tend to be geared to the unemployed or other disadvantaged groups' (OECD, 2004a, p121). The report suggested that public employment services might be expanded, perhaps in partnership, to bring about improved and broader career guidance services to meet the needs of a wider range of people, including those entering retirement. Furthermore, a mixed model of government funding could (p121):

✧ stimulate the market in order to build its capacity

✧ regulate the market and assure the quality of services, both to protect the public interest and to build consumer confidence

✧ compensate for market failure where this is appropriate.

The report suggested that quality career information, an important element of career guidance, needed to be consumer-driven, comprehensive, up-to-date, well co-coordinated and effectively distributed. In particular, a wider range of delivery methodologies was required, with more effective use of ICT. The report proposed that, when deciding policy and allocating resources, policy makers should focus on career guidance systems which embrace broader career management skills and high quality impartial information (OECD, 2004a).

In regard to career practitioners, the report concluded that 'A priority for policy-makers in most OECD countries should be to create separate, and appropriate, occupational and organisational structures through which career guidance can be delivered, together with associated qualification and training requirements' (OECD, 2004a, p11).   It argued that governments have a role in regulating and setting quality frameworks for career guidance services.

The challenges for policy makers were identified in a follow-up publication, 'Career guidance: a handbook for policy makers'. It was found that there were major gaps between policy and practice of career guidance in the participating countries. This was particularly evident in schools where the issues were mainly related to the resources dedicated to career guidance, and in tertiary institutions where there was a general lack of provision and where the range of services needed to be broadened. The demand for career guidance exceeded its supply and access to existing services was limited, particularly for employed adults, an aging population and disadvantaged groups, with career guidance services within public employment services being undeveloped. Career information needed to be of improved quality and relevant in order to support universal access, and services often focused on immediate decisions rather than developing people's career management skills. Training and qualifications for practitioners were often inadequate, with non existent or voluntary quality standards. Co-ordination between stakeholders was poor, resulting in a collection of disconnected services within the education, training, employment, community and private sectors.   Finally, the evidence base for policy decisions was weak and a lifelong learning perspective of career development will place additional demands on public resources. The handbook for policy makers gave policy makers clear guidelines and practical options for addressing the challenges and provided examples of good practice drawing upon research conducted in 36 OECD and European countries (OECD, 2004b).

The need for community collaboration at the local level to support career service delivery was an important theme internationally. In preparation for the international review of career guidance policies, the Canadian Career Development Foundation was commissioned by the OECD and the European Commission to investigate local level strategies to meet the challenges of wider provision of career service delivery (Bezanson & Kellett, 2001).   One of the outcomes of a wider delivery of career information and guidance services was that they had become more deregulated and decentralised, with resulting problems regarding an efficient match between service and client, and gaps in service delivery.   Key areas of concern were the variability in guidance provided by a range of social services, integration between the education and employment sectors

and enhanced services for young people and adults. In the paper, a number of examples of collaboration at national, regional and local level in various countries were described, including a network model, a co-location model and a one-stop model. However, only one example of a fully integrated service delivery model was found, in the career information and guidance component of the apprenticeship system in Denmark and Germany (p36). In the Canadian model of a coherent career information and guidance system, stakeholders in the career development of the individual were identified as: families; labour; employers; counsellors, social and community agencies; the community; education, training and lifelong learning providers; professional career centres; government; and peers and role models (p11). Overall, in order that service delivery might be seamless, the paper identified a need for greater collaboration between stakeholders and integration of services at a local level, supported by seamless policies.

In his address to the National Forum for Career Practitioners, in August 2004, Tony Watts presented the main points from three international reviews of career guidance: the OECD review on career guidance (OECD, 2004a) and two further reviews undertaken: one of seven middle-income countries carried out in 2002 for the World Bank by Watts and Fretwell (Public policies for career development: case studies and emerging issues for designing career information and guidance systems in developing and transition economies) and one produced by Sultana for the European Commission, covering the remaining EU countries not covered by the other two reports (Guidance policies in the knowledge society: trends, challenges and responses across Europe) (Watts, 2004b).

Watts highlighted the role career development services played in supporting public policy goals relating to learning, the labour market and social equity. Career services were crucial in encouraging individuals to learn and in ensuring that skills are responsive to labour market needs. He maintained that there was substantial evidence for immediate learning outcomes from career development interventions, including attitudinal changes and increased knowledge; growing evidence for intermediate behavioural outcomes, including entry into a particular career path, course or job; but little evidence for longer-term outcomes, such as success and satisfaction with these, which is linked to economic and social policy (Watts, 2004b, p4).

There were issues relating to the delivery of career development services in all sectors. In schools there needed to be a clear distinction made between vocational education and training and career education, with strong recommendations for improving career education and guidance within schools and a suggestion for making it available outside schools. There was growing concern for young people at risk, who require a highly individualised approach. It was also suggested that teacher training should include a career education component and for all pre-service teacher education to include some career education training; Career development services in tertiary education were inadequate though strongly professionalised. Here there was a need for strengthened career development services, career management courses in the curriculum, opportunities for work experience, and for profile and portfolio systems. There was a need for career development services for all, which should be preventative rather than remedial, and should include: service provision within the adult education sector, enhanced support provided in the workplace by employers, and provision for the 'third age'. Finally there was a need for good quality career information, and for skilled personal help, which can be provided in person, by phone or on the internet. Much delivery could also be on a self-help basis (Watts, 2004b).

There were also issues related to the resourcing of widely available career development services. Solutions included contracting out career development/employment services, and supporting the development of private markets for career development services. In regard to staffing, there was a need for stronger occupational structures and for competence frameworks for career practitioners. Other issues related to government leadership, the requirement for a strong evidence base, the need for quality and competence frameworks. In summary, Watts argued that career services had hitherto been marginal in terms of public policy and now need to be brought into the mainstream (p12). One significant move in this direction was the setting-up of an

International Centre for Career Development and Public Policy, for which Australia would be one of the six founding members.

The major policy statements of two United Nations agencies, the United Nations Educational, Scientific and Cultural Organization (UNESCO) and the International Labour Organisation (ILO), were presented in a publication which combines the former's concern with technical and vocational education and the latter's focus on training for employment. The rationale for this was that combining education and training was essential for a lifelong learning response to global change. It was viewed that career guidance and job placement services (career development services), embracing career education, career counselling, employment counselling and educational, vocational and labour market information, have a crucial role to play in human resources development (UNESCO/ILO, 2002, p57). In this publication, the development of a career development culture was seen as particularly important for ensuring the employability of young people and for facilitating their transition from education and training to work or further training (p58). Nine recommendations referred to guidance which, it was advised, should be a continuous process spanning the entire education system, including promoting technical and vocational education as a viable and attractive choice for young people. It was deemed that the career guidance process should include the provision of necessary and realistic information, self evaluation, including testing and consideration of environmental factors, decision making, career planning and work experience. In addition, these guidance systems, or providers, needed to be accountable and evaluated (pp35-37).

In her paper informing discussion of the National Forum of Career practitioners (McMahon, 2004a), McMahon reviewed the development of quality standards for the profession in Ireland, Canada, the United Kingdom, New Zealand and the USA, as well as the International Association for Educational and Vocational Guidance. There was some variability in the professional requirements in these countries. Membership of professional associations in Ireland, the United Kingdom, New Zealand and the USA required postgraduate career guidance qualifications; however, in New Zealand and the USA, these were not required to be career guidance specific, although practitioner competencies had been identified by the professional associations in these countries. Many employing authorities in Ireland and the United Kingdom required guidance counsellors to have specialist guidance and counselling qualifications consistent with those of the professional association. In fact, other authors found that in Ireland career guidance reform was being driven by practitioners within professional associations, though greater coordination between the education sectors and between the education and labour market sectors was still required (McCarthy & Coyle, 2000). McMahon found that members' practice was guided by a code of ethics in all these countries except for Canada where standards and guidelines which included a code of ethics were under development. However, there was no national career practitioner association in Canada, these being province based with variable requirements. In effect, the practice of the careers industry was more controlled in Ireland and the UK, with a corresponding higher level of expectation by employer organisations. There was more variability in the other countries where codes of ethics and competency frameworks were available in a less regulated industry. In comparison, Australia currently has a range of professional associations, each with their own standard. Generally, career specific qualifications are not required for membership of the associations and, correspondingly, there is no general requirement by employers for career practitioners to have specialist qualifications.

The Blueprint *for Life/Work Designs* was the Canadian response to accommodate the new career, and to the shift from the old to the new career management paradigm. This was an innovative, lifelong, comprehensive competency framework which was designed to bring personal, social and economic benefits to the country (Jarvis, 2002). This was also the model used for the design of the Australian Blueprint for Career Development. Canada's leadership in career guidance, notably with pioneering resources such as the Real Game and strategic instruments such as the

Blueprint and the Standards and Guidelines for Career Development Practitioners, were applauded by the OECD in its comparative review of career guidance policies.

A New Zealand study (Boyd et al, 2001) referred to a 1995 review, by the Ministry of Education, of career information and guidance in New Zealand schools which led to a national education guideline clarifying the responsibility of schools to provide appropriate career information and guidance and extra funding, and the publication of a document of good practice in career information and guidance by the Ministry of Education in 1997. Also it reported that the 1999 Education Review Office report on 'The Senior Secondary Study' concluded that approx 4 out of 5 schools in New Zealand were providing 'acceptable' to 'good' career information and support.

The Boyd, Chalmers & Kumekawa study (Boyd et al, 2001) investigated the experiences of final year school students' transition to tertiary study or employment in New Zealand. It examined these young people's career intentions and ultimate destinations as well as the information used or desired in the process. Sources of information *most used* and considered *most useful* by students, at the time they made their decision about the transition from school, were family members and relatives, followed by 'brochures, pamphlets or handbooks put out by universities or polytechnics', then 'career information service at school' (px). However, *retrospectively*, the most useful were school, tertiary or employment based assistance. The authors suggested that the reason for choosing family members was because these were easily accessible and most likely to offer advice, or because of an absence of other sources (Boyd et al, 2001, p34). Most young people felt they did have enough information to help them make transition decisions (p36). It was found that adequate information, advice and preparation was directly related to the ability of students in this study to make good decisions (pxi) When asked what they would have liked to receive, but did not receive, to help them make transition decisions, most frequently mentioned was 'more career planning', then specific information (p38). The researchers' recommendations were that personal career assistance would benefit younger students or those about to leave without a career plan, and that activities which identify students' interest, strengths and skills should be an earlier and continuous priority in career information and guidance programmes.

The authors cited a number of studies showing parental influence in career decision making process. For example, they referred to a study by Paa & McWhirter, in 2000, which examined perceptions of influences on the career expectations of 464 first and second year, predominantly European American, high school students in the United States. Researchers found that the strongest environmental influences for girls were mother, father and female friends, with male teachers and counsellors having the weakest perceived influence. For boys, the strongest influence were father, mother and male friends, with the weakest being counsellors, female teachers and female friends.

The challenges which are experienced in Australia in co-ordinating policy and service delivery across three levels of government are also experienced in the United States. A greater integration of services with a focus on lifelong service provision, supported by better co-ordinated policies, were recommended by Herr and Gysbers in their report on career development services and policy in the USA (Herr & Gysbers, 2000).

Evaluation

As part of its review of guidance systems, the OECD and the European Commission requested the National Institute for Careers Education and Counselling to report on different ways of evaluating outcomes from career information and guidance service delivery, and to outline policy priorities for the collection of evidence required by governments to justify funding.

The resulting report, prepared by Maguire and Killeen, referred to a framework of outcomes identified by Watts, in his 1999 paper on the economic and social benefits of guidance (Maguire & Killeen, 2003). In this paper, Watts proposed that the three areas where outcomes can be

assessed are the *individual*, *organisations* and *societal*; the effects of these three areas being immediate, intermediate and longer-term, respectively. Watts considered that the immediate outcomes for the individual were learning outcomes, which could most easily be evaluated. Based on the results of 40 studies, Watts claimed that there was substantial and convincing evidence of the learning outcomes from guidance. Whereas Watts regarded attitudinal changes in the individual as *side effects*, other authors considered that attitudinal change and shifts in an individual's motivation were important *outcomes* from career guidance, placing them alongside learning outcomes, decision-making skills, self-awareness, opportunity awareness, certainty of preference and transition skills. However, Watts considered individual decisions an economic benefit leading to successful outcomes in terms of, for example, employment and learning.

Watts included schools, other education and training providers and employers in the category of organisations, the benefits of which are intermediate and more difficult to evaluate. Overall, the evidence for positive outcomes for career programmes in schools was debatable, despite one UK study (by Andrews, Law, McGowan and Munro) suggesting that careers work could be perceived as contributing to enhanced achievement and decision-making (Maguire & Killeen, 2003, p15). Watts considered that the societal benefits from guidance included economic and social benefits, which were longer term and therefore more difficult to evaluate. The report claimed that while the rationale for the social and economic benefits of career guidance was sound, there was inadequate evidence to justify government funding.

The different perceptions of successful outcomes by *policy makers* and *practitioners* were described in the report, with the former being concerned with wider, objective, quantitative and macro-economic issues and the latter being concerned with the subjective, qualitative micro-level issues relating to the individual. The lack of agreed terminology for career activities was perceived as an issue affecting the evaluation process. The authors found that the term 'treatment' was increasingly used to describe an information or guidance technique, process, programme, practitioner or service which was being evaluated. A chart ranking the outcomes of different evaluation designs in respect to their relevance to policy goals, placed client opinion as least relevant to policy goals but having the most available evidence. Outcomes for client opinion included decision skills, opportunity awareness, transition skills, career management skills and a positive change in attitude. The report alluded to a 1999 study by Nielsen in New Zealand where 86% of respondents felt that career services had been influential in their employment-related decision making (Maguire & Killeen, 2003, p13).

Overall, the report found there was a shortage of substantive research evidence that could be used by policy makers, and that policy makers, practitioners and researchers had engaged in little dialogue with each other (Maguire & Killeen, 2003, p17). The report proposed a need for more longitudinal data, especially on the impact of career guidance on individuals' decision making, behaviour and attitude. In addition, programme evaluation should take account of the impact on the participants' aspirations, motivation and attitudes to learning (p18). A further area where research was urgently needed was into the sources of information, advice and guidance which impact on the decision-making and behaviour of employees (p18).

The OECD Report, Bridging the Gap, reflected the framework of outcomes used in Maguire and Killeen's antecedent report and focused on the positive learning outcomes from career guidance interventions (OECD, 2004a). These included enhanced opportunity awareness and decision making skills, as demonstrated in Killen and Kidd's 1991 review of 40 studies in the USA. It also referred to a 1998 study by Whiston, Sexton and Lasoff which found that career interventions were successful with most age groups and that individual guidance had the most effect, followed by group counselling and classroom interventions, with computer aided interventions being the most cost effective (OECD, 2004a, pp34-35). The OECD report reflected the Maguire and Killeen's finding that the shortage of intermediate and long-term studies made behavioural outcomes from career guidance difficult to assess, though there were a number of studies showing that career guidance impacted positively on individuals' participation

in education and training programmes. Importantly, the report concluded that studies hitherto had focussed on interventions which may be no longer common or economically sustainable, such as individual counselling, and there was a need for research into the outcomes from self-help strategies for career guidance and those based on information and ICT delivery. While information was indisputably necessary for good decision making, the report found that there was more research needed, particularly into equity of access, the difficulty in finding the right information and the need most people have for personal support in individualising the information. Policy makers specifically required quantitative and qualitative data on the extent and nature of services provided in schools and in the private sector, as well as on client need and how this was being serviced. The report suggested ways in which policy makers can strengthen the voice of consumers to ensure that career guidance services were responding to their need (p135).

The OECD report found that the UK was developing a strong national research strategy for career guidance. Here career guidance research was characterised by a focus upon policy and evaluation, not only upon processes and techniques. There was a healthy debate between government and practitioners, with the government commissioning research and applying it to policy development. However, much of the research was one-off and fragmented rather than strategic, and not disseminated widely or effectively (p130).

Patton & McMahon found that there was very little evidence of career development program evaluation in Australia (Patton & McMahon, 2001). They described the different strategies that can be used for evaluation, including surveys, interviews, pre/post testing and commercial tools. The authors suggested that evidence associated with the seven key program elements defined in the Career Education Quality Framework could be used for evaluation. These elements are: leadership and innovation; strategy and planning processes; data, information and knowledge; people; customer and market focus; processes, products and services; and results (pp20-21).

Besides providing a framework of career competencies, the draft Australian Blueprint for Career Development (Haines et al, 2003) provided a process for planning, developing, implementing, and evaluating career development programs and resources. It was proposed that this process would enable the benefits of programs to be evaluated and provide the evidence needed by policy makers when allocating funding. It described both process evaluation and product evaluation. In this publication, process evaluation reviews the program's procedures, structure and schedule and product evaluation assesses the extent to which the program is effective in helping individuals attain the career competencies as specified by the local standards. It advised how to plan, implement and utilise an evaluation plan to improve programmes; provided proformae for career service providers to identify need, design the program and assess the career product, program or resource in respect to the career competencies; and provided self rating checklists for clients to assess their level of mastery of the career competencies. The draft blueprint will be trialled in a range of organisations and learning institutions where career development activities are undertaken.

Summary of issues

Career development services play a critical role at all levels, however the industry is characterised by diversity (McMahon, 2004a, p2) and is not widely available, used or appreciated.

It is widely acknowledged that career development services bring benefits at all levels - to individuals, society and governments – and a benefit at any level impacts on the others. For example, personal benefits in respect to lifelong learning, job satisfaction, skills acquisition and labour market mobility impact on the social and economic success of the country. Also, social equity goals relating to equal opportunity and social inclusion can be achieved through successful

and effective career development. (Jarvis, 2002; McCowan & Hyndman, 1998; McMahon, 2004a; McMahon & Tatham, 2001; Sweet, 2001a; Watts, 2004b).

Service providers can be found in commonwealth and state jurisdictions, in private and public sector educational institutions, in business and industry, and in a range of private sector agencies. Practitioners function in a variety of roles reflecting the educational, information and guidance elements of practice and operate in a number of industries including health, rehabilitation, employment, education and training. In effect, there is no cohesive national system, with resulting gaps and overlaps in service provision. (Miles Morgan, 2002, Prime Minister's Action Plan Taskforce, 2001; Watts, 1996; Watts, 2004a).

There is wide divergence between the existing and potential client base for career development services. In Australia, the focus for career development policy and practice has been on transition points, whereas this is not the case in other countries, such as Canada and the USA, where there is a lifelong perspective of career development (Jarvis, 2002; McMahon et al, 2003; OECD, 2000). While there is an international concern with the transition from school to work and its impact at all levels, and a growing concern for young people at risk, there is also a need to broaden the understanding of career to embrace a 'whole-of-life' construct, in terms of both breadth and duration. Hence, while existing careers services focus on those in educational institutions, the unemployed and on special groups, there is a need for preventative, not remedial, services for all adults and throughout the lifespan.

In effect, career development services are not commonly available and, consequently, there is not a culture established for accessing the often poorly resourced and disparate services which do exist. A lack of infrastructure reflects an undervaluing of career work, unlike in other countries where the career advisory system is recognised as important (McCowan and Hyndman, 1998 p40). This flows down to the personal level where the professional nature of career work is not recognised - 'Everybody is a career expert of some sort! Relatives, neighbours and friends all give good career advice. Is this one of the reasons that careers work is perceived to be as commonplace as it is' (McCowen, 2000, p21. A significant relevant issue relates to the qualifications, skills and effectiveness of career development practitioners and a need for a national system to ensure quality and consistency of practice.

Stakeholders in the design of quality standards have been defined as: practitioners, the CICA, practitioner associations, policy makers, consumers/clients, parents, training providers, employers of career practitioners, service providers, business and industry groups (McMahon, 2004a). Collaboration between all stakeholders would reflect a change in cultural attitude towards the value and place of career development within society. There is also a need for strengthened community partnerships to support young people's career development (Miles Morgan, 2002). Recommendations from stakeholders in the preparation of the response to the OCED review of career guidance policies included an identified need for an Australia wide policy and planning framework with greater collaboration between all levels of government (Miles Morgan, 2002). There is strong case for federal government to provide leadership in association with other stakeholders.

We need to know, not only what career development services are being used by young people, but whether these services are using the appropriate medium of delivery and the required element of career development to meet their needs.

There is a wide variety of delivery models which need to be tailored to the client group. Career development services can be delivered in a variety of ways: as a one-on-one service, as a stand-alone course/workshop, embedded in the curriculum, as an accredited course, through computer/media based delivery. They can include opportunities for work experience and building profile and portfolio systems. The process can include outreach, counselling, assessment,

classroom instruction, career information, work experience, referral, consultation, placement and follow-up. Although it is acknowledged that career development services should be available to all, this need not be at a personal level. While there is a place for traditional personal interventions, mediums for effecting this have not been widely used, such as ICT based systems. Also, individuals should not be totally reliant on career development services but should be assisted in developing the skills to manage their own careers. Within the framework of lifelong learning, all career development services should be part of a coherent system and as seamless as possible. (Grubb, 2002b; Haines et al, 2003, appendix b; Jackson et al, 1996; McMahon, 2004a; Watts, 2004b)

Career education in schools is an important socialising influence, is appropriately placed to shape career management skills and can facilitate the school-to-work transition (Patton, 2001), however it is not consistently or effectively delivered in all schools and there is a focus on the transition from school rather than lifelong career development. There is also a need to make a clear distinction between career education and vocational education and training; VET in schools should not be provided at the cost of wider career education; and there is a need to recognise the career opportunities afforded by vocational education as an alternative to tertiary education. Career services are also variously delivered in the tertiary sector. There is a further requirement for young people to perceive career learning as relevant to their lives - an integrative, awareness raising process which can start at an earlier stage in their educational careers (Kelly et al, 2003).

There are various elements in the career development process, but there is not a common understanding of these elements, of their role and their interaction. There is a need to distinguish between and develop a common understanding of the terms used in career development. Mechanisms for doing this are the Australian Blueprint for Career Development and the quality framework provided by the National Standards and Accreditation of Career Practitioners project.

Career information is an essential component of career development but is inconsistent, variously sourced and may not be effectively distributed. While there has been an emphasis hitherto on the provision of information to help people make career decisions, there is a dearth of services to help them individualise that information and execute the decision making process.

In effect, young people are variously served by career services in the education system or as part of a disadvantaged group, and there are few services available for them if they do not belong to one of these two cohorts. There is little evaluation of identified need, of the impact on young people of any services they may have received, of their satisfaction with these services or the attitudes of those who have not received any career development services. A recent forum on setting the agenda for career guidance research found there is a requirement for impact research, for qualitative studies which give insight into how impact is achieved, and research which examines the particular aproaches or tools in use by career practitioners and which may be used to improve practice (Hawthorn et al, 2005).

Solutions need to be found to resourcing wider provision of career development services.

In 2002 stakeholders determined that additional resources should be allocated to improve career services nationally (Miles Morgan, 2002). However, if career development services are made available for all, this may be expensive, if not prohibitive for services provided at a personal level, though ICT could provide services in a more cost effective way. While it has been suggested that resource allocation decisions give the first priority to systems that develop career self-management skills and career information (OECD, 2004b), the cost implications could be countered by supporting individuals to manage their own careers (Watts, 2004b). It has also been suggested that funding be devolved either to regions and localities or to individual educational institutions and that services be contracted out (Watts, 2004b). The OECD also proposed that better quality assurance mechanisms may be linked to the funding of services (OECD, 2004a). Given restricted funding, there are issues relating to ways in which access to

nationally available services will be allocated, the marketisation of career development services and service fees (Watts, 1996).

Finally, there is substantial need for data to support policy and service delivery. Data is needed both in relation to the benefits of career service development services and on the financial and human resources devoted to career development. Evidence is especially required of the long-term outcomes in relation to economic and social benefits (Watts, 2004b). There is a consequent need for closer links between policy makers, researchers and practitioners (McMahon, 2004a).

Appendix B: Interview schedule

Thank you for taking part in this project. We would like to explore each of the learning transitions (or moves) you have made since leaving school.

1. The first learning transition/move	
	Interviewer prompts (if necessary)
What was your final year of schooling?	*Year 10/11/12/Other*
After school, what was the first learning transition/move you made?	*Examples of learning options:* *TAFE* *Other VET training e.g. private providers* *University* *Apprenticeship* *Traineeship* *Adult & Community Education (ACE sector)* *Other study* ………………………………………………………
Was it clear to you what your learning choices were at that stage? Please explain how you saw them.	

2. Careers services	
At the time you made this learning transition, were you aware of what careers services were available to you? Did you use any of these, if so, which one(s)?	*Prompts – careers services provided by:* *your current school/institution* *the institution you were thinking of joining* *the Careers Information Centre* *Website* …………………………………………………... *the Jobs Pathways Provider/Career Counselling Programme* *the Commonwealth Rehab Service* *the JobNetwork agency* *your employer (not for first move)* *the National Career Information Service* *A private/commercial agency eg HR/Recruitment* *Other* ………………………………………………….. *Don't know*

	Prompts: Easy to access Seemed to provide the help you needed Well advertised Recommended Other Don't know
Why did you use this/these careers service(s)?	
What help did it/they give you?	Prompts: Information/handouts/literature Careers education eg class/seminar/workshop Careers event eg Careers Fair A formal interview with a careers/staff member Testing eg skills, aptitudes, interests, personality Help in making a decision Other Can't remember
Did the careers service(s) you used, include VET (e.g. TAFE or private providers) as an option?	
Did the career service(s) give you information about VET (e.g. TAFE or private providers)?	
How easy/difficult was it to make a decision about what type of learning you would undertake?	
How helpful/effective was this/these career service(s) overall?	
What did your parents think about the careers help you had when you left school?	

3. Making the transition/move	
Why did you choose (response at question 1) for your first/next learning transition/move?	
What other factors influenced you to make this transition/move?	
Were there any barriers which hindered you in making the transition/move? If so, can you suggest how this/these barrier(s) could have been minimised?	
Did the transition/move (response at question 1) meet your expectations?	
At that time, did you have a long-term view of what you wanted to achieve with this learning transition – a final goal? If so, what did you think it would help you to achieve, in the long-term?	
Repeat questions 1-3 for each move, with appropriate adjustments. *Reflect whether goals and objectives changed with each transition.* What made you change your goal?	

4. Learning pathways	
What does the term, 'learning pathway', mean to you?	
Is this how you would describe your learning moves – as a pathway? If not, how/what phrase/what word would you use todescribe them?	
Looking back, how would you describe your … *(use 'learning pathway' or other metaphor/phrase supplied by interviewee)* so far?	

Looking back, in respect to where you are now, can you see what you have gained from each transition/move?
 	
On the other hand, looking back, can you see any losses/disadvantages in each move?
	Prompt
	
	Gains and losses against *x* *First move*
	              Second move
	              Third move

Can you suggest what might have made it easier for you to move through the different learning options?	
At the <u>present</u> time, do you have a long-term view of what you want to achieve through all your learning moves – a final goal? If so, what is your long-term goal?	
If employment is a goal, what form would you **like** this employment to take?	*Prompts:* *full-time, part-time, casual, contract, permanent, discontinuous*
Realistically, what form would you **expect** this employment to take?	
Reflecting on your experience, how effective do you think VET is as a bridge to **further education**?	
Reflecting on your experience, how effective do you think VET is as a bridge to **employment**?	

5. Is there anything else you'd like to add in relation to issues we've raised in this interview?	

Appendix C: VET and higher education profiles for young students with experience/achievement in the other sector

VET and higher education student profiles for young students with experience/achievement in the other sector

NCVER provided a range of statistical data relating to VET vocational students (excluding fee paying overseas students) ie domestic VET vocational students for the years 1996 to 2003 from the national VET statistics collection while DEST provided data on undergraduate students in higher education (excluding fee paying overseas students) ie domestic undergraduate students for the years 1993 and 1996 to 2003 from the national higher education statistics collection. Similar data elements, sex, broad areas of study, disability, Indigenous status, language spoken at home, country of birth, location of permanent home address and occupation while studying had been requested from both collections. Generally these were available although not always for the period of years sought. Further geographic distribution of permanent home address into broad groupings and employment while studying were not available from the higher education collection.

For both collections, changes had occurred over the period under consideration. NCVER noted a change from field of study to field of education in 2002 and some data issues in 1996. DEST noted that the scope of its data collections changed between 2000 and 2001. Originally one enrolment file was collected as at 31 March. However from 2001 DEST has collected enrolment at 31 March and 31 August enabling the production of more accurate full year data. Further discipline classifications changed in 2001 from field of study to field of education. DEST indicated that the data on the statistical files relating to complete and incomplete TAFE qualifications essentially had only been collected and reported for commencing undergraduate students. In addition, although data on prior qualifications other than TAFE (element E366), and prior sub degree non TAFE qualifications (element E361) were collected by DEST, the researchers decided that as TAFE was a major component of the VET sector, the focus would be on undergraduate domestic students with prior complete or incomplete TAFE qualifications.

In view of these limitations comparisons between the profile of undergraduate students with TAFE experience and those with or without such experience ie the total domestic undergraduate cohorts was not undertaken. Nor was that between this sub population of undergraduate students ie largely commencing undergraduate students with complete or incomplete TAFE qualifications and those in VET from the total domestic VET vocational population with higher education achievement.

Profile of young domestic VET vocational students with higher education achievement

Distribution by state and territory

The number of VET vocational students (excluding fee paying overseas students) ie domestic VET vocational students increased by around 30% from 1996 to almost 1.7 million in 2003. All states and territories registered increases in the period. The number aged less than 25 years also increased by almost 30% to around 630000 in 2003. The increase in the 25-29 year age group was around 12% to almost 175000 in 2003 which was significantly less growth than that for those aged less than 25 years. For all three age cohorts, New South Wales, Victoria and Queensland accounted for a total of around 80% of students, while Tasmania the Northern Territory and the Australian Capital Territory had around 5%.

Nationally, over the period of eight years, females as a proportion of total students have shown a slight increase from 46.5% in 1996 to just under 49% in 2003. Except for New South Wales in four of the eight years, rarely was their percentage in any state or territory greater than 50% while in Tasmania, the proportion was less than 45% in three quarters of the years. Females aged less than 25 years as a proportion of the cohort aged less than 25 years consistently formed lower proportions nationally than did total female students as a proportion of all students. As for the total group, the proportion of those aged less than 25 years has shown slight increase from around 42% to almost 45% over the period. Interestingly, for no state or territory or nationally in any year did the proportion exceed 50% and in a significant majority of cases this was less than 45%. Compared with this age group, females aged between 25 and 29 years formed a greater proportion of this cohort. However, they still made up less than 50% of the group for most years in most states and territories. Nationally, also they have comprised around 47% over the period with this proportion being closer to that for females overall and has been relatively stable over the eight year period.

In contrast to females, males comprised more than half in all years nationally but there has been a very slight decline in the proportion over the eight year period from over 51% in 1996 to 51% in 2003. In most states and territories and for many years, the proportion has exceeded 50%. Those aged less than 25 years formed greater proportions in all states and territories and nationally in each year than males as a proportion of total domestic VET vocational students. They comprised over half in every state and territory and nationally in each year but over the period all except South Australia, showed a small decline. The proportion in the 25-29 year age group was again above half in each year, but tended to be lower than for those aged less than 25 years as a proportion of the age cohort. There was a slight decline in all states and territories over the eight years except for New South Wales, the Northern Territory and South Australia (where the proportions in 1996 and 2003 were the same).

Distribution of domestic VET vocational students with higher education achievement by state and territory

Table 1 shows the number of domestic VET vocational students with higher education achievement in each state and territory in each year under consideration.

Table 1: Number of VET vocational students with higher education achievement

State/year	1996	1997	1998	1999	2000	2001	2002	2003
NSW	36872	29331	32709	48351	46285	46522	41767	40881
Vic	36123	28596	30087	26943	26713	29999	31445	33903
Qld	16753	14240	15898	16312	14024	18467	18889	15437
SA	2702	4535	4961	5356	6813	7012	7015	6280
WA	9686	5690	5539	7057	8390	6732	5581	6590
Tas	2725	1872	1756	1967	2214	2378	2544	2674
NT	1215	1007	564	1374	1652	1721	1742	1274
ACT	3227	2222	2186	2217	2226	2486	1734	1898
TOTAL	109303	87493	93700	109577	108317	115317	110717	108937

Note: NSW (New South Wales); Vic (Victoria); Qld (Queensland); SA (South Australia); WA (Western Australia); Tas (Tasmania); NT (Northern Territory); ACT (Australian Capital Territory)

In contrast to the growth in overall domestic VET vocational students between 1996 and 2003, there was a marginal reduction (0.3%) in the number of students with higher education achievement although since 1997 there has been an overall increase. Between 1996 and 2003, most states and territories recorded a percentage drop with only New South Wales, South Australia and the Northern Territory showing an increase. However except for the Australian Capital Territory, all states and territories had growth from 1997. At both the beginning and end of the period, New South Wales, Victoria and Queensland had over 80% of students with higher education achievement, a situation similar to that relating to the total number of domestic VET vocational students with or without higher education achievement. Table 2 below shows the number of domestic VET vocational students who were less than 25 years of age with higher education achievement

Table 2: Number of VET vocational students aged less than 25 years with higher education achievement

State/year	1996	1997	1998	1999	2000	2001	2002	2003
NSW	9560	4522	4759	6883	5643	4826	4887	4644
Vic	11187	5607	4700	4078	3738	3563	3776	3956
Qld	4785	2003	2365	1990	1430	1937	2008	1649
SA	377	628	626	796	903	794	840	790
WA	2838	798	773	914	1155	883	641	768
Tas	600	219	210	205	209	206	194	208
NT	271	150	92	137	150	116	95	64
ACT	761	323	354	270	232	234	172	174
TOTAL	30379	14250	13879	15273	13460	12559	12613	12253

There was a significant decrease of just under 60% in the number of students in this age group with higher education achievement with the only state or territory registering an increase being South Australia where enrolments more than doubled, off a relatively small base representing 1.2% of enrolments in this overall cohort in1996. However, while the number of students in 1997 was less than half of that of 1996, the national decline from 1997 to 2003 was 14% and the increase in South Australia was over 25%. Considering the years 1996 and 2003, New South Wales, Victoria and Queensland again had over 80% of students. Table 3 below shows the number of domestic VET vocational students aged 25- 29 years with higher education achievement.

Table 3: Number of VET vocational students aged 25 – 29 years with higher education achievement

State/year	1996	1997	1998	1999	2000	2001	2002	2003
NSW	6509	5483	6282	8982	7789	7930	6329	6053
Vic	6355	5104	5632	4888	4700	5058	5070	5344
Qld	2618	1833	2805	2854	2328	2959	2984	2315
SA	358	709	832	815	1089	1113	1103	988
WA	1619	1016	933	1182	1463	1163	898	1043
Tas	458	286	274	302	405	352	361	357
NT	215	164	96	254	277	265	262	196
ACT	565	349	393	395	374	408	289	322
TOTAL	18697	14944	17247	19672	18425	19248	17296	16618

Over the eight years, there was a decrease of around 11% in the number of VET vocational students aged between 25 and 29 years with higher education achievement, although from 1997 there has been overall growth of just over 11%. Relatively large percentage drops occurred in the Australian Capital Territory, Western Australia and Tasmania with all states and territories registering a decline since 1996 except South Australia in a situation similar to that for the cohort aged less than 25 years. However, all states and territories except the Australian Capital Territory showed an increase from 1997. Again New South Wales, Victoria and Queensland had around 80% of students. Table 4 shows the number of domestic VET vocational students aged less than 25 years with higher education achievement as a percentage of VET vocational students aged less than 25 years.

Table 4: VET vocational students aged less than 25 years with higher education achievement as percentage of VET vocational students less than 25 years

State/year	1996	1997	1998	1999	2000	2001	2002	2003
NSW	5.4	2.3	2.6	3.6	2.6	2.4	2.4	2.2
Vic	9.2	4.2	3.5	2.7	2.4	2.2	2.2	2.3
Qld	5.4	2.9	2.5	1.9	1.5	1.7	1.7	1.5
SA	1.2	2.0	1.9	2.1	2.3	2.0	2.1	2.0
WA	6.7	1.9	1.8	2.0	2.4	1.6	1.2	1.3
Tas	6.3	2.1	1.9	1.8	2.0	1.8	1.7	1.7
NT	6.1	3.1	1.7	2.1	1.9	1.5	1.2	0.8
ACT	9.7	4.4	4.8	3.6	2.9	2.7	2.0	1.8
TOTAL	6.3	3.0	2.7	2.8	2.3	2.1	2.0	2.0

Nationally the number of students aged less than 25 years with higher education achievement as a percentage of students less than 25 years of age, declined over the period. It halved between 1996 and 1997 and then has slowly declined to be relatively stable at around 2% since 2001. For all states and territories except South Australia, there has been a drop from 1996 with this being dramatic in some cases although between 1997 and 2003 it has generally been slower. In 1996, Victoria, Western Australia and the Australian Capital Territory were above national proportions, with Tasmania equal to that figure, while in 2003 New South Wales and Victoria were above and South Australia equal to it. Table 5 shows the number of domestic VET vocational students aged 25 - 29 years with higher education achievement as a percentage of domestic VET vocational students aged 25 - 29 years.

Table 5: VET vocational students aged 25 – 29 years with higher education achievement as percentage of VET vocational students aged 25 – 29 years

State/year	1996	1997	1998	1999	2000	2001	2002	2003
NSW	11.9	9.4	11.1	15.2	11.8	13.2	11.4	10.5
Vic	13.1	9.8	10.6	8.7	9.1	9.9	9.8	10.6
Qld	12.6	9.1	10.3	8.7	8.4	8.9	8.9	7.2
SA	2.9	5.1	5.6	5.8	7.4	8.4	8.1	8.6
WA	13.7	8.1	7.3	8.5	11.1	8.0	6.7	8.0
Tas	17.1	9.1	9.4	9.1	11.5	9.6	10.5	9.6
NT	12.0	7.8	4.5	10.0	10.5	9.7	9.8	8.2
ACT	25.1	15.7	18.1	17.2	16.3	16.2	12.0	12.3
TOTAL	12.1	9.1	10.0	10.7	10.1	10.6	9.8	9.6

As for those aged less than 25 years, there was an overall decline in the proportions of the 25 – 29 year age group over the period. All states and territories had reductions except for South Australia where it was substantially greater in 2003. The national decrease for this age group between 1996 and 1997 was significant though not as great a fall as for those aged less than 25 years (table 4) and reductions were registered in all states and territories between these two years with at times these being quite large, except in South Australia where there was an increase. Nationally and in most states and territories, there were increases between 1997 and 2003. In 1996, Victoria, Queensland, Western Australia, Tasmania and the Australian Capital Territory were above the national percentage, while in 2003, similar to the case for those aged less than 25 years, New South Wales and Victoria were above the national proportion and in addition, the Australian Capital Territory was also above with Tasmania equal to it. In each year in each state and territory and nationally, percentages of this age cohort were substantially greater than for the youngest group.

Female domestic VET vocational students with higher education achievement as a proportion of all students with higher education achievement increased from around 50% in 1996 to 57% in 2003. In each year they comprised more than half the enrollees in this cohort, although only marginally so in 1996. Table 6 shows the number of female domestic VET vocational students aged less than 25 years with higher education achievement as a percentage of domestic VET vocational students aged less than 25 years with higher education achievement.

Table 6: Female VET vocational students aged less than 25 years with higher education achievement as percentage of all VET vocational students aged less than 25 years with higher education achievement

State/year	1996	1997	1998	1999	2000	2001	2002	2003
NSW	50.7	59.7	58.9	61.5	62.0	62.7	57.9	57.9
Vic	45.5	51.8	54.8	57.2	56.7	57.2	58.4	56.6
Qld	53.1	62.1	61.0	62.1	61.3	63.1	55.9	54.5
SA	64.2	60.5	59.1	63.1	60.0	62.3	60.1	63.0
WA	53.7	60.7	57.3	61.3	60.2	62.7	59.6	61.5
Tas	51.0	53.4	63.3	66.3	62.7	56.8	57.7	55.3
NT	53.5	42.0	51.1	55.5	65.3	70.7	71.6	78.1
ACT	49.9	66.6	63.6	62.2	66.4	72.2	73.3	60.9
Total	49.6	56.9	57.9	60.5	60.3	61.3	58.3	57.7

The number of females aged less than 25 years with higher education achievement as a proportion of all students with higher education achievement in this age group increased to over 61% in 2001, and then declined to 2003 with the level in that year still being much greater than

that for 1996. For all states and territories, except for South Australia, the percentage in this cohort in 2003 was greater than that for 1996. (In South Australia, that in 2003 was only marginally less than for 1996 and 1999 but greater than for the other years in the eight year period). The percentages here were substantially greater than for those in the same age group with or without higher education achievement nationally and in each state and territory except in 1997 in the Northern Territory where it was marginally less. Table 7 shows the number of female domestic VET vocational students aged 25 -29 years with higher education achievement as a percentage of all VET vocational students aged 25 -29 years with higher education achievement.

Table 7: Female VET vocational students aged 25 – 29 years with higher education achievement as percentage of all VET vocational students aged 25 – 29 years with higher education achievement

State/year	1996	1997	1998	1999	2000	2001	2002	2003
NSW	52.3	55.9	56.3	58.9	60.1	60.1	60.7	61.7
Vic	47.1	51.3	56.2	57.7	58.7	57.8	59.3	58.4
Qld	52.4	57.4	57.5	58.6	61.5	61.6	55.2	55.2
SA	55.9	54.9	56.5	56.3	59.9	57.6	58.1	60.4
WA	53.8	58.5	62.2	59.4	62.1	59.2	63.3	62.9
Tas	52.8	56.6	56.9	60.3	55.6	50.6	61.2	57.4
NT	59.1	65.9	58.3	68.1	59.9	60.8	71.0	70.4
ACT	48.5	58.7	60.1	59.2	54.3	60.0	63.0	64.0
Total	50.7	54.8	56.9	58.6	59.8	59.4	59.5	59.8

The proportions of females in this age group nationally were above 50% in each year rising to almost 60% in 2000 and maintaining that percentage. All states and territories registered increases over the period. The percentages in this age group nationally and in each state and territory in each year were greater than for those females in the age group with or without higher education achievement. For most states and territories across years, proportions in the 25-29 year age group with higher education achievement were greater than for those females aged less than 25 years with higher education achievement. In South Australia, for this youngest age group, it was greater than for those aged 25-29 years in each year while this was the case in the Australian Capital Territory in seven of the years and in Queensland for three quarters of the years.

Males with higher education achievement as a proportion of all students with higher education achievement declined from just under 50% in 1996 to around 43% in 2003. In contrast to females, in no year nationally did they comprise 50% or more of the cohort. Table 8 shows the number of male domestic VET vocational students aged less than 25 years with higher education achievement as a percentage of all VET vocational students aged less than 25 years and with higher education achievement

Table 8: Male VET vocational students aged less than 25 years with higher education achievement as percentage of all VET vocational students aged less than 25 years with higher education achievement

State/year	1996	1997	1998	1999	2000	2001	2002	2003
NSW	49.3	40.3	41.1	38.4	37.9	37.3	42.0	42.1
Vic	54.5	48.2	45.2	41.7	42.7	42.7	41.6	42.8
Qld	46.8	37.8	38.6	37.9	38.7	36.9	44.1	45.4
SA	35.8	39.5	40.9	36.9	39.8	37.7	39.8	37.0
WA	46.3	39.3	42.6	38.7	39.7	37.1	40.2	38.0
Tas	49.0	46.6	36.7	33.7	37.3	43.2	42.3	44.7
NT	46.5	58.0	48.9	44.5	34.7	29.3	28.4	21.9
ACT	50.1	33.1	36.4	37.8	33.6	27.8	26.7	30.1
Total	50.4	43.1	42.0	39.2	39.5	38.6	41.7	42.1

Nationally, the percentage of males in this group as a proportion of all domestic VET vocational students aged less than 25 years with higher education achievement, declined from around 50% to almost 42%, a similar decline to the total age cohort. The proportion in each state and territory was less than half in almost every year and in many cases, less than 40%. There were declines in each state and territory over the period, except for South Australia where the proportion increased marginally. The overall pattern contrasted with the profile of females in this age cohort. The proportions here were also less than those for males with or without higher education achievement nationally and in all states and territories except the Northern Territory in 1997. Table 9 shows the number of male domestic VET vocational students aged 25 - 29 years with higher education achievement as a percentage of all VET vocational students aged 25 - 29 years and with higher education achievement.

Table 9: Male VET vocational students aged 25 – 29 years with higher education achievement as percentage of all VET vocational students aged 25 – 29 years with higher education achievement

State/year	1996	1997	1998	1999	2000	2001	2002	2003
NSW	47.7	44.1	43.7	41.0	39.8	39.9	39.3	38.2
Vic	52.9	48.7	43.7	41.4	42.1	42.1	40.6	41.4
Qld	47.5	42.6	42.3	41.3	38.5	38.4	44.8	44.8
SA	44.1	45.1	43.5	43.6	40.1	42.4	41.8	39.6
WA	46.2	41.5	37.8	40.5	37.8	40.7	36.5	36.9
Tas	47.2	43.4	43.1	39.7	44.4	49.4	38.8	42.6
NT	40.9	34.1	41.7	31.9	43.7	39.2	29.0	29.1
ACT	51.5	41.3	39.9	40.5	43.3	40.0	37.0	35.7
Total	49.3	45.2	43.0	41.1	37.5	40.6	40.4	40.1

In all states and territories and nationally, the number of males in this age cohort as a proportion of all students in this age group with higher education achievement declined over the period. The percentages were less than females in all states and territories and nationally in all years except for Victoria and the Australian Capital Territory in 1996. They were also less than those for males with or without higher education achievement in this age group nationally and in each state and territory in each year. This profile of female dominance contrasts with that for the total student cohort and the two younger groups irrespective of whether or not they had higher education achievement where males tended to dominate.

In the period 1996 – 2003, there was an increase of around 30% in domestic VET vocational students, a similar increase in the number of those aged less than 25 years and a 12% increase in those aged 25 – 29 years. In the same period there were decreases in the number of VET vocational students in the total age group with higher education achievement, but increases for this group between 1997 and 2003. Those aged less than 25 years with higher education achievement declined over the eight year period while the number of 25 – 29 year olds with higher education achievement also declined from 1996, but increased from 1997 to 2003. The proportions of those aged less than 25 years with higher education achievement in the youngest age group and those aged 25 -29 years with higher education achievement in that age group also declined over the period. Among those with or without higher education achievement, males were more dominant in the total age group and the two young groups, while among those with higher education achievement, females dominated these cohorts with this domination increasing over the period.

Field of study/education

Among students with or without higher education achievement, for the total cohort, for those aged less than 25 years and for those aged 25 – 29 years in the years 1996 and 2001, the business field was particularly attractive as was engineering and surveying. Also popular with the three age

groups were the VET multi-field education and services, hospitality and transportation fields. Health and community services was slightly less attractive to all three groups but still popular while architecture had some appeal to those aged less than 25 years and arts, humanities and social sciences for all students and for those in the 25 – 29 year age group in 1996. Education, law and veterinary science were fields in which small numbers of students from each age cohort were enrolled. In 2002 and 2003, the management and commerce and the engineering and related technologies fields were again the most popular with the three age groups. Society and culture also appealed but less so to those aged less than 25 years than the other two groups. Food, hospitality and personal services was attractive to those aged less than 25 years while mixed field programs were also attractive to some extent to all groups. Natural and physical sciences had very small proportions of enrolments. Hence over the period 1996 to 2003, business related and engineering related studies were particularly attractive to VET vocational students overall and also to young students, ie those aged less than 30 years.

Table 10 shows the percentages of domestic VET vocational students with higher education achievement in various fields of study in 1996 and 2001, the last year before the classification changed to field of education.

Table 10: Field of study distribution of VET vocational with higher education achievement as a proportion of all students with higher education achievement in age cohorts

Field/age	All years (%)	All years (%)	<25 yrs (%)	<25 yrs (%)	25-29 yrs (%)	25-29 yrs (%)
	1996	**2001**	**1996**	**2001**	**1996**	**2001**
Land, anim	4.6	5.7	3.8	4.9	4.4	5.4
Arc ,bdlg	4.8	2.8	6.6	3.2	5.2	3.5
Arts	10.5	11.8	9.1	14.6	10.9	14.3
Bus	32.2	22.2	32.7	25.0	34.0	23.7
Edn	2.4	8.3	1.0	3.3	1.6	5.7
Eng, sur	13.5	7.9	17.1	10.3	13.9	9.5
Hlth, com	6.9	9.0	7.6	9.8	7.2	9.3
Law	1.2	0.7	1.6	1.3	1.4	1.0
Science	6.3	10.8	4.8	7.0	5.6	9.3
Vet Sc	0.1	0.2	0.3	0.5	0.2	0.4
Serv , hosp	7.8	7.0	10.7	13.0	7.7	8.6
Multi fld	9.4	8.4	4.6	4.6	7.9	6.4
Subject	0.02	5.0	0.003	2.4	0.03	3.1
Total	99.7	99.8	99.9	99.9	100.0	100.2

Note: "Land, anim" is Land and marine resources, animal husbandry; "Arc, bdlg" is Architecture, building;" Arts" is Arts, humanities and social sciences; "Bus" is Business, administration, economics; "Edn" is Education; "Eng, sur" is Engineering , surveying; "Hlth, com." is Health, community services; "Law" is Law, legal studies; "Science" is Science; "Vet Sc" is Veterinary science, animal care; "Serv, hosp" is Services, hospitality, transportation; "Multi fld" is VET multi-field education; "Subject" is Subject only.

For those domestic VET vocational students with higher education achievement, the business, administration and economics field was the most attractive to all students and the two younger cohorts in 1996 and 2001. Arts humanities and social sciences was similarly popular with each group, but more attractive in 2001 than 1996. Engineering and surveying had strong appeal to the overall group in 1996 and to the young cohorts in 1996 and 2001 although for both groups, larger proportions enrolled in this field in 1996 compared with 2001. Health and community services had some attractiveness for each age cohort in 2001, although for those aged less than 25 years, this field also appealed in 1996. Services, hospitality and transportation was popular with those aged less than 25 years. VET multi- field education had some popularity to the overall group in

1996 and 2001 and also to those aged 25 – 29 years in 1996, while science was attractive to all students and those in the 25 – 29 year cohort in 2001.

In the fields of business, administration and economics and arts, humanities and social sciences, for all students, those aged less than 25 years and those aged 25-29 years, the proportions of students with higher education achievement were much greater than for the groups with or without higher education achievement. In engineering and surveying, the reverse held. In health and community services percentages of those with or without higher education achievement exceeded those for the total age group and for those aged 25-29 years, but were less than for those aged less than 25 years with higher education achievement. In the field of services, hospitality and transportation, for each of the cohorts the proportions with or without higher education achievement were greater than for those with higher education achievement.

 In business, economics and administration, there were from around one quarter to almost one half of students with higher education achievement in the field in various states and territories in 1996 and while smaller proportions in 2001, there were still six of the eight with more than 20% here. Between 1996 and 2001, all had declines with significant falls occurring in Tasmania, the Northern Territory, Queensland, Victoria and the Australian Capital Territory. For those aged less than 25 years, in each state and territory except South Australia, more than 25% were in this field in 1996 while in 2001, more than 20% were here except for the Northern Territory which had seen a sharp decline from over 40% in 1996 to just under 15% in 2001. South Australia, the only state or territory to show growth had a strong increase over the six years moving from around 23% to over 31%, the highest proportion in that year. In almost half in 1996 and over half in 2001, the percentages were greater than those for the respective total state and territory cohorts with higher education achievement. Highest proportions were in the Northern Territory, Victoria and Tasmania in 1996 and South Australia, Victoria and New South Wales in 2001. For those aged 25-29 years, in 1996, proportions in five of the eight states and territories were in excess of one third and all except Western Australia were greater than 30%. In 2001 in all except Western Australia, the Northern Territory and the Australian Capital Territory they were greater than one fifth with all showing a general decline. The percentages more than halved in Tasmania, over 45% to 20%, the Northern Territory, over 33% to almost 15% and the Australian Capital Territory just under 40% to over 17%. The decrease in Queensland was also substantial from 37% in 1996 to over 21% in 2001 as was that in Victoria, almost 38% in 1996 to just under 25% in 2001. Tasmania, the Australian Capital Territory and Victoria in 1996 and South Australia, New South Wales and Victoria in 2001 had the highest proportions in this field. In 1996, percentages for most states and territories were greater than those for the youngest group with the situation being reversed in 2001. In less than half in 1996 and more than half in 2001 they exceeded those for the total group with higher education achievement.

In arts humanities and social sciences, for all domestic VET vocational students with higher education achievement, Western Australia and the Australian Capital Territory had between 18% and 25% of enrolments. For several states and territories, proportions were less than 10% while in others the range was from 10% to 17%. For those aged less than 25 years proportions in this field increased, sometimes significantly in several states and territories. The Australian Capital Territory saw the proportion more than double over the period from just under 15% to over 30% as did New South Wales from around 8% in 1996 to almost 18% in 2001. The increase in Western Australia was of almost the same magnitude from over 18% to over 34% and Queensland, off the lowest base of all of under 4% % to over 7%, equal lowest proportion of all in 2001. There were declines in South Australia, Tasmania and the Northern Territory. Highest percentages were in Western Australia and the Australian Capital Territory in both 1996 and 2001 and South Australia in 1996 and New South Wales in 2001. In most in 1996 and in half in 2001, proportions of this age group were less than those for total state and territory age cohorts with higher education achievement. The proportion of those aged 25-29 years in Western Australia was the greatest of all states and territories in both 1996 (over 21%) and 2001 (over 25%) with

the Australian Capital Territory having almost 20% in each of the two years. New South Wales grew over the period to almost 17% as did Queensland, to 11% Victoria, to just over 11%, South Australia, to almost 8% and Tasmania to over 9%. Only the Northern Territory registered a decline falling to 12% in 2001. Highest proportions were broadly similar to those for the youngest group. Western Australia and the Australian Capital Territory in both years, and the Northern Territory in 1996 and New South Wales in 2001. In 1996, percentages in most states and territories were greater than those for the youngest group while this was the case in half in 2001. In this final year of the period they exceeded those for the total state and territory age cohorts with higher education achievement in three quarters and in 1996 in half.

In the majority of states and territories there were reductions in proportions of the total cohorts with higher education achievement in the field of engineering and surveying with Western Australia (almost 11% to over 12%), Tasmania (11% to over 12%) and South Australia (8% to over 11%) being the three states that grew. For those aged less than 25 years, Tasmania saw strong growth from over 16% to 23% while South Australia grew from around 7%, the lowest proportion of all in 1996 to almost 12% in 2001. Except for the Northern Territory where there was a marginal increase, all others declined which in some cases were significant. Highest proportions were in the Australian Capital Territory, Victoria and New South Wales in 1996 and Tasmania, Western Australia and Victoria in 2001. Most in 1996 and all in 2001 had proportions greater than those for the total state and territory cohorts with higher education achievement. The 25-29 year cohort had high proportions in Tasmania in both 1996 (almost 14%) and 2001 (over 16%), in Western Australia, almost 12% and just under 14% in 2001 and Victoria, almost 15% in 1996 and just over 11% in 2001. South Australia grew from almost 10% to over 13%, while the remainder declined. Highest proportions were in New South Wales, Victoria and Tasmania in 1996 and Tasmania, South Australia and Western Australia in 2001. In both years, in many they were less than those for the youngest group while the reverse was true in relation to the total cohorts with higher education achievement.

Percentages of the total age cohorts with higher education achievement in the field of health and community services showed growth in most states and territories over the period with that in Queensland more than doubling to 20% in 2001. This was similar for the Northern Territory which grew from almost 6% to over 12% while the increase in Tasmania was also large from under 8% to above 11%. There were small reductions in New South Wales and in Western Australia. For the youngest age group, Queensland had the highest proportions in 1996 with over 10% and in 2001 with around 20% and they increased significantly in Tasmania from over 7% to over 12% while New South Wales, Victoria, the Northern Territory and the Australian Capital Territory also grew. Highest proportions were in Queensland and Tasmania in both 1996 and 2001 and in Western Australia in 1996 and the Northern Territory and Victoria (equal percentages) in 2001. In most states and territories percentages exceeded those for the total state and territory age cohorts with higher education achievement. There was growth for the next youngest group in most and in some cases this was large. In the Northern Territory, there was an increase from almost 5% to 14% in 2001 while in Queensland over the same period it was from almost 9% to just over 20%, the highest proportion of all states and territories in that year. The movement in the Australian Capital Territory was also relatively large while Victoria, South Australia and Tasmania saw smaller increases. Both New South Wales and Western Australia registered marginal decreases. Highest proportions were in Queensland and Tasmania in both years and Victoria in1996 and the Northern Territory in 2001 and for half the in both years, percentages were greater than those for the youngest cohort while in relation to the total state and territory age cohorts, this was the case for just under half in 1996 and for three quarters in 2001.

In the field of services, hospitality and transportation, for the total age groups with higher education achievement, there were declines in most states and territories over the period. Victoria which grew from just under 9% to over 9% and Western Australia which was stable at just over 4% were the exceptions. Among the youngest age group, proportions in the Northern Territory

increased from over 16% to over 20%, the highest proportion of all states and territories in that year. Victoria grew from 10% to almost 18%, while there were smaller increases in New South Wales, Queensland and Western Australia. There were declines in South Australia, Tasmania and the Australian Capital Territory. Highest proportions were in the Northern Territory and Queensland in both years and in Tasmania in 1996 and Victoria in 2001 and in all they were greater than those for total state and territory cohorts with higher education achievement. For those aged 25-29 with higher education achievement, there was growth in New South Wales, to just over 7%, in Victoria to over 11%, Queensland, to just above 8%, Western Australia to over 5% and Tasmania to almost 6%. South Australia and the two territories registered drops over the period. Highest proportions of enrolments were in Victoria and Queensland in 1996 and the Northern Territory in 1996 and New South Wales in 2001 and in both years in all they were lower than those for the youngest group. The reverse was the case in relation to the total cohort with higher education achievement in 2001 and in half the states and territories in 1996.

Table 11 shows the proportions of domestic VET vocational students with higher education achievement in particular age cohorts in various fields of education for 2002 and 2003.

Table 11: Field of education distribution of VET vocational students with higher education achievement as a proportion of all students with higher education achievement in age cohorts

Field/age	All years (%)	All years (%)	<25 yrs (%)	<25 yrs (%)	25-29 yrs (%)	25-29 yrs (%)
	2002	**2003**	**2002**	**2003**	**2002**	**2003**
Nat pc sc	0.7	0.6	0.7	0.7	0.9	0.8
IT	6.8	5.2	5.4	4.7	6.1	4.3
Eng	11.6	10.7	15.5	15.5	13.9	12.4
Arc, bdlg	3.5	3.4	3.7	3.8	3.8	3.5
Ag env sc	5.5	5.4	4.8	4.4	5.7	5.3
Health	5.3	6.2	5.1	5.6	5.5	6.3
Edn	8.3	9.3	3.3	3.6	6.0	6.8
Mgt	23.2	21.4	24.6	23.8	24.8	22.9
Society	13.4	15.0	14.8	15.9	14.8	17.9
Creat arts	5.3	5.5	6.5	6.6	5.4	5.8
Food,hosp	3.4	4.2	8.3	8.1	4.0	4.7
Mxed fld	7.1	7.9	4.5	5.4	5.4	5.4
Subject	5.9	5.2	2.7	1.9	3.8	2.9
Total	100.0	100.0	99.9	100.0	100.1	99.0

Note: "Nat pc sc" is Natural and physical sciences; "IT" is Information technology; "Eng" is Engineering and related technologies; "Arc, bdlg" is Architecture, building; "Ag env sc" is Agriculture, environmental and related studies; "Health" is Health; "Edn" is Education; "Mgt" is Management and commerce; "Society" is Society and culture; "Creat arts" is Creative arts; "Food, hosp" is Food, hospitality, and personal services; "Mxed fld" is Mixed field programs; "Subject" is Subject only.

Management and commerce was attractive to the three age cohorts with higher education achievement. Society and culture and engineering and related technologies were also popular. Education had some attraction to the total group and those aged 25 – 29 years in both 2002 and 2003 while the fields of food, hospitality and personal services and creative arts had some appeal to the youngest group. The mixed field programs also had some appeal to the overall group in both years while information technology was reasonably popular with the 25-29 year age group in 2002. Hence among those domestic VET vocational students with higher education achievement, over the period 1996 to 2003, business related, engineering related and arts related studies were consistently popular with students aged less than 25 years and those aged 25 – 29 years.

In the fields of management and commerce, and society and culture, proportions in the three age groups with higher education achievement were greater than those for domestic VET vocational

students irrespective of whether or not they had higher education achievement while in engineering and related technologies, the reverse of the profile in society and culture held in all age cohorts. Education had the same profile as society and culture while it was the reverse for food, hospitality and personal services. For creative arts, there were higher proportions among those with higher education achievement than among those with or without such achievement.

In the field of management and commerce the proportion of enrolments with higher education achievement in a number of states and territories were significant. In Tasmania, the percentages were close to 30% in both years, while in New South Wales, these were over 25%. In South Australia, there was a decline from almost 25% to over 20% in 2003, in Victoria from over 20% to close to 18%, in Queensland from over 21% to around 20% while in the Australian Capital Territory there was an increase from just over 19% to over 21%. Proportions in Western Australia were relatively stable while the Northern Territory had the lowest percentages at just under 10% in both years. For those aged less than 25 years, in five of the eight states and territories, there were more than 20% in this field in each year. South Australia had the highest percentages with over 30% in 2002 and around 28% in 2003. Those in New South Wales, Victoria and Tasmania were around 25% with Queensland between 20% and 22%. Of all, the Northern Territory had the lowest percentages with 8% in each year. Half registered growth over the two years with highest proportions being in South Australia and Tasmania in both years and Victoria in 2002 and New South Wales in 2003 and for less than half in 2002 and half in 2003, proportions were greater than those for the total state and territory cohorts with higher education achievement. Four states and territories had over one fifth of their enrolments of those aged 25-29 years in this field in both years. In Tasmania, proportions were the highest in 2002 at around 30% and then above 22% in 2003. New South Wales had between 26% and 28% highest of all in 2003 and South Australia and Victoria also had more than one fifth in both years. Queensland had just above 20% in 2002 while Western Australia had a similar proportion to this in 2003. For this age group, only two states had increases over the two years and highest proportions of enrolments being in Tasmania, New South Wales and South Australia. Five in 2002 and four in 2003 had enrolment proportions greater than those for the youngest group which was the same as the pattern for total state and territory cohorts with higher education achievement.

Western Australia and the Australian Capital Territory had over 25% of their domestic VET vocational students with higher education achievement enrolled in the field of society and culture. There was a strong increase in New South Wales from around 14% to over 17%, in South Australia from 10% to just above 14% with Victoria from around 11% to close to 14%. Proportions in the Northern Territory and Tasmania increased while there was a decline in Queensland. For those aged less than 25 years, the Australian Capital Territory had the highest proportions in both years, over 55% in 2002 and close to 40% in 2003. Western Australia also had high percentages with over 25% in each year. New South Wales, South Australia, Victoria and Tasmania saw some growth while Queensland and the Northern Territory decreased. Highest percentages were in the Australian Capital Territory and Western Australia in both years and the Northern Territory in 2002 and South Australia and New South Wales (equal) in 2003. In most states and territories in both years, proportions were greater than those for the total state and territory cohorts with higher education achievement. The next youngest cohort had very high proportions in each year in the Australian Capital Territory, over 30%, and Western Australia, almost 30%. There were increases in a number of states and territories. The Northern Territory more than doubled to over 17% while New South Wales grew to above 20% and Victoria, South Australia and Tasmania had increases while there was a decline in Queensland from around 12% to just over 8%. Highest percentages were in the Australian Capital Territory, Western Australia and New South Wales in both years and in four states and territories in 2002 and five in 2003, percentages of students were greater than those for the youngest age group while in three quarters in 2002 and all in 2003, they exceeded those for the total state cohorts with higher education achievement.

Within the field of engineering and related technologies, Tasmania and South Australia had relatively high percentages of enrolments (over 15%) in both 2002 and 2003. Those in Victoria, Queensland and Western Australia were above 10% in both years while in New South Wales and the Northern Territory they were under 10%. The Australian Capital Territory had the smallest in both years at around 5%. Percentages for the youngest group in most states and territories grew, sometimes significantly. Tasmania went from 18% to a high 26% , while the increase in the Northern Territory was from just under 10% to over 15% and the Australian Capital Territory, the lowest of all states and territories in 2002 of around 4% to above 9%, still the lowest. Growth in New South Wales was marginal as was that in Victoria and Western Australia. Queensland and South Australia had declines. Highest proportions were in Victoria and Tasmania in both years, and in Queensland in 2002 and South Australia in 2003 and in relation to the total state and territory age cohorts, they were higher in seven in 2002 and in all in 2003. For those aged 25-29 years, the highest proportions in both years were in Tasmania at around 20% in 2002 and over 25% in 2003. Those in South Australia were also high in both years, between 16% and 18% as they were in Victoria, between 16% and 17%. Queensland declined from over 17% to around 13% as did Western Australia from just above to just below 12% and New South Wales from over 9% to around 8%. Proportions in the Northern Territory increased from around 10% to almost 12% as did those in the Australian Capital Territory, though only very marginally, around 5%, the smallest in either year. In half in 2002 and only one in 2003, percentages were greater than those for the youngest group while they were greater than those for the total cohorts with higher education achievement in all in both years.

In the field of education which appealed more to those aged 25-29 years among the younger student groups, proportions grew in seven of the eight states and territories. The Northern Territory was one to decline from over 20% to around 16%. Highest percentages of enrolments were in the Northern Territory, Western Australia and Tasmania in both years with most states and territories having less than 10%. For none were they greater than those for the total age cohorts with higher education achievement. Food hospitality and personal services which had some appeal to the youngest group had high proportions in both years in Tasmania, New South Wales and Queensland. Those in the Northern Territory more than doubled to almost 11% while in Victoria there was also an increase to above 7%. The remaining states and territories had low proportions in each year. Overall six registered growth. For creative arts, a field that also had some appeal to the youngest group, there were high proportions in Western Australia at around 20% in both years, with the remaining states and territories generally enrolling less than 10%. Highest percentages were Western Australia in both years, the two territories in 2002 and Queensland and Victoria in 2003 and there were increases over the two years in half of the states and territories.

Over the period 1996 to 2003, the broad areas of business, arts and engineering were particularly appealing to younger domestic VET vocational students with higher education achievement.

Indigenous students

Nationally the proportion of Indigenous VET vocational students with or without higher education achievement was around 3.5% in both 2002 and 2003, the only years for which data were provided. For those aged less than 25 years, they were just over 4% while for those in the 25-29 year age group, they were less than this but still at 4% in one year and slightly above this for the other. The highest proportion in each of the three age groups was in the Northern Territory. This was almost 45% in both years for the total group, around 50% for those aged less than 25 years and over 45% for those aged 25-29 years. These were significantly greater than those in other states and territories where highest percentages were in Western Australia and Queensland. Table 12 shows the number of Indigenous students with higher education achievement as a percentage of domestic VET vocational students with higher education achievement in the three age cohorts.

Table 12: Indigenous VET vocational students with higher education achievement as a proportion of VET vocational students with higher education achievement

State/age	All years (%)	All years (%)	<25 years (%)	< 25 years (%)	25-29 years (%)	25-29 years (%)
	2002	2003	2002	2003	2002	2003
NSW	1.2	1.3	1.7	1.8	1.1	1.0
Vic	0.4	0.3	0.4	0.3	0.5	0.3
Qld	1.9	1.5	2.3	1.0	2.1	1.2
SA	1.3	1.4	1.3	1.0	1.0	0.9
WA	1.2	1.3	0.8	0.8	1.1	1.1
Tas	0.9	0.7	1.0	0	0.6	1.4
NT	5.1	5.7	5.3	1.6	3.8	5.1
ACT	0.5	0.4	0.6	1.7	0.7	0.3
Total	1.1	1.1	1.3	1.1	1.1	0.8

There were very small percentages of Indigenous students with higher education achievement in the three age cohorts. For each group nationally, the proportions were much less than for those with or without such achievement. For the two young cohorts, those in the Northern Territory were highest, but less than for corresponding age cohorts with or without higher education achievement, although in 2003 the percentage for those aged less than 25 years in the Northern Territory was marginally less than for New South Wales and the Australian Capital Territory. Percentages of the youngest group in the Northern Territory and New South Wales in both years and for those aged 25-29 years in New South Wales, Queensland and the Northern Territory were above national proportions for the age groups. For the two young age groups, proportions in most states and territories and nationally declined but for the youngest group, exceeded those of the total state and territory cohorts in half in 2002 and two in 2003 while for those aged 25-29 years they were greater in three in 2002 and only one in 2003. Overall the percentage of Indigenous students with higher education achievement was very low for each of the three age cohorts with these being relatively stable for the total cohort but with small reductions for the two young groups.

Students with a disability

The proportions of students with or without higher education achievement and having a disability ranged from around 3.5% in 1996 to almost 5.5% for the total age group, from 3.0% in 1996 to 5.0% in 2003 for those aged less than 25 years and from around 3% to almost 4.5% for those aged 25-29 years. In 2003, these were greater than those for 1996 nationally and in all states and territories in each age cohort except for the 25-29 year age group in Queensland. Table 13 shows the numbers of domestic VET vocational students with a disability and with higher education achievement as a proportion of students with higher education achievement in the three age cohorts.

Table 13: Students with a disability and higher education achievement as a proportion of students with higher education achievement

State/age	All years (%)	All years (%)	< 25 years (%)	< 25 years (%)	25-29 years (%)	25-29 years (%)
	1996	2003	1996	2003	1996	2003
NSW	3.6	6.9	2.2	5.4	2.2	3.8
Vic	2.9	4.5	2.4	3.0	1.9	2.7
Qld	2.6	3.3	1.7	1.5	1.6	2.1
SA	3.6	4.4	3.4	3.2	3.6	3.0
WA	1.4	4.8	1.0	3.9	0.9	3.5
Tas	4.0	5.9	2.3	3.4	3.1	2.2
NT	2.6	3.5	2.6	0	1.9	1.5
ACT	4.2	4.6	3.4	1.7	3.9	2.8
Total	3.0	5.3	2.1	3.7	2.0	3.1

For students with a disability and with higher education achievement, national percentages for the total age cohorts were consistently less than those for the VET vocational students with or without higher education achievement. Proportions of the two youngest groups nationally and in each state and territory tended to be less than those for the total student cohort with a disability and with higher education achievement in either year. Nationally and in half of the states and territories, percentages of the younger age groups increased with those in New South Wales being consistently higher than national proportions while in Queensland for both younger groups and Victoria and the Northern Territory for those aged 25-29 years, they were consistently lower.

Language spoken at home

The proportions of students with or without higher education achievement and indicating that English was the language spoken at home were high for each age cohort nationally and for most states and territories in 2003, while this tended to be the case in 1996 for New South Wales, Victoria and the Australian Capital Territory. Table 14 shows the number of domestic VET vocational students with higher education achievement who indicated that English was spoken at home as a percentage of the age cohorts with higher education achievement.

Table 14: Percentage of VET vocational students with higher education achievement and English spoken at home as a proportion of students with higher education achievement

State/age	All years (%)	All years (%)	< 25 years (%)	< 25 years (%)	25-29 years (%)	25-29 years (%)
	1996	2003	1996	2003	1996	2003
NSW	60.6	62.8	71.6	67.2	62.3	59.7
Vic	73.7	72.1	76.5	72.3	73.4	69.6
Qld	64.5	89.0	66.9	92.2	62.7	88.7
SA	89.0	82.9	90.2	87.0	86.0	83.6
WA	76.4	71.5	82.9	76.3	77.8	69.8
Tas	3.6	88.4	4.0	92.3	3.1	88.8
NT	86.7	83.9	81.5	95.3	87.4	86.7
ACT	71.8	81.5	81.5	84.5	72.2	85.1
Total	66.8	72.3	73.0	74.9	67.1	70.4

Note: The significantly low proportions in Tasmania in 1996 may indicate a data recording issue.

The proportions who indicated that the language spoken at home was English and who also had higher education achievement were high in all states and territories except for Tasmania in 1996.

Excluding this state where percentages in this year for each of the three age cohorts were 4% or less, for the three cohorts in 1996 the proportions in states and territories ranged from 60% to over 90%. In 2003, the range including Tasmania, was from almost 60% to over 95%. In South Australia and the Northern Territory, proportions were greater than 80% in both years for each of the three age cohorts. In Queensland, this was also the case for each group in 2003 and in the Australian Capital Territory for each in 2003 and also for those aged less than 25 years in 1996. For the youngest age group nationally and in five of the states and territories there were increases while for the next youngest group, four saw growth in addition to a national increase. For the youngest group in 1996, seven states and territories, and in 2003, eight had proportions greater than those for total state and territory cohorts with higher education achievement while for the 25-29 year age group, this was the case in both years for half.

Country of birth

Among students with or without higher education achievement, the proportions who were born in Australia ranged from around 45% to over 95%. The majority of those students in each state and territory, except Western Australia in 1996 for the 25-29 year age group and for the total age group, were born in Australia. Table 15 shows the number of domestic VET vocational students with higher education achievement who were born in Australia as a percentage of the age cohorts with higher education achievement.

Table 15: Number of VET vocational students with higher education achievement born in Australia and as a proportion of students with higher education achievement in age cohorts.

State/age	All years (%)	All years (%)	< 25 years (%)	< 25 years (%)	25-29 years (%)	25-29 years (%)
	1996	2003	1996	2003	1996	2003
NSW	56.1	54.1	76.4	70.3	59.1	55.3
Vic	68.0	62.6	79.1	73.3	70.7	65.4
Qld	74.8	70.1	85.2	81.8	78.0	74.2
SA	75.9	72.4	92.3	87.2	85.8	81.9
WA	61.1	51.7	76.2	67.2	65.5	57.0
Tas	84.9	75.0	92.5	91.3	88.4	82.6
NT	82.5	69.9	87.8	92.2	84.2	72.4
ACT	64.4	67.0	83.0	81.6	66.9	77.0
Total	65.1	60.9	79.5	74.3	68.0	64.1

In 1996 for those aged less than 25 years in all states and territories and nationally, and in 2003 for Queensland, South Australia, Tasmania, the Northern Territory and the Australian Capital Territory, proportions of students born in Australia exceeded 75%. This was also the case in South Australia and Tasmania in both 1996 and 2003 and, in Queensland and the Northern Territory in 1996 and the Australian Capital Territory in 2003 for the 25 – 29 year age group. For the total cohort, the proportions were greater than or equal to three quarters in South Australia in 1996, Tasmania in both 1996 and 2003 and in the Northern Territory in 1996. New South Wales had consistently lower percentages than those nationally. Both young groups in most states and territories and nationally had proportions that declined. In all and nationally in both 1996 and 2003 they were greater than those for the total cohorts with higher education achievement.

Geographic distribution of home address

For states and territories except Queensland, Tasmania (in 1996 and 2003) and the Northern Territory (in 2003), the majority of students with or without higher education achievement in the three age cohorts had a home address in a capital city. The Northern Territory had the greatest proportions in remote locations and Tasmania had the greatest in rural locations. Table 16 shows distribution of the total age cohort of domestic VET vocational students with higher education achievement by home address at the commencement and end of the eight year period as a proportion of all students with higher education achievement.

Table 16: Location of the total age cohort of VET vocational students with higher education achievement as a proportion of all VET vocational students with higher education achievement

Location	Capital	City	Other	Metro	Rural		Remote		O/seas	
State/year	1996	2003	1996	2003	1996	2003	1996	2003	1996	2003
NSW	68.7	65.4	11.3	8.2	19.2	25.5	0.6	0.6	0	0
Vic	74.3	66.2	3.2	3.1	21.8	28.1	0.5	0.8	0.04	0.8
Qld	53.8	50.7	12.2	11.5	28.8	30.4	4.6	6.5	0.04	0.1
SA	76.4	75.6	0.04	0.08	20.3	20.8	3.2	3.2	0	0
WA	77.8	74.7	0.04	0	11.5	14.0	10.4	11.2	0.01	0
Tas	50.7	47.2	0.2	0.7	47.7	50.6	1.3	1.0	0	0.07
NT	67.7	41.0	0.3	0.2	4.9	6.4	27.2	49.7	0	0.3
ACT	95.5	95.2	0.7	1.9	3.6	2.7	0.09	0.05	0	0
TOTAL	69.6	64.5	6.8	5.7	21.0	26.0	2.4	2.9	0.02	0.3

In 1996, all states and territories had a majority of domestic VET vocational students with higher education achievement with capital city home addresses and in 2003 this situation was similar except for Tasmania and the Northern Territory. Queensland and New South Wales had the greatest proportions with other metropolitan addresses while Tasmania was dominant with rural addresses and the Northern Territory with remote addresses. In all states and territories, the proportion of students with capital city home addresses declined and in many there were decreases for other metropolitan addresses. The proportions of rural or remote addresses increased in most. Table 17 shows distribution of domestic VET vocational students aged less than 25 years with higher education achievement by home address as a proportion of domestic VET vocational students aged less than 25 years with higher education achievement.

Table 17: Location of VET vocational students aged less than 25 years with higher education achievement as a proportion of VET vocational students aged less than 25 years with higher education achievement

Location	Capital	City	Other	Metro	Rural		Remote		O/seas	
State/year	1996	2003	1996	2003	1996	2003	1996	2003	1996	2003
NSW	69.3	67.4	14.5	9.6	15.7	22.1	0.4	0.6	0	0
Vic	78.0	74.7	3.6	3.3	17.9	19.5	0.3	0.8	0.01	0.4
Qld	58.1	54.5	13.3	12.0	24.6	25.9	3.6	6.7	0.04	0.2
SA	82.8	81.9	0	0	14.1	14.3	3.2	3.7	0	0
WA	84.8	87.4	0.07	0	8.5	6.5	6.3	6.0	0	0
Tas	51.2	58.2	0.5	0	47.5	40.4	0.7	1.4	0	0
NT	79.3	43.8	1.1	0	4.1	6.3	15.5	50.0	0	0
ACT	95.4	92.0	0.8	3.4	3.7	4.6	0.1	0	0	0
TOTAL	72.7	70.3	8.0	6.4	17.4	20.3	1.6	2.3	0.01	0.1

Except for the Northern Territory in 2003, all states and territories had a majority of the youngest age group with capital city home addresses. Similar to the above, Queensland and New South Wales had the greatest proportions with other metropolitan addresses, while Tasmania dominated with rural addresses and the Northern Territory with remote home addresses. Those with capital city home addresses made up greater proportions than the total group with higher education achievement in all states and territories, except the Australian Capital Territory in both 1996 and 2003. The reverse was the case for those with rural addresses, again except for the Australian Capital Territory. For those with other metropolitan home addresses, almost all had percentages greater than those for respective total groups in 1996, and for half in 2003. This situation in 2003 was the same as for those with remote home addresses while in 1996, only two were greater than those for the total group. Among states and territories proportions of students with capital city home addresses declined in half and other metropolitan in three quarters while for rural and remote addresses, three quarters had increases.

Table 18 shows distribution of domestic VET vocational students aged 25 to 29 years with higher education achievement by home address as a proportion of all students aged 25 to 29 years with higher education achievement.

Table 18: Location of VET vocational students aged 25 – 29 years with higher education achievement as a proportion of VET vocational students aged 25-29 years with higher education achievement

Location	Capital	City	Other	Metro	Rural		Remote		O/seas	
State/year	1996	2003	1996	2003	1996	2003	1996	2003	1996	2003
NSW	73.3	74.0	10.8	7.2	14.9	17.9	0.7	0.6	0	0
Vic	80.0	73.8	3.1	2.9	16.5	20.6	0.3	0.7	0.06	0.6
Qld	54.2	53.0	12.6	11.6	26.0	26.6	6.6	7.4	0.04	0.2
SA	82.4	76.8	0	0	13.1	19.7	4.5	3.2	0	0
WA	80.0	79.7	0	0	7.8	7.7	11.8	12.7	0	0
Tas	56.8	50.4	0.2	1.7	41.5	46.8	1.5	0.8	0	0
NT	68.4	42.3	0	0.5	5.1	4.1	26.5	51.5	0	0.5
ACT	95.9	96.6	0.7	0.9	3.2	2.2	0.2	0	0	0
TOTAL	73.9	71.1	6.6	5.2	16.5	19.6	2.8	3.1	0.03	0.2

The picture for those aged 25-29 years with higher education achievement was the same as for those aged less than 25 years in table17. Many students had home addresses in capital cities and for most states and territories, this was the case in both 1996 and 2003. Queensland and New South Wales consistently had higher proportions with other metropolitan addresses with Tasmania dominating the rural category and the Northern Territory remote category. This young cohort formed larger proportions with capital city home addresses than the total group in all states and territories while they tended to be lower than those for the youngest group. For those with other metropolitan addresses, proportions were lower than those for the total group in four in 1996 and five in 2001, while they were lower than the youngest group in seven states (and equal in the eighth) and territories in 1996 and half (and equal in two) in 2003. In seven in 1996 and all in 2003, percentages of this age group with rural home addresses were less than state and territory totals while this was the case for three quarters in 1996 and three in 2003 for the youngest age group. Among those with remote addresses, in most, proportions were less than those for the total group while for none in 1996 and three in 2003, percentages were less than those for the youngest group. Over the eight year period, there were reductions in percentages with capital city addresses in six states and territories, in three each for the other metropolitan and rural addresses and half with remote addresses.

Employment while studying

For those students with or without higher education achievement, the percentage in full time employment declined slightly nationally and in several states and territories while that for part time employment increased nationally and in all states and territories. The proportions in full time unemployment fell in all states and territories. The pattern for those aged less than 25 years with or without higher education achievement was similar to that for the total age cohort. For those aged 25 – 29 years, a greater proportion than those aged less than 25 years, or of the total cohort, were in full time employment. This was also the case for each state and territory. However for those in part time employment, the proportions here tended to be lower than for the youngest age cohort and the overall cohort. Table 19 shows the distribution of a selection of employment categories of domestic VET vocational students with higher education achievement while studying.

Table 19: VET vocational students with higher education achievement in selected employment categories as percentage of all VET vocational students with higher education achievement

Employ category	Employ F/T		Employ P/T		Unemp F/T		Not in Labour Force	
State/year	1996	2003	1996	2003	1996	2003	1996	2003
NSW	44.1	40.8	14.4	17.7	23.8	9.7	10.6	11.5
Vic	45.3	39.9	14.8	21.5	10.9	8.0	9.3	10.3
Qld	51.8	52.0	15.1	14.5	10.5	7.6	6.8	7.7
SA	47.9	44.9	18.9	20.6	15.8	6.2	4.8	7.7
WA	39.5	38.2	18.2	19.1	10.1	10.0	12.1	11.8
Tas	49.6	44.9	16.9	18.7	12.4	7.7	7.0	8.8
NT	56.0	63.3	12.7	14.1	6.6	3.4	5.0	6.8
ACT	48.8	52.6	14.5	15.4	11.8	5.7	7.2	4.7
Total	45.8	42.8	15.1	18.6	15.3	8.5	9.3	10.1

In all states and territories and nationally, higher proportions were employed full time than was the case for those either with or without higher education achievement. In a small number of states and territories, over 50% were employed full time while studying although percentages declined in most over the period while those for part time employment tended to increase. Percentages of students in full time unemployment declined in all states and territories and nationally while for those not in the labour force these grew in most and nationally over the eight years. Table 20 shows the distribution of a selection of employment categories of domestic VET vocational students aged less than 25 years with higher education achievement.

Table 20: VET vocational students aged less than 25 years with higher education achievement in selected employment categories as percentage of VET vocational students aged less than 25 years with higher education achievement

Employ category	Employ F/T		Employ P/T		Unemp F/T		Not in Labour Force	
State/year	1996	2003	1996	2003	1996	2003	1996	2003
NSW	43.6	44.1	21.9	23.4	22.4	9.7	9.1	8.5
Vic	38.3	40.1	22.0	33.9	10.2	6.7	11.8	6.0
Qld	45.6	53.3	23.9	21.9	10.1	8.1	8.1	5.5
SA	39.8	43.7	29.7	30.8	19.9	5.8	5.0	3.4
WA	34.1	34.4	27.6	27.7	8.3	10.2	11.8	7.0
Tas	45.5	45.2	17.8	24.5	17.0	12.5	7.5	4.3
NT	45.8	64.1	21.8	21.9	5.9	1.6	7.7	7.8
ACT	37.6	54.6	28.0	20.7	10.1	4.6	5.9	3.4
Total	40.9	43.7	23.0	27.3	14.1	8.2	10.0	6.7

Percentages of the youngest group with higher education achievement in full or part time employment or full time unemployment were greater than those for the same age group with or without higher education achievement nationally and in most states and territories in both 1996 and 2003. Percentages of this cohort with higher education achievement employed full time generally increased and were lower than for the total age group with higher education achievement in all states and territories and nationally in 1996, while except for South Australia and Western Australia, the reverse held in 2003. For those in part time employment, proportions were greater than those for the total group in all and generally increased while for those in full time unemployment percentages declined nationally and in many and tended to be slightly lower than for the total group. Tasmania was an exception in both 1996 and 2003, South Australia an exception in 1996 while Queensland and Western Australia were also exceptions in 2003. Percentages of students not in the labour force tended to be lower than for the total group in 2003 except in the Northern Territory while in 1996 only in New South Wales, Western Australia and the Australian Capital Territory were they less than those for the total group with higher education achievement. Percentages in this category also declined nationally and in all states and territories, except the Northern Territory, over the eight years. Table 21 shows the distribution of a selection of employment categories of domestic VET vocational students aged 25- 29 years with higher education achievement.

Table 21: VET vocational students aged 25-29 years with higher education achievement in selected employment categories as percentage of VET vocational students aged 25 -29 years with higher education achievement

Employ category	Employ F/T		Employ P/T		Unemp F/T		Not in Labour Force	
State/year	1996	2003	1996	2003	1996	2003	1996	2003
NSW	55.0	54.5	11.5	15.8	21.0	10.0	7.2	6.6
Vic	56.0	52.9	11.2	19.7	10.8	8.3	7.1	6.0
Qld	62.0	58.6	11.0	14.7	10.0	7.9	4.8	6.3
SA	58.7	56.6	15.1	16.7	15.1	6.2	3.6	4.4
WA	51.9	49.9	12.2	18.4	9.8	10.1	10.5	6.6
Tas	55.7	56.0	14.6	19.6	13.1	8.1	6.8	3.1
NT	62.8	69.4	9.3	14.3	9.3	2.0	4.2	5.6
ACT	56.6	68.3	9.7	9.9	12.4	3.7	5.8	1.9
Total	56.2	54.8	11.4	17.1	14.3	8.7	7.0	6.1

For this young group with higher education achievement, percentages in full time employment were consistently greater than for the total age cohort and those aged less than 25 years. They were also consistently higher than those in this age category, irrespective of whether or not they had higher education achievement. The percentages in part time employment were lower than those for the total group in most states and territories and nationally and lower for all and nationally for the youngest age group. Again the employment trends were similar to other groups with the proportions of those in full time employment declining, those in part time employment increasing and those in full time unemployment declining. In this latter category, percentages were greater than those for the total cohort in three states and territories in 1996 and nationally and in five in 2003, while they were greater than the youngest group nationally and in four in both years. This group and the youngest group who were not in the labour force formed relatively low proportions of their respective cohorts with those for the former group being lower than for the youngest group in all states and territories and nationally in 1996 and again in 2003 except in Queensland, South Australia and Victoria (where proportions were equal) and also lower than the total cohort in all and nationally in both years. The period also saw decline in percentages in this category nationally and in most states and territories.

For domestic VET vocational students with higher education achievement, most indicated that they were employed either full time or part time while studying. Proportions of the youngest group increased in these employment categories over the eight year period while those for the next youngest group in part time employment increased but those in full time employment declined slightly but to still be well above 50%. For those who were unemployed full time percentages reduced from over 14% in 1996 for both young age cohorts to less than 10% in 2003 while those who were not in the labour force while studying these also declined to just over 6% for each group.

Profile of higher education students with experience in the TAFE section of the VET sector

Distribution of higher education undergraduate students by state and territory

The number of domestic undergraduate students increased by around 24% between 1993 and 2003, and by 16.6% from 1996 to almost 5300000 in 2003. All states and territories had growth from 1993 to 2003 except the Australian Capital Territory where there was a small decrease. However between 1996 and 2003, all showed an increase. New South Wales, Victoria and

Queensland accounted for three quarters of the enrolments in both 1996 and 2003 and almost 70% in 1993. The two territories and Tasmania together had around 6%.

Domestic undergraduate students aged less than 25 years increased by around 25% from 1993 and 20% from 1996 to almost 400000 in 2003. Again all states and territories had increases between 1993 and 2003 and between 1996 and 2003 except for the Northern Territory which registered a very marginal decline between 1993 and 2003 and a slightly larger, though still small decline between 1996 and 2003. Similar to the distribution of the total cohort, New South Wales, Victoria and Queensland accounted for around 75% of students while the Northern Territory, the Australian Capital Territory and Tasmania had around 6%. For students aged between 25 and 29 years, the proportion increased by almost 30% between 1993 and 2003 and 14% between 1996 and 2003 to over 50000 in 2003. All states and territories registered increases between 1993 and 2003 while a similar situation prevailed between 1996 and 2003 except for Victoria which saw a marginal decline. The distribution among states and territories was similar to that for the youngest cohort.

Nationally females dominated the total cohort, those aged less than 25 years and those aged 25-29 years in each of the three years. The total number increased from just over 50% in 1993 to more than 55% in 1996 and 57.5% in 2003. In each state and territory females also comprised more than 50% of enrolments in each of the three years. For those aged less than 25 years, the proportion increased from around 54% in 1993 to almost 55% in 1996 and almost 57% in 2003. Similar to that for the total group, for this age group in each state and territory, they comprised more than 50% in each of the years. Among the 25-29 year age group, nationally they were just over 50% in 1993, more than 51% in 1996 and then almost 55% in 2003. In contrast to the distribution among states and territories for the total age group and for those aged less than 25 years, for this age group, males dominated in New South Wales, Queensland, Tasmania and the Australian Capital Territory in each of 1993 and 1996 and again in Tasmania in 2003.

Hence for domestic undergraduate students, there has been substantial growth over the period1993 – 2003 and 1996 – 2003 for the total group and the two young age groups. This growth has also been reflected among states and territories. Females have dominated nationally, and in all states and territories for the total group and those aged less than 25 years in each of the three years and for the 25-29 year age group nationally and in most states and territories in each of the three years. For each group, the proportion of females nationally has also increased over the period to be close to or above 55% in 2003.

Distribution of domestic undergraduate students with complete or incomplete TAFE qualifications by state and territory

Table 22 shows the number of domestic undergraduate students with complete or incomplete TAFE qualifications for particular age cohorts.

Table 22: Number of undergraduate students with complete or incomplete TAFE qualifications by state and territory

Year	1993	1996	2003	1993	1996	2003	1993	1996	2003
State/ territory	All years	All years	All years	<25 years	< 25 years	<25 years	25-29 years	25-29 years	25-29 years
NSW	6601	10972	17492	2643	4345	6580	1308	2107	3322
Vic	4318	7268	8153	2130	3562	4591	769	1335	1377
Qld	3503	6246	11055	1752	3201	5024	588	1112	2103
SA	1540	2511	3885	560	999	1346	314	462	759
WA	1963	3273	4334	739	1513	2217	349	516	761
Tas	420	509	758	150	164	245	80	107	148
NT	266	330	568	77	103	135	54	71	106
ACT	686	972	992	296	480	535	134	204	173
Multi	215	384	628	93	237	326	34	44	101
Total	19512	32465	47865	8440	14604	20999	3630	5958	8850

Note: 1. NSW (New South Wales); Vic (Victoria); Qld (Queensland); SA (South Australia); WA (Western Australia); Tas (Tasmania); NT (Northern Territory); ACT (Australian Capital Territory); Multi (multi state)

2. The data here are not for all undergraduate students but rather are essentially commencing students from whom TAFE qualification information was collected and recorded on the DEST statistical system each year

The number of students in all age groups with complete or incomplete TAFE qualifications increased significantly by more than doubling between 1993 and 2003. All states and territories except Victoria and Tasmania reflected growth of this magnitude. The increase from 1996 was also substantial at just over 47% nationally with all states and territories increasing with this being large in some such as New South Wales, Queensland and Tasmania. As was the case for all domestic undergraduate students irrespective of whether or not the had TAFE experience, New South Wales, Victoria and Queensland made up around three quarters of the enrolments with complete or incomplete TAFE qualifications and Tasmania and the two territories combined accounted for between 5% and 7%. For students aged less than 25 years, enrolments more than doubled nationally and in all states except for Tasmania, the Northern Territory and the Australian Capital Territory between 1993 and 2003. There was also growth of close to 45% nationally as well as increases in all states and territories between 1996 and 2003. Students aged 25-29 years also more than doubled between 1993 and 2003. This was reflected in each state and territory except for Victoria, Tasmania, the Northern Territory and the Australian Capital Territory. Growth between 1996 and 2003 was again almost 50% nationally and substantial in some states and territories such as Queensland (almost 90%) and South Australia (almost 65%). The Australian Capital Territory was the only state or territory to register a decline in this period (15%). Similar to the distribution of the total age group and the youngest group, New South Wales, Victoria and Queensland accounted for around three quarters of the enrolments while Tasmania, the Northern Territory and the Australian Capital Territory had around 5%.

Table 23 shows the number of female students with complete or incomplete TAFE qualifications as a percentage of students with complete or incomplete TAFE qualifications for particular age cohorts.

Table 23: Female undergraduate students with complete or incomplete TAFE qualifications as a percentage of students with complete or incomplete TAFE qualifications

Year	1993	1996	2003	1993	1996	2003	1993	1996	2003
State/age	All years (%)	All years (%)	All years (%)	<25 years (%)	<25 years (%)	<25 years (%)	25-29 years (%)	25-29 years (%)	25-29 years (%)
NSW	51.3	54.5	60.9	53.5	54.2	57.4	47.4	53.8	60.4
Vic	49.2	50.7	53.0	49.5	51.0	51.8	50.3	48.1	51.0
Qld	46.6	54.7	57.3	49.5	54.1	56.0	42.2	51.8	55.3
SA	54.9	55.1	62.1	56.8	53.2	60.4	48.4	50.9	59.3
WA	53.0	58.1	57.7	49.1	56.2	53.3	49.6	60.3	56.8
Tas	43.1	51.9	48.9	40.7	55.4	49.8	46.3	48.6	43.9
NT	54.1	56.4	66.4	51.9	57.3	54.8	48.1	59.2	67.0
ACT	54.2	58.3	62.3	48.3	56.3	61.3	56.7	52.9	52.6
Multi	68.4	67.4	67.5	67.7	66.7	60.4	67.6	56.8	73.3
Total	50.6	54.4	58.5	51.2	53.8	55.7	48.0	52.4	57.1

The percentage of females with complete or incomplete TAFE qualifications has increased nationally from just over 50% in 1993 to almost 55% in 1996 and then to above 58% in 2003. Except for 1993, the proportions of younger female students ie those aged less than 25 years and those aged 25-29 years have been less than these total national proportions, but still increasing and except for those aged 25-29 years in 1993, being greater than half. The proportions in the two younger age groups, with a small number of exceptions, were less than those for the total age group in most states and territories in each of the three years. For the total cohort, in each the proportion was greater than half except in Victoria and Queensland in 1993 and Tasmania in 1993 and 2003. Those aged less than 25 years comprised less than half in Victoria and Queensland in 1993 and Tasmania in 1993 and 2003. In addition in 1993, Western Australia and the Australian Capital Territory had less than 50%. The 25-29 year age group had more instances where the percentages were less than half. This was the case in New South Wales, Queensland, South Australia, Western Australia, the Northern Territory and nationally in 1993, in Victoria in 1996 and in Tasmania in each of 1993, 1996 and 2003.

For the total group, the proportion increased in each state and territory, except for multi state, between 1993 and 2003 and for all except Western Australia and Tasmania between 1996 and 2003. For those aged less than 25 years, change between 1993 and 2003 reflected that for the total age group, while between 1996 and 2003, proportions increased except in Western Australia, Tasmania, the Northern Territory and multi-state. Among those aged 25-29 years, increases occurred between 1993 and 2003 in all except Tasmania and the Australian Capital Territory while between 1996 and 2003, in addition Western Australia also registered a decline.

Table 24 shows the number of male domestic undergraduate students with complete or incomplete TAFE qualifications as a percentage of students with complete or incomplete TAFE qualifications for particular age cohorts.

Table 24: Male undergraduate students with complete or incomplete TAFE qualifications as a percentage of students with complete or incomplete TAFE qualifications

Year	1993	1996	2003	1993	1996	2003	1993	1996	2003
State/age	All years (%)	All years (%)	All years (%)	<25 years (%)	<25 years (%)	<25 years (%)	25-29 years (%)	25-29 years (%)	25-29 years (%)
NSW	48.7	45.5	39.1	46.5	45.8	42.6	52.5	46.2	39.6
Vic	50.8	49.3	47.0	50.5	49.0	48.2	49.7	51.9	49.0
Qld	53.4	45.3	42.7	50.5	45.9	44.0	57.8	48.2	44.7
SA	45.1	44.9	37.9	43.2	46.8	39.6	51.6	49.1	40.7
WA	47.0	41.9	43.3	50.9	43.8	46.7	50.4	39.7	43.2
Tas	56.9	48.1	51.1	59.3	44.5	50.2	53.8	51.4	56.1
NT	45.9	43.6	33.6	48.1	42.7	45.2	51.9	40.8	33.0
ACT	45.8	41.7	37.7	51.7	43.8	38.7	43.3	47.1	47.4
Multi	31.6	32.6	32.3	32.3	33.3	39.6	32.4	43.2	26.7
Total	49.4	45.6	41.5	48.8	46.2	44.3	52.0	47.6	42.9

The percentage of males with complete or incomplete TAFE qualifications has decreased nationally from just under 50% in 1993 to just over 45% in 1996 and then to above 41% in 2003. Those for younger students have been greater than national proportions for the total age cohort, except for those aged less than 25 years in 1993, but have still declined over the period. Among the total group and the two younger groups only in 1993 was a national percentage above 50% and this was for those aged 25-29 years. The proportions in the younger age groups, with a small number of exceptions, were greater than those for male students in the total age group in most states and territories in a number of years. This was the case for the youngest age cohort in each year in Western Australia, the Australian Capital Territory and multi state, and in two of the three years in New South Wales, Queensland, South Australia, and the Northern Territory. For those aged 25-29 years, percentages were greater than national figures in each of the three years in New South Wales and Queensland and greater in two of the years in five other states and territories and multi state. In each state and territory the proportions of the total group were more than half in Victoria and Queensland in 1993 and Tasmania in 1993 and 2003 while for those aged less than 25 years, they were more than half in Victoria and Queensland in 1993 and Tasmania in 1993 and 2003 and in addition in 1993, Western Australia and the Australian Capital Territory had more than 50%. For those aged 25-29 years the proportion was more than half in New South Wales, Queensland, South Australia, Western Australia, the Northern Territory and nationally in 1993, in Victoria in 1996 and in Tasmania in each of 1993, 1996 and 2003.

Proportions decreased for the total group in each state and territory, except for multi state, between 1993 and 2003 and for all except Western Australia and Tasmania between 1996 and 2003. For those aged less than 25 years, change between 1993 and 2003 reflected that for the total age group, while between 1996 and 2003, they declined except in Western Australia, Tasmania, the Northern Territory and multi-state. Among those aged 25-29 years, decreases occurred between 1993 and 2003 in all except Tasmania and the Australian Capital Territory while between 1996 and 2003, in addition Western Australia registered percentage growth. Hence females tended to be dominant among the total age cohort and the younger age groups with proportions increasing over the period nationally and in most states and territories. The proportions of females in the younger age groups tended to be lower than those for the total group nationally and in the states and territories.

Field of study/education

Domestic undergraduate students with complete or incomplete TAFE qualifications were particularly attracted to business, administration and economics, arts, humanities and social sciences, science and education.

Table 25: Field of study distribution of domestic undergraduate students with complete or incomplete TAFE qualifications as a proportion of those with complete or incomplete TAFE qualifications

Age	All years (%)	All years (%)	All years (%)	<25 years (%)	<25 years (%)	<25 years (%)	25-29 years (%)	25-29 years (%)	25-29 years (%)
Field/year	1993	1996	2000	1993	1996	2000	1993	1996	2000
Agric	3.0	3.2	2.5	3.2	2.9	2.4	3.2	3.4	2.7
Arch	2.5	2.2	2.0	2.8	3.0	2.4	2.8	1.8	2.2
Arts	25.3	26.4	25.7	22.4	23.8	24.7	22.8	24.3	22.4
Bus	27.9	27.0	22.3	31.4	30.8	25.6	30.4	30.6	22.8
Edn	12.2	11.5	13.6	10.0	9.4	12.8	10.3	9.9	12.3
Eng	5.7	5.5	3.8	6.5	6.2	4.2	6.5	6.1	3.9
Hlth	8.0	8.2	10.8	7.5	6.7	8.3	7.7	7.5	10.7
Law	2.2	3.1	6.1	1.6	2.5	5.1	2.3	3.1	9.4
Science	13.0	12.9	13.2	14.5	14.8	14.4	14.1	13.4	13.7
Vet Sc	0.01	0.01	0.1	0	0.01	0.1	0	0.02	0.03
Total	99.8	100.0	100.1	99.9	100.1	100.0	100.1	100.1	100.1

Note: "Agric" is Agriculture; "Arc, bdlg" is Architecture, building;" Arts" is Arts, humanities and social sciences; "Bus" is Business, administration, economics; "Edn" is Education; "Eng" is Engineering , surveying; "Hlth," is Health, community services; "Law" is Law, legal studies; "Science" is Science; "Vet Sc" is Veterinary science;

For those students aged less than 25 years, the business administration and economics field was most popular in each of 1993, 1996 and 2000, (the last year for field of study classification), attracting between 25% and 31% nationally but with the percentage declining over the eight year period to around 25%. Nationally, proportions in each of the three years were greater than those for the total group with complete or incomplete TAFE qualifications and in the states and territories, most had around 25% or above with all except Tasmania exceeding those for the total group in 1993 and all exceeding these in 2000. For most states and territories, there were declines over the period with the highest proportions of enrolments in 1993 being in the Northern Territory, Queensland and Victoria, and in 2000 in Tasmania, Victoria and the Australian Capital Territory.

This field was also most popular for the next youngest group, appealing to between 22% and 30% nationally in each of the years with the proportion also declining over the period to just over 22%. Among states and territories in 1993 these tended to be lower than those for students aged less than 25 years but except for multi-state in both years, and the Northern Territory in 2000 were around one fifth and above of enrolments. For around half, proportions exceeded those for the total cohort. Again for most, percentages declined but were still generally close to or above 20% except for the Northern Territory which had over 15% with highest proportions in 1993 were in Queensland, Victoria and New South Wales, and in 2000 were in Victoria, Queensland and South Australia.

Arts, humanities and social sciences was consistently the second most popular area among both younger age groups and percentages were lower than those for the business field, but still above 20%. For those aged less than 25 years, there was an increase nationally from around 22% in 1993 to almost 24% in 1996 and just below 25% in 2000, but in each year was below that for the total group. For states and territories, all except Queensland, the Northern Territory and multi-

state were greater than 20% in 1993 and all except Tasmania with over 19% of enrolments, had more than 20% in 2000. Proportions tended to be lower than those for the total group and except for South Australia, the Australian Capital Territory and Tasmania, registered increases. The highest proportions in the field in 1993 were in South Australia, the Australian Capital Territory and Tasmania, and in 2000 were in Victoria, the Northern Territory and the Australian Capital Territory.

Among the next youngest group, numbers increased to almost 24% in 1996 before declining to around the 1993 level in 2000 of over 22%. As with the youngest group, percentages in this field were less than those for the total group in each year. In the states and territories, in 1993, all except Queensland and multi-state had more than 20% enrolled while in 2000, this was the case except for New South Wales with over 19% and Tasmania with over 17%. Proportions of this age group were generally higher in 1993 and generally lower in 2000 than those for students aged less than 25 years and highest percentages were in the Australian Capital Territory, Tasmania and South Australia in 1993, the same as for those aged less than 25 years, while in 2000, Western Australia, multi-state and the Australian Capital Territory were in this position. About half of the states and territories registered declines over the period.

The third most popular field among the younger age groups was science, with around 13% to 14 % of each being enrolled. For those aged less than 25 years, the percentages at both the beginning and end of the eight year period were similar and in each of 1993, 1996 and 2000, nationally exceeded those for the total group with complete or incomplete TAFE qualifications. Among the states and territories, except for multi-state, South Australia and the Northern Territory in 1993 they were less than 10%, percentages ranged from 14% to over 25%, while in 2000 the range was from 13% to just over 20%. For many the proportions exceeded those for the total group with complete or incomplete TAFE qualifications in both 1993 and 2000. Victoria, South Australia, Tasmania, the Northern Territory and multi-state registered increases, although only very marginally in the case of Tasmania, while the highest percentages in this field in 1993 were in the Australian Capital Territory, Tasmania and Western Australia, and in 2000 were in Tasmania, multi-state and the Australian Capital Territory.

Proportions in the 25-29 year age group showed a marginal decline nationally between 1993 and 2000 when almost 14% were enrolled. And as with the youngest group, these were greater than those for the total group in each of the three years. For the states and territories, in Queensland, South Australia, Western Australia and the Northern Territory in both 1993 and 2000, and in Tasmania and the Australian Capital Territory in 2000, proportions exceeded those for students aged less than 25 years. In most also, they equalled or exceeded those for the total group. Growth occurred between 1993 and 2000 except in New South Wales, Queensland and the Australian Capital Territory. This latter territory was among the three with the highest proportion of enrolments in both 1993 and 2000. Others in this category in both years were Tasmania and Western Australia. (In 1993, Queensland also had the same proportion as Tasmania).

The fourth most attractive field for the younger groups was education. Here between around 10% and 13% were enrolled. For the youngest age group nationally, there was growth between 1993 and 2000 to almost 13% from 10%, but in each of 1993, 1996 and 2003, the proportion was less than that for the total group. In the states and territories, these varied from under 10% in each of Victoria, South Australia, Tasmania and the Australian Capital Territory, to between 10% and 17% in other states and territories and almost 60% in multi-state (the Australian Catholic University) in 1993. In 2000, only Victoria and Tasmania had less than 10% with others ranging from 11% to 18% and multi-state again being high at over 30%. Except for Queensland in 1993 and 2000 where there was a marginal difference and Western Australia in 2000, proportions of this age group were less than those for the total group in all states and territories and all except for multi-state, the Northern Territory and New South Wales (marginal decline) had increases. Highest proportions were in multi-state and the Northern Territory in both 1993 and 2000, New South Wales in 1993 and Queensland in 2000.

The 25-29 year age group had increases nationally from over 10% in 1993 to above 12% in 2000 and as was the case with the youngest group, the proportions were less than for the total group in each of the three years. Most states and territories had percentages greater than those for the youngest group in 1993 with the reverse of this in 2000. Nationally and in many states and territories, these were less than those for the total cohorts. Proportions were above 10% except for Victoria in both 1993 and 2000 and Queensland and South Australia in 1993 and ranged from 10% in New South Wales to over 20% in the Northern Territory in 1993 and 10% in South Australia to just over 15% in Queensland in 2000. Those for multi-state were again high at over 60% in 1993 and above 25% in 2000. Growth occurred in all states and territories over the period except for Victoria, Western Australia, the Northern Territory and multi-state with highest proportions of enrolments being multi state, and Tasmania in both 1993 and 2000, the Northern Territory in 1993 and Queensland in 2000.

In the years 2001 and 2003 following the change of field of study to field of education classifications, the three most attractive fields for those aged less than 25 years were management and commerce, society and culture and education. In 2001, health was the fourth most popular, replaced in 2003 by information technology. For those aged 25-29 years, the most attractive fields were the same as those for the youngest group, but with society and culture being more popular than management and commerce and with health being fourth most popular in both 2001 and 2003.

Table 26: Field of education distribution of domestic undergraduate students with complete or incomplete TAFE qualifications as a proportion of those with complete or incomplete TAFE qualifications

Age	All years (%)	All years (%)	<25 years (%)	<25 years (%)	25-29 years (%)	25-29 years (%)
Field/year	2001	2003	2001	2003	2001	2003
Nat pc sc	4.9	4.5	5.5	4.8	5.3	5.1
IT	7.3	7.2	8.3	9.7	7.2	6.6
Eng	3.6	4.2	4.1	4.8	3.9	4.8
Arc, bdlg	1.8	1.8	2.4	2.3	1.9	2.1
Ag env sc	3.1	2.8	3.1	2.7	3.6	3.5
Health	10.4	11.1	9.0	8.4	8.8	10.7
Edn	13.9	15.6	11.9	12.2	13.6	15.9
Mgt	21.9	22.1	25.7	27.3	22.9	21.6
Society	26.9	23.5	21.9	18.4	27.9	23.3
Creat arts	6.1	7.2	8.1	9.5	4.8	6.4
Food, hosp	0.04	0.002	0.04	0	0.04	0
Mixed fld	0.1	0	0.1	0	0.1	0
Total	100.0	100.0	100.1	100.1	100.0	100.0

Note: "Nat pc sc" is Natural and physical sciences; "IT" is Information technology; "Eng" is Engineering and related technologies; "Arc, bdlg" is Architecture, building; "Ag env sc" is Agriculture, environmental and related studies; "Health" is Health; "Edn" is Education; "Mgt" is Management and commerce; "Society" is Society and culture; "Creat arts" is Creative arts; "Food, hosp" is Food, hospitality, and personal services; "Mxed fld" is Mixed field programs.

In the field of management and commerce, the percentage of enrollees was over 25% for those aged less than 25 years with complete or incomplete TAFE qualifications with an overall increase over the period. Proportions were well above those for the total age group with complete or incomplete TAFE qualifications. Among the states and territories, except for New South Wales and multi-state in 2001 and Western Australia, South Australia, the Northern Territory and multi state in 2003, these were above 25%. They ranged from just under 20% for multi-state in 2001 to 24% in these excepted cases. In all they exceeded those for the total cohort with complete or incomplete TAFE qualifications in both years and increased over the three years except in

Western Australia, South Australia and the Northern Territory. Highest proportions were in Tasmania, Victoria and the Australian Capital Territory. The next youngest age group, had national percentages lower than those for the youngest group, but still above 20% with an overall drop between 2001 and 2003, while they were slightly above and slightly below those for the total group in 2001 and 2003 respectively. Among many states and territories, percentages were below those for the youngest group. Exceptions were Queensland (marginally higher) and the Australian Capital Territory in 2001 and South Australia in 2003. They tended to be less than those for the total group. Highest proportions were Victoria and Queensland in both years and in the Australian Capital Territory in 2001 and South Australia in 2003 with all states and territories except Victoria and multi-state decreasing.

Percentages of those aged less than 25 years in the field of society and culture declined between 2001 and 2003 from almost 22% in 2001 to over 18% in 2003. These were much lower than those for the total group in both years which had also fallen. For the states and territories, except for the Northern Territory which had over 10% in 2001, proportions ranged from around 17% in Western Australia to over 25% in New South Wales in 2001 and from over 13% in Tasmania to almost 20% in Queensland and over 20% in multi-state in 2003. They were less than those for the total group except for Queensland in both years and South Australia in 2003 and there were reductions in each except the Northern Territory and multi-state with highest percentages in South Australia in both years, in New South Wales and the Australian Capital Territory in 2001 and also multi-state and Queensland in 2003. The proportions of those aged 25-29 years also declined from almost 28% in 2001 to over 23% in 2003. These were at or slightly above national figures for the total group. In the states and territories, the range was from over 12% in the Northern Territory to over 35% in New South Wales in 2001 and from just under 16% in Victoria to just above 30% in New South Wales in 2003. Only in Queensland and Tasmania in 2001 and Victoria, Queensland, South Australia and multi-state in 2003 were percentages in this age group less than those for the youngest group. Nationally and in many states and territories, they were at or above those for the total cohort. Tasmania, the Northern Territory and multi-state saw growth over the three years with highest proportions of enrolments being in New South Wales and the Australian Capital Territory in both years and also in Victoria in 2001 and the Northern Territory in 2003.

Education was the third most popular field for both of the younger groups. For those aged less than 25 years, proportions were lower than for the total cohort and increased marginally from just under 12% to just above this figure in 2003. Among the states and territories, four had proportions below 10% in 2001 while in 2003, two were in this category. Of those above this, the range was from just above 12% in New South Wales to over 15% in the Northern Territory and almost 33% in multi-state in 2001 and from 12% in South Australia to almost 16% in the Northern Territory and just over 25% in multi-state in 2003. In a number proportions were less than for the total cohort and in all, growth occurred (multi-state declined) with highest proportions in each year being multi-state and then the Northern Territory, Queensland and Western Australia. Percentages for those aged 25-29 years group exceeded those for the youngest age group in both years and increased to almost 16% from 12% nationally. In relation to the total group, they were just below in 2001 and just above in 2003. For the states and territories, in 2001 percentages for most were above those for the youngest age group and this was the case for all in 2003. Compared with the total group, in 2001 proportions were less except for New South Wales, Queensland, the Australian Capital Territory and multi-state and in 2003, except for New South Wales, Western Australia, Tasmania, the Australian Capital Territory and multi-state. All had increases over the period with highest proportions being in multi-state, the Northern Territory , Queensland and New South Wales in 2001 and multi-state, the Australian Capital Territory, Tasmania and the Northern Territory in 2003.

The field of health was popular with those aged less than 25 years in 2001 and also reasonably popular with this group in 2003, though not as attractive as information technology in that year.

Proportions declined from 9% to over 8% in 2003, both of which were below national percentages for the total cohort with complete or incomplete TAFE qualifications. In states and territories, except for Victoria, Queensland, Tasmania and the Australian Capital Territory, they were above 10% in 2001, ranging from 10% in New South Wales to almost 16% in the Northern Territory and over 20% in multi-state. In contrast, in 2003, most were below 10%. Only in South Australia and multi-state was this exceeded. In New South Wales and the Australian Capital Territory in 2001 and in no state or territory in 2003 did percentages in this age cohort exceed those for the total cohort. In many cases, there were declines over the period with this being large in the Northern Territory and highest proportions were in multi-state, the Northern Territory and South Australia in both years and also in Western Australia in 2001 and New South Wales in 2003. The percentage of those aged 25-29 years increased from almost 9% to almost 11% in 2003 with these being below those for the total cohort. In states and territories, in a number of cases percentages were under 10% in 2001 but with almost 30% in the Northern Territory and almost 25% in multi state standing out from others. South Australia, with just over 15% also was exceptional. In 2003, only Tasmania, Victoria and the Australian Capital Territory had less than 10%, with others being between 10% and 20%. In both years, proportions exceeded those for the youngest group and were lower than those for the total cohort in a number of states and territories. Most had small increases with highest proportions being in multi-state, the Northern Territory, South Australia and Western Australia in 2001 and 2003 and also Queensland in 2003.

Hence among those domestic undergraduate students with complete or incomplete TAFE qualifications, over the period 1993 to 2003, business, arts and education fields were most attractive to the younger students with large proportions of each group being enrolled in the first two of these fields. In the period prior to the change of classification, science was also attractive and after the change, health was similarly appealing. The popularity of these fields was also reflected by that for the total age group with complete or incomplete TAFE qualifications. This situation was also generally reflected in the states and territories.

Indigenous students

Indigenous domestic undergraduate students with complete or incomplete TAFE qualifications made up low proportions of the domestic undergraduates with complete or incomplete TAFE qualifications in the three age cohorts. Table 27 shows Indigenous students as a proportion of those with complete or incomplete TAFE qualifications in these age groups.

Table 27: Indigenous domestic undergraduate students with complete or incomplete TAFE qualifications as a proportion of domestic undergraduate students with complete or incomplete TAFE qualifications.

Age	All years (%)	All years (%)	All years (%)	<25 years (%)	<25 years (%)	<25 years (%)	25-29 years (%)	25-29 years (%)	25-29 years (%)
State/year	1993	1996	2003	1993	1996	2003	1993	1996	2003
NSW	2.5	2.0	1.8	1.9	1.4	1.3	2.6	2.0	2.1
Vic	0.7	0.6	1.1	0.5	0.3	0.7	0.5	0.7	1.3
Qld	2.2	1.4	1.9	1.9	0.9	1.6	2.2	2.2	1.9
SA	3.2	1.7	2.0	2.9	1.3	1.1	3.2	1.7	2.4
WA	2.9	3.0	2.7	1.4	1.7	1.3	1.4	2.9	3.3
Tas	3.8	3.3	1.6	3.3	2.4	2.0	2.5	4.7	1.4
NT	3.4	6.4	9.0	2.6	8.7	6.7	0	5.6	1.9
ACT	1.0	1.4	1.3	1.7	1.5	1.5	0	1.0	0.6
Multi	9.8	1.8	6.5	3.2	0	4.6	11.8	0	5.0
Total	2.2	1.7	1.9	1.6	1.1	1.3	2.0	1.8	2.0

Indigenous students among the total age cohort with complete or incomplete TAFE qualifications formed around 2% in each of the three years nationally, a proportion reflected by those aged 25-29 years. However, the youngest age cohort, made up consistently lower proportions of around 1%. For this group there were relatively larger percentages in Tasmania, South Australia, the Northern Territory and multi-state in 1993, in Tasmania and the Northern Territory in 1996 and this latter state and multi-state in 2003. For the group aged 25-29 years, there were relatively larger proportions in South Australia and multi-state in 1993, Tasmania and the Northern Territory in 1996 and Western Australia and multi-state in 2003. However, in a number of these cases, numbers were low, often being below ten. In each of the age cohorts, percentages declined nationally between 1993 and 1996, but then increased again to 2003. Among the states and territories, the two younger age groups tended to form lower proportions of the relevant age cohorts compared with the totals.

Students with a disability

Domestic undergraduate students with complete or incomplete TAFE qualifications and who had a disability comprised relatively low proportions of the three age cohorts. Table 28 shows data for 1996 and 2003 (disability data were not available for 1993)

Table 28: Domestic undergraduate students with complete or incomplete TAFE qualifications and with a disability as a proportion of domestic undergraduate students with complete or incomplete TAFE qualifications.

Age	All years (%)	All years (%)	<25 years (%)	<25 years (%)	25-29 years (%)	25-29 years (%)
State/year	1996	2003	1996	2003	1996	2003
NSW	2.9	4.6	1.9	3.5	2.5	3.8
Vic	2.7	3.4	2.0	2.5	2.5	3.6
Qld	2.5	4.9	1.6	2.7	2.3	4.8
SA	4.9	5.8	2.9	3.3	5.0	5.1
WA	1.4	2.9	1.1	1.8	1.6	3.2
Tas	0.2	5.3	0	4.5	0	0.7
NT	4.5	4.9	1.0	5.9	0	1.9
ACT	1.6	6.1	0.6	3.0	3.4	8.1
Multi	3.1	6.1	3.8	2.8	0	6.9
Total	2.7	4.5	1.8	2.9	2.5	4.1

Over the eight year period, the proportions of domestic undergraduate students with complete or incomplete TAFE qualifications and with a disability have increased for each of the three age cohorts. This has also been the case in each state and territory (there was a decline for those aged less than 25 years in multi-state). Nationally percentages of those with a disability from the two younger age groups were less than those for the overall group in both 1996 and 2003. This was also generally the case for states and territories. Only for multi-state in 1996 and the Northern Territory in 2003 for those aged less than 25 years, and for South Australia, Western Australia and the Australian Capital Territory in 1996 and for Victoria, Western Australia, the Australian Capital Territory and multi-state in 2003 for those aged 25-29 years were proportions higher than for the total age cohort. The youngest age cohort made up relatively larger percentages in South Australia and multi-state in both 1996 and 2003, and also in New South Wales, Tasmania, the Northern Territory and the Australian Capital Territory in 2003. Meanwhile for those aged 25-29 years, this was so for South Australia and the Australian Capital Territory in both years, and for New South Wales, Victoria, Queensland, Western Australia and multi-state in 2003.

Language spoken at home

The majority of domestic undergraduate students with complete or incomplete TAFE qualifications indicated that the language spoken at their home was English (Table 29).

Table 29: Domestic undergraduate students with complete or incomplete TAFE qualifications and with English spoken at home as a proportion of domestic undergraduate students with complete or incomplete TAFE qualifications.

Age	All years (%)	All years (%)	All years (%)	<25 years (%)	<25 years (%)	<25 years (%)	25-29 years (%)	25-29 years (%)	25-29 years (%)
State/year	1993	1996	2003	1993	1996	2003	1993	1996	2003
NSW	84.0	82.7	82.0	81.1	76.0	75.5	80.9	83.9	85.6
Vic	77.6	76.7	81.0	74.1	71.5	79.6	77.4	79.5	83.1
Qld	92.8	92.1	92.1	92.0	90.9	90.8	91.5	94.7	93.7
SA	91.8	92.9	89.9	92.0	92.1	87.9	92.7	86.1	90.8
WA	92.3	89.6	91.5	90.8	86.7	89.4	92.3	92.1	95.1
Tas	97.4	94.7	94.9	97.3	95.1	95.5	100.0	96.3	92.6
NT	88.0	89.1	95.4	85.7	86.4	95.6	94.4	90.1	93.4
ACT	87.2	87.0	87.5	85.8	84.2	87.3	84.3	88.7	91.9
Multi	83.7	79.9	83.1	84.9	77.6	82.5	88.2	81.8	84.2
Total	86.0	85.0	86.1	83.7	81.0	83.1	84.8	86.3	88.7

For those with complete or incomplete TAFE qualifications, proportions of the youngest age group in states and territories ranged from around 70% to almost 100% over the period while for the 25-29 year group, these were from around 75% to 100%. They were above 80% in most states and territories in each of the three years and were also consistently above 90% in Queensland and Tasmania, while those for Victoria tended to be lowest at between 70% and over 80%. Nationally, the proportions of those aged less than 25 years were over 80% between 1993 and 2003, but in each of the years, were less than those for the total cohort and also for the 25-29 year age group. Over the period, for this latter group there was an increase to almost 90%. In 1993 in most states and territories, the proportions of the two younger age groups were less than those for the total group and while in 1996 and 2003 this held for those aged less than 25 years, in almost all states and territories percentages for the 25-29 year age group exceeded percentages for the total cohort. Proportions of those aged less than 25 years declined in most states and territories and nationally between 1993 and 2003, while between 1996 and 2003, most registered increases. Change for those aged 25-29 years was similar to this although national proportions increased over each period.

Country of birth

Most domestic undergraduate students with complete or incomplete TAFE qualifications were born in Australia as shown in table 30.

Table 30: Domestic undergraduate students with complete or incomplete TAFE qualifications who were born in Australia as a proportion of domestic undergraduate students with complete or incomplete TAFE qualifications.

Age	All years (%)	All years (%)	All years (%)	<25 years (%)	<25 years (%)	<25 years (%)	25-29 years (%)	25-29 years (%)	25-29 years (%)
State/year	1993	1996	2003	1993	1996	2003	1993	1996	2003
NSW	76.2	75.1	77.4	81.0	78.2	78.8	71.8	74.1	82.3
Vic	73.5	75.6	78.2	77.9	80.9	81.2	71.7	73.4	78.9
Qld	80.8	79.7	82.0	82.8	82.6	84.7	79.4	83.0	85.2
SA	78.1	78.7	81.4	90.2	88.8	91.2	78.3	77.7	85.8
WA	67.7	68.8	74.0	75.5	73.8	77.6	62.5	71.5	78.7
Tas	86.4	83.3	85.0	92.0	86.6	91.4	91.3	89.7	93.9
NT	76.7	80.9	84.0	83.1	88.3	88.1	74.1	80.3	82.1
ACT	76.7	78.8	82.5	83.1	81.7	85.0	73.9	78.9	87.3
Multi	78.6	78.4	79.5	86.0	83.1	84.0	94.1	65.9	78.2
Total	76.0	76.1	79.0	81.1	80.4	81.9	73.4	76.1	82.7

Nationally, proportions of those aged less than 25 years who were born in Australia were consistently above 80% in the three years and were greater than those for the total group and those aged 25-29 years except in 2003 for this latter group when there was a marginal difference. In most states and territories in the three years, percentages of the youngest age cohort exceeded 80% while only in 2003 for those aged 25-29 years was this the case. For those aged less than 25 years in many there were increases between 1993 and 2003 and also between 1996 and 2003, while for those aged 25-29, there were increases in all and nationally. In all and nationally also, the proportions of those aged less than 25 years exceeded those for the total age group while for those aged 25-29 years, in 1993, they formed lower proportions compared with the total group in most, a profile that gradually changed in 1996 until in 2003, they were higher than the total group in a majority of cases. In South Australia, Tasmania and the Northern Territory, percentages of those aged less than 25 years were consistently high while those for Western Australia were lowest in each of the three years, but still around 75%. Among the next youngest group, proportions in Tasmania were high while those in Western Australia tended to be lowest.

Geographic distribution of home address

Grouping of location of home addresses of domestic undergraduate students into broad categories as was done by NCVER for VET statistics could not be provided, however data indicating which students had rural addresses was available for some years, but not 1993 or 1996. Table 31 shows the distribution of home addresses of those domestic undergraduate students who had a permanent rural home address.

Table 31: Domestic undergraduate students with complete or incomplete TAFE qualifications with home addresses classified as rural as a proportion of domestic undergraduate students with complete or incomplete TAFE qualifications.

Age	All years (%)	All years (%)	<25 years (%)	<25 years (%)	25-29 years (%)	25-29 years (%)
State/year	**2000**	**2003**	**2000**	**2003**	**2000**	**2003**
NSW	22.3	24.9	20.1	18.6	19.7	22.7
Vic	20.1	17.6	19.3	15.5	15.7	14.1
Qld	25.3	25.2	21.4	21.3	22.9	24.1
SA	11.0	12.5	9.0	10.2	9.3	8.8
WA	8.3	11.2	5.2	9.4	5.8	10.1
Tas	46.0	43.4	40.0	39.2	37.6	39.2
NT	3.6	10.9	4.7	8.9	0	9.4
ACT	9.3	8.6	12.3	9.0	5.8	9.2
Multi	9.1	7.2	8.0	5.2	1.3	6.9
Total	20.2	21.0	17.9	16.8	17.4	19.1

The proportion of domestic undergraduate students with complete or incomplete TAFE qualifications with permanent rural home addresses and aged less than 25 years was between 17% and 18% while that for those aged 25-29 years was between 17% and 19%. For both groups, proportions in both years were less than those for the total group nationally while for the 25-29 year age group they were greater than those for the youngest age cohort. Among this latter group, in most states and territories and nationally, there were decreases, while among those aged 25-29 years, the reverse held. In most states and territories proportions of the youngest age group were less than those for the total group, while for the next youngest group, this held in 2003, but in 2000 were less in all and nationally. For both age groups, the proportions in Tasmania were high, while those in the Northern Territory were low.

Summary

Among domestic VET vocational students with higher education achievement there was a marginal reduction in numbers between 1996 and 2003, although an increase between 1997 and 2003. For the younger groups, ie those aged less than 25 years and those aged 25-29, there was also a decline between 1996 and 2003 and for the former group, a decline between 1997 and 2003, but for the latter group, an increase. The number of the youngest group with higher education achievement as a proportion of all those aged less than 25 years has been steady at around 2% since 2001, while for the next youngest group with higher education achievement this has been steady at around 10% since 1998.

Females have dominated the student profile and increased this dominance over the years. Of the total age cohort with higher education achievement, the percentage of females has increased from around 50% in 1996 to 57% in 2003. In the youngest group, the proportion has increased by a similar amount from 50% in 1996, while that for those aged 25-29 years has grown from just under 50% to almost 60% over the period. These increases for the two younger age groups have been reflected in states and territories (except for South Australia for those aged less than 25 years). Generally, the proportion aged 25-29 years has exceeded that for the youngest age group in most states and territories over the period. In contrast to females, males have tended to make up less than 50% of the relevant age cohorts and have declined over the eight year period.

Between 1996 and 2001 when field of study classification changed to field of education, for the two young groups, business, economics and administration, arts, humanities and social sciences and the engineering and surveying fields appealed. Health and community services was attractive

to the youngest group at both the beginning and end of the eight years period and to those aged 25-29 years in 2001. Services, hospitality and transportation was also popular with the youngest group in both 1996 and 2001. Although the business area was most appealing, proportions of the two younger groups declined nationally. In most states and territories proportions fell to around 20%. In contrast to business, percentages of both age groups in the arts area increased nationally and in most states and territories over the period while in engineering, they tended to fall. The health and community services field and the services, transportation and hospitality field grew for both those aged less than 25 years and those aged 25-29 years.

Following the change to field of education classification, in 2002 and 2003, management and commerce, society and culture and engineering and related technologies appealed to both those aged less than 25 years and to those aged 25-29 years. In broad terms, these are similar areas to those which were particularly popular prior to 2002. The food, hospitality and personal services field and the creative arts field were popular with the youngest group while education was similarly appealing to those aged 25-29 years. Proportions of the two younger groups in the management and commerce field in most states and territories were above 20% and declined across the two years. For society and culture, there was growth for both, while in engineering and related technologies, proportions grew across states and territories for the youngest group, but declined for those aged 25-29 years. For those aged less than 25 years there was slight growth in creative arts, but a drop in food hospitality and personal services areas, while in education, there was an increase for those aged 25-29 years.

Around 1% of both younger age groups were Indigenous, with the proportion in the Northern Territory being reasonably high. For those with a disability, although proportions of the two younger groups in most states and territories tended to be lower than those for the overall cohort of domestic VET vocational students with higher education achievement, there were increases for both age groups across the period. Almost three quarters of those aged less than 25 years and 70% of those aged 25-29 years indicated that English was spoken at home. For the youngest cohort, in most states and territories in 1996 and in all in 2003, proportions were greater than for the total group while this was the case in half in both years for those aged 25-29 years. For those who were born in Australia, between 1996 and 2003, nationally, there was a decline from 80% to 75% for the youngest group and from 68% to 64% for those aged 25-29 years. This reduction was reflected in most states and territories, but the proportions of these two younger groups were greater than those for the total group in both 1996 and 2003. Over three quarters of the two younger groups had permanent home addresses in capital city or other metropolitan areas with proportions having declined between 1996 and 2003. In contrast there were increases in those with rural home addresses (comprising around one fifth) and for those with remote home addresses. Most of each of the two younger cohorts were in some form of employment, be this full time or part time. Those aged 25-29 years had consistently higher proportions in full time employment than the youngest group with an increase for the latter group and a decrease for the former group. Part time employment percentages grew for both age groups while those unemployed full time or not in the labour force declined.

The proportions of the total domestic undergraduate cohort with complete or incomplete TAFE qualifications and the two younger age groups (drawn largely from the commencing population) have increased between 1993, 1996 and 2003. Females in the two younger groups have dominated nationally and in most states and territories, except in 1993 for those aged less than 25 years. This dominance has tended to increase. Over the period, the proportion of females in the younger groups tended to be lower than those for the total cohort nationally and in the states and territories. The proportion of males in the younger age groups has been declining and has been less than 50%.

For the two young age cohorts, the most popular fields of study in 1993, 1996 and 2000 when classifications changed have been business, administration and economics, arts, humanities and social sciences, science and education. Nationally, percentages in the most attractive field of

business have declined for the youngest group to over 25% and for the next youngest group to over 20%. The arts area has seen growth for the youngest age group to almost 25%, while that for those aged 25-29 years has fluctuated but at the beginning and end of the eight year period has been around 22%. Proportions for science have been relatively stable while for both groups those in education have increased. Among the states and territories, proportions in business tended to decline for both young age groups, but still remained relatively high. In the arts field, for both age groups there tended to be over 20% enrolled with a number of states and territories registering increases. Such growth in several states and territories also occurred in science and education.

The most popular fields of education in 2001 and 2003 for the younger groups were management and commerce, society and culture, education and health, although for the youngest group, information technology was more attractive than health in 2003. Nationally, percentages in the management area were above 25% for the youngest group and grew while those for students aged 25-29 years declined slightly but was still over 20% in 2003. In society and culture, for both age groups they were high with those for the youngest group declining to just below 20% and those for the next youngest group to under 25%. For both groups, education had increases while health declined for the youngest group and increased for those aged 25-29 years. The national movement in the fields was reflected in the states and territories over the period.

The proportion of Indigenous students among the youngest group was around 1.5% although it declined slightly over the period. For those aged 25-29 years, this was reasonably stable at around 2%. These two younger cohorts also tended to form lower proportions of the respective age cohorts than the total cohort and in most states and territories they declined. Among those with a disability, the younger age groups tended to form lower proportions than the total group and over the period these increased with this being reflected among the states and territories. A strong majority of both age cohorts indicated that English was the language spoken at home with the range in states and territories being from over 70% to 100%. A large majority were born in Australia with percentages in states and territories ranging from over 70% to around 95%. Approximately 20% of the overall group said their permanent home address was rural. This was above those for the two younger groups where there was a small decline to almost 17% for the youngest group and increase to 19% for those aged 25-29 years. And for these groups, there were relatively high percentages with such addresses in Tasmania, Queensland and New South Wales.

While direct comparisons between the profile of those domestic VET vocational students with higher education achievement and those domestic undergraduate students with complete or incomplete TAFE qualifications have not been made for reasons outlined earlier, there are however some interesting similarities and differences which have emerged.

For young domestic VET vocational students with higher education achievement (drawn from the total VET vocational student population), there were reductions in numbers over the period 1996 – 2003 and females were dominant with this dominance increasing. The business, arts, engineering and health areas of study were particularly attractive to 2001 while in subsequent years, the management, society and culture and engineering and related technologies fields appealed. Small proportions of Indigenous students and those with a disability were in the age cohorts. A large majority of students were born in Australia and came from homes where English was spoken. Most also had city or metropolitan permanent home addresses with around one fifth having rural addresses. Most also were in some form of employment while studying.

Among young domestic undergraduate student groups with complete or incomplete TAFE qualifications (drawn largely from commencing student population), numbers grew from 1993 and females dominated with such domination growing. Business, arts, education and science areas of study to 2000, and then management, society and culture, education and health areas from 2001 were most attractive. Small proportions of Indigenous students and those with a

disability were in the age cohorts. Overwhelming majorities were born in Australia and came from homes where English was spoken and around one fifth had rural home addresses.

Appendix D: References

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