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between

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and training and higher education

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Publisher's note

Additional information relating to this research is available in *Student traffic: Two-way movement between vocational education and training and higher education—Support document*. It can be accessed from NCVER's website <<http://www.ncver.edu.au>>.

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Key messages

- ✧ **Student movement within and between the tertiary education sectors—vocational education and training (VET) and higher education—is growing and complex.**

Intersectoral and intrasectoral movement of tertiary students is significant. The flow from higher education to vocational education and training is estimated to be three times greater, nationally and in South Australia, than the flow from VET to higher education, which has been declining over time. Student traffic is a complex phenomenon, involving students with backgrounds in multiple education sectors, various combinations of complete and incomplete qualifications, and some concurrent enrolment in the two sectors.
- ✧ **Student motivation in both sectors is similar.**

Students in both the higher education and VET sectors responded similarly to questions about reasons for undertaking further study, both emphasising employment prospects and personal development. Thus, greater recognition needs to be given to the different, but increasingly complementary roles that higher education and vocational education and training play.
- ✧ **The transition from the higher education to the VET sector is smoother than the reverse.**

The majority of tertiary students moving from one sector to another find the transition easy, with one exception. Both sets of students experience difficulty in making changes in their life so that they have enough time to study. Transition to higher education poses greater difficulties (particularly relating to financial issues) than transition to the VET sector, largely because those moving to VET tend to be older, more financially secure, more experienced in the workforce and more confident.

Executive summary

In a society committed to lifelong learning, and with an economy requiring a knowledgeable, skilled, flexible and adaptable labour force, it is essential that there are clear and easy pathways between the vocational education and training (VET) and higher education sectors. Such intersectoral movement is important for reasons of equity and efficiency. The Australian Government through the Department of Education, Science and Training has argued for the strengthening of intersectoral links and for the development of a national system underpinning educational options. The purpose of this study, therefore, was to investigate the extent and nature of the two-way traffic of students between VET and higher education institutions.

The study utilised three different, but complementary sources of information. A comprehensive review of the literature identified previous research and highlighted the key issues. Secondly, detailed analyses of existing data from the National Centre for Vocational Education Research (NCVER) and the Department of Education, Science and Training established the statistical background. Data were examined on students with higher education achievement who had moved to the VET sector over the years 1997 to 2002, and students with VET experience commencing in the higher education sector over the same period (in both cases, excluding fee-paying overseas students). Thirdly, a questionnaire survey was undertaken of all undergraduate students who commenced study in 2003 at all technical and further education (TAFE) institutes, the three universities and a sample of private VET providers in South Australia, in order to obtain samples of commencing students who had experience in the other sector.

The key issues identified for investigation included the following:

- ✧ What is the scope and nature of the student two-way movement between VET and higher education institutions?
- ✧ What opportunities are students seeking in this cross-sectoral movement and how do they express these preferences?
- ✧ To what extent is there a gap between these opportunities and what is promoted?
- ✧ Are there particular groups of students who access, and benefit from, particular forms of cross-sectoral movement?
- ✧ Are there barriers that hinder or prevent students from accessing these education and training opportunities, and, if so, how can these barriers be addressed?

In interpreting the findings, a major limitation on the survey component of this study was the low response rate (556 students, estimated to be 15% of the VET to university and 7% of university to VET commencers), largely resulting from difficulties encountered in undertaking the online survey and in using the incomplete database on TAFE students. Another was the restriction of this survey to one state. Nevertheless, the samples were generally representative of their respective state populations in terms of gender, age and field of study, and the findings from all three sources were relatively consistent. This serves to increase confidence in the robustness of the information and to reinforce the main conclusions.

There was a high degree of consistency in the findings from the three sources of information. It is evident that, between 1997 and 2002, Australia has witnessed considerable growth in movement from the higher education sector to the VET sector, both nationally and in South Australia, but a

decline in movement from the opposite direction. For those moving in either direction, females comprised the greater proportion. For almost all fields of education in each year, the majority of the VET cohort was in the 30+ age group, while the majority group of students in the higher education cohort was students aged less than 30 years.

There were similarities between the destinations of the annual cohorts moving to the higher education sector and those moving to VET. For both groups, nationally and in South Australia, business-related studies and nationally, arts-related studies were popular. Science studies were also relatively appealing. Health and education tend to have been more popular destinations for those moving to higher education than for those moving to VET. For females, in both VET and in the higher education sectors in South Australia and nationally, arts, business and education were fields that consistently attracted large proportions of enrolments, while for males, business, science and engineering and related studies were popular for both groups. There is a dominance of business fields as destinations for those moving in either direction.

The study's sources demonstrate that the higher-education-to-VET traffic is characterised by females, mature-aged students in part-time study in the VET sector, where the move is often to a different field of education (such as moving from an education field to a business field). By contrast, the VET-to-higher-education traffic is characterised by younger students studying full-time, where the move is frequently to the same or a similar field of education (such as moving from marketing to management within the business field). For both groups of students, business studies areas are popular destinations, with students frequently moving for vocational reasons, although personal interest is also important.

The study highlights the *complexity* in movement between and within these two educational sectors. It also pinpoints some *notable* differences between the commencing university and VET student cohorts.

The survey indicates that those students going from VET to higher education generally appeared not to have lengthy delays before movement, compared with those moving in the reverse direction. This is consistent with other findings in the literature. Notably, however, it appears that a greater proportion of students commencing VET were either concurrently enrolled in higher education and VET in 2003, or had studied at university in 2003 and decided to discontinue these studies and move immediately to VET.

Sixty per cent of the university to VET commencers reported that they had *completed* their higher education course, compared with 80% of the VET to university commencers who had completed their VET course. Also, those moving from VET to higher education are more likely to have completed their most recent VET course closer to the time of moving than those taking the opposite path. These outcomes support findings in the literature and suggest that, among those with completed awards/courses, students moving from VET to higher education tend to do this in a more planned way, without a substantial time delay compared with those moving in the reverse direction.

The survey data show considerable multiple intersectoral and intrasectoral movements among these students. In the case of university to VET commencers, 25% had two intersectoral moves, while 51% had between three and eight inter- *and* intrasectoral moves. With VET to university commencers, 17% had two or more intersectoral moves (including 4% who had between three and four moves), while 49% had between three and eight inter- *and* intrasectoral moves. All of these findings reinforce the complex nature of movement between and within sectors.

In their current studies, the VET to university commencers were concentrated in fewer fields of study, but again, with both groups, enrolments in business, arts and health studies were common. The VET to higher education commencers tended to be studying full-time, while the university to VET commencers were part-time. Twice as many VET to higher education as higher education to VET commencers gained admission on the basis of their studies in the previous sector, and applied for credit in their current course, and three times as many were successful in receiving half or more

of their current course in credit, a reflection of greater numbers of VET to university commencers progressing to similar courses as their previous VET studies.

There were statistically significant differences between the two groups of students on 13 of the 19 reasons for undertaking study. The key motivation for both groups in undertaking further study was to improve employment prospects. Generally, the majority of VET to university students were studying in the same or a similar field of education to retrain for a different career, whereas the university to VET students favoured studying in a different field of education to improve prospects in their present career. This is a reflection of the VET commencers being older, more financially secure and having further study motivations that were often employment-driven. There was evidence that the career planning process undertaken by both groups of students was individualistic, independent and calculated.

The other key differences in motivation related to getting a broad education and a prestigious qualification, improving English skills, pleasing family, and studying because they were advised to by someone they respected, and because they could obtain some status for their previous qualification (all of which were significantly more highly reported by VET to university commencers), and studying because it was required by their employer (significantly more highly reported by university to VET commencers). Despite these differences, it was notable that the top ten reasons for both sectors were the same (although with variations in ranking). Overall, this may reflect a converging of perception in regard to what can be gained from the sectors, both in terms of personal development and career outcomes.

The literature suggests that students moving intersectorally experience difficulties in the transition process, with such issues as inadequate, or indeed, inaccurate information on admission requirements and credit transfer policies and practices, difficulties with expectations, especially of degrees of responsibility for management of learning, different teaching styles, workloads and assessment, course content, content repetition, curricula underpinnings, interactions with staff, facilities and support mechanisms. This was supported only to a degree by the survey.

Most students in both sectors found the actual transition between sectors relatively easy, with the exception of 'making changes in your life so that you had enough time to study', which both sets of students found difficult. There were statistically significant differences between the two groups of students on nine of the 15 issues influencing their decision to undertake further study. Overall, the university to VET commencers found it easier than those going in the reverse direction. The main differences related to finance, meeting entry requirements, going through the application process, self-confidence, and obtaining advice from staff, with all of which the VET to university commencers had the most difficulty.

Three-quarters of the students were confident that their reasons for choosing the award program/course would be met. Nevertheless, the transition from one sector to the other, irrespective of direction of movement, was perceived as a quite different educational experience. The statistically significant differences between the two groups related to cost of studying, level of work in the course/award and class size. In these three aspects more VET to university commencers claimed differences than did those moving in the opposite direction. These data signpost particular areas with the potential to be stumbling blocks, leading to attrition if not carefully handled or negotiated.

Overall, despite the strong sense of difference between the sectors, the students did not appear overly concerned. Almost three-quarters in both sectors reported feeling 'fairly' or 'very' comfortable moving from one sector to the other. Evidence suggests that it is in the transition from the VET sector to the higher education sector where the greatest degree of discomfort occurs.

The context of this study is that the higher education and the vocational education and training sectors together form the Australian tertiary education sector, and are linked and complement one another, but are different in missions, structures and funding regimes. The research was carried out to improve general understanding of this very interesting phenomenon of two-way student movement and to assist policy-makers and institutional leaders with insights into how best to

position these sectors to the advantage of students with changing needs, expectations and desired educational pathways. Given the significant rise in numbers moving from higher education to VET, and that it is only relatively recently that this so-called 'reverse articulation' has been recognised, it was considered particularly timely to undertake this research.

The appendices referred to in this report are located in the support documents on the NCVET website at <<http://www.ncver.edu.au>>. They contain the full literature review, the two questionnaires for the commencing higher education and commencing VET samples, the profile of students moving in either direction, details of the survey methodology and further tables on the survey results.

Research purpose

The higher education sector and the vocational education and training (VET) sectors, while not distinct sectors are certainly different in many respects. They are different in the number of students, age profile of students, and coverage of fields of study and equity groups (Karmel & Nguyen 2003, p.12). However, the interface between these sectors, evident in the pathways and the seamlessness promoted over the past decade to students, and also in some instances of multi-sectoral tertiary institutions, has been growing. Consequently, they are 'not clearly distinct', since there are dual sector qualifications, cross-sectoral provisions and considerable numbers of people who have participated in both sectors (Karmel & Nguyen 2003, p.12). This is the result of a number of factors which, as well as the efficiencies generated through such cooperation, include the changing nature of work, the need for multi-skilling and the growing acknowledgement of the importance of learning throughout life. In a society committed to lifelong learning, and with an economy requiring a knowledgeable, skilled, flexible and adaptable labour force, it is essential that there be clear and easy pathways between the vocational education and training and higher education sectors (Department of Education, Science and Training 2002, Executive summary, p.3). People must have choices and be able to move between sectors.

In recent years, student 'traffic' between VET and other sectors has increased, not only with students from VET going on to university (the higher education sector) and being admitted on the basis of their VET studies, but also with university graduates going on to VET for the acquisition of, for example, industry-relevant skills. The Department of Education, Science and Training records that, in 2001, 7% (15 300 of 220 000) of commencing university undergraduate students were admitted to universities in Australia on the basis of prior complete or incomplete technical and further education (TAFE) studies. (Note that in Australia, TAFE does not equate with VET, but is a substantial proportion of the VET sector.) This figure was 3.9% in 1993. Conversely, in the same year, 4.8% (83 900) VET students had a degree or postgraduate diploma as their highest qualification prior to commencing their VET studies. This figure had grown from 3.4% in 1995 (Department of Education, Science and Training 2002, Executive summary, p.1). Karmel and Nguyen (2003, p.11) have also recently drawn attention to the growing proportion of people with a qualification from both sectors, particularly the increase in the proportion of VET-qualified persons who also have a degree.

It is only relatively recently that the so-called 'reverse articulation', that is, movement from higher education to vocational education and training, has been recognised. Haas (1999, p.10) comments that reverse articulation is a phenomenon which has grown without any perceived encouragement by governments, educational authorities or institutions. Demand has been a function of individual need. One-way models of student movement between sectors, leading only to university, are prevalent in the literature. Golding and Vallence (2000, pp.1–2) state that '[these] are not only simplistic, illusionary and inaccurate: they have been misleading, patronising and destabilising on TAFE from a student perspective', and claim that, in explaining student movement, a two-way movement model linked to the notion of lifelong learning is more useful than a one-way articulation and credit transfer model. It is indeed noteworthy that university to VET movement is greater than VET to university movement. It runs counter to public perception, despite the perceived 'lower' status of VET qualifications and the marked differences in teaching and learning

approaches. It is also significant that much of the informative research has been predominantly undertaken in multi-sectoral institutions (for example, Pitt 2001), which can be expected to have much to gain by promoting and facilitating two-way movement.

Eltis (2002) argues that more needs to be done to facilitate articulation across institutions/sectors and to promote a seamless set of learning opportunities. The Department of Education, Science and Training (2002) also concludes that the way forward is to strengthen intersectoral links, that there be 'clear and easy pathways between VET and higher education' and that 'the challenge is to develop in Australia a national system that underpins educational choice' (2002, Executive summary, p.3). Golding's (1999c) doctoral work suggested the need for the development of new two-way models of movement. Hence this research project was funded by the National Research and Evaluation Committee to explore two-way movement between the South Australian universities and VET institutions—not multi-sector entities.

This project, therefore, is designed specifically to gather data on the extent and nature of the two-way traffic of students between VET and universities. The findings will improve general understanding of this fascinating phenomenon and assist policy-makers and institutional leaders with insights into how best to position VET and its relationship with higher education to the advantage of students with changing needs, expectations and desired educational pathways.

Research questions

- 1 What is the scope and nature of the student two-way movement between VET and higher education institutions?
- 2 What opportunities are students seeking in this cross-sectoral movement and how do they express these preferences?
- 3 To what extent is there a gap between these opportunities and what is promoted?
- 4 Are there particular groups of students who access, and benefit from, particular forms of cross-sectoral movement?
- 5 Are there barriers that hinder or prevent students from accessing these education and training opportunities? If so, how can these barriers be addressed?
- 6 What are the implications of these findings for policy and practice?

Issues in the literature

The higher education sector—the sector which formerly comprised universities and colleges of advanced education, including institutes of technology and now largely comprises universities—and the vocational education and training sector together form the Australian tertiary education sector. Despite having different missions, structures and funding regimes, the sectors complement each other. Higher education has, as its primary focus, the pursuit, preservation and transmission of knowledge, while VET has its primary focus on education and training for work. However, higher education also has a concern with employment-related learning outcomes, while VET provides more generic skills within its vocationally oriented programs (Department of Education, Science and Training 2002, para 6). A summary of the main issues relating to student movement between these sectors is given in the following sections (the full literature review is in appendix A).

Background developments in collaborative arrangements

Since the 1980s collaboration between the higher education and the VET sectors has been growing (Burns 1997, p.4). Arrangements have paralleled those in the United States of America and have been on developing and implementing policy and mechanisms to facilitate smooth movement of

students between components of the tertiary education sector (Parkinson, Mitchell & McBeath 1986, p.10). Such a focus on articulation has also been of importance in many other countries (see for example, Haas 1999; Kintzer 1999; Scott 2001).

Stimulus for these intersectoral arrangements between Australian tertiary institutions in the early 1980s came from governments, government authorities such as the Commonwealth Tertiary Education Commission, and the institutions themselves (see for example, Parkinson 1985, pp.25, 61–9; Parkinson, Mitchell & McBeath 1986, pp.57–9; Ramsay et al. 1997, pp.23–4). However, at the time there was no coordinated national policy framework relating to inter-sector collaboration and cooperation. Rather, voluntarism prevailed at the local level.

In the late 1980s, the federal government initiated major reforms to higher education, including the creation of the Unified National System (UNS). One of the government's aims was to provide a national framework to enhance cooperation and collaboration between TAFE and higher education (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. However, the federal government's emphasis was on unidirectional movement to higher education. Movement in the reverse direction was not of central concern at the time. Nevertheless, its policies fostered greater intersectoral cooperation and collaboration, with implementation of these relationships in the 1990s being shaped by a range of critical environmental factors. These included globalisation; the growth of a knowledge-based economy and the centrality of knowledge to social and economic progress; rapid technological, social and economic changes; the demands for new and continuous skill development, upgrading and multi-skilling; efficiencies and market advantages generated by collaboration; and the growing trends for lifelong learning (Department of Education, Science and Training 2002, paras 14–19; Eltis 2002, pp.77, 80). These factors have impacted internationally, with a growing emphasis on lifelong learning (see for example OECD 1996; United Nations Educational, Scientific and Cultural Organization 1996).

Over the past two decades, considerable advances have been made in strengthening arrangements between the education sectors, particularly the VET and higher education sectors, and more recently, the secondary school sector which provides vocational courses at senior school level through VET in Schools programs (Kosmopoulis 2002, p.6). However, for much of the period, universities have dominated the debate over issues such as articulation and credit transfer.

Student traffic within the tertiary education sector

Consistent with the student traffic policy focus of the late 1980s and early 1990s generally, research has concentrated on movement from VET to higher education. Earlier studies included major national investigations in the mid-1980s by Parkinson and others (Parkinson 1985; Parkinson, Mitchell & McBeath 1986). Later studies by Lewis (1995), Hawke and Quirk (1996), and Cohen et al. (1997) examined admissions to university by VET applicants. Ramsay et al. (1997) researched linkages such as articulation, credit transfer and recognition of prior uncredentialed learning. McPhee (1998), Lewis (1992), Alba, Lewis and Dawes (1993) and Cameron (1999) monitored the performance of TAFE students in higher education.

However, during the 1990s, and particularly post-1992, researchers began investigating movement from higher education to VET, movement now referred to as 'reverse articulation' (Golding & Eedle 1993; Golding 1995b; Millican 1995; Werner 1998), although it was only in the latter years of the decade that such movement attracted the significant interest of national authorities such as the National Board of Employment, Education and Training and the Australian National Training Authority (ANTA) (Golding 1999b, p.8).

Researchers highlighted that reverse articulation was significant and intersectoral movement in the tertiary education sector, complex. A one-way inter-sector movement model focusing on VET-to-higher education traffic was deemed inadequate and not inclusive. A model embracing two-way

movement between the sectors better explained, not only the movement in either direction, but also its complexity.

Magnitude of movement between the VET and higher education sectors

Student traffic between the VET and higher education sectors has been significant for a number of years. Parkinson, Mitchell and McBeath (1986, p.11) reported that, in the period 1980–83, over 15 000 students with a prior TAFE qualification had entered higher education. Just over a decade later in 1995, 20 000 university students (of a total of 244 000 commencing students) with a TAFE award, such as a diploma or associate diploma, enrolled in Australian universities (Cohen et al. 1997, p.5). Similarly, internationally, such equivalent intersectoral movement, for example, in some American states such as Texas and California, is significant (Moodie 2003, pp.3–4).

Student traffic in the reverse direction has also been increasing—a feature of intersectoral movement internationally (OECD 1991, p.76). Golding and Eedle (1993) reported from research undertaken in Victoria that approximately a quarter of TAFE associate diploma and advanced certificate commencers in the period 1990 to 1992 had prior university experience (p.146). In Queensland research, Millican (1993, p.1) found that, in each of 1992 and 1993, around 10% of TAFE enrollees reported university as their highest prior level of study. Werner (1998, p.8), in an analysis of national data noted that, in 1992, 7.3% and, in 1993, 6.5% of TAFE students had a university background.

Golding (1995b) concluded from an analysis of Victorian data from 1990 to 1993 that, although there were some concerns about data quality, it was likely that there were eight times as many TAFE enrollees with university experience as there were university enrollees with TAFE experience. Subsequently, Golding and Vallenge (2000, p.3) reported that, in the period 1991 to 1997, the proportion of VET commencing students with prior university completions was between 2.2% and 5.5%, that is, annually about 40 000 students in VET vocational programs held a degree. Furthermore, and although data on those students with incomplete higher education qualifications who shifted were not collected nationally, they concluded that a similar number of VET students would have held an incomplete university qualification. And given higher education statistics for 1995 above, such a claim if verified, would imply that a very significant number of TAFE students had a higher education background.

However, a cautionary note needs to be made about these data. Golding (1995b, 1998a), Fooks (1997), Pitt (2001) and Moodie (2003), for example, have raised questions on the comprehensiveness and quality of data from which conclusions can be drawn on the magnitude of traffic between sectors and the basis upon which students are admitted. Nevertheless, Teese and Polesel (1999) reviewed the national VET and higher education student information systems and, although raising a number of concerns, concluded that both these information systems could be used to track cross-sectoral movement in a general way.

Profile of students moving between sectors

Research reported by Golding (1995b), Millican (1995), Golding, Marginson and Pascoe (1996) and Werner (1998) showed that, although there is some variation in profiles, females tended to be dominant among students with a university background shifting to VET, a conclusion reached in the analysis of national data from 1997 to 2002 in this current study, and outlined later in this report. Furthermore, those moving in this direction tended to be in a mature-age group, with some variability between those with complete or incomplete higher education qualifications (that is, older people who had completed their university course and younger people who had not), and studying part-time. Those shifting from VET to university tended to be male, younger and more likely to be studying full-time. It also seems that, while there are numbers of students moving in either direction who had experienced recent periods of unemployment, significant numbers were either in part-time or full-time employment, with many employed on a full-time basis at the time of shifting.

Multiple tertiary education backgrounds of students moving intersectorally

Movement between the sectors is often delayed, particularly from university to VET (see for example, Golding 1995b, p.1; Werner 1998, p.33). Furthermore, multi-sectoral backgrounds are common among those shifting in either direction (Golding 1995b, p.2). A study conducted in the Australian Capital Territory in the early 1990s (Golding 1998b, p.8) and Golding's subsequent Victorian research, confirmed the significance of multiple-sectoral backgrounds among students who move. A number of students also have various combinations of complete and incomplete tertiary awards and some are enrolled concurrently in both sectors (Golding, Marginson & Pascoe 1996, pp.73, 76–7). The most recent experience of students shifting between sectors may not be movement to the other tertiary education sector. This may, in fact, be within the sector in which they are currently enrolled, and these factors contribute to the complex nature of movement within the tertiary education sector.

Field of study destinations of students moving intersectorally

The VET field of study destinations for university students often varies from that of their prior university study in contrast with that of VET students moving to university. Golding, Marginson and Pascoe (1996, p.77) reported that, of those moving from TAFE to university, 22% were enrolled in a completely different field of study at university, while for those moving in the reverse direction, 67% were enrolled in a completely different field of study. Werner (1998) confirmed this outcome when he noted that, of the students shifting from higher education, 57% of their TAFE enrolments in South Australia were in a field of study not at all similar to that of their highest university qualification (pp.37–8). Yet further evidence for this change in field of study destination was provided in a study conducted on data from the Australian Capital Territory in the early 1990s (Golding 1998b, p.8).

Golding (1995b) reported from his 1994 Victorian study and subsequently confirmed in research by Millican (1995) and Golding, Marginson and Pascoe (1996, p.20), that most students moving in either direction tended to enrol in business areas. Ramsay et al. (1997) confirmed the attractiveness of the business field for TAFE students moving on to study at the University of South Australia over the first half of the 1990s. Furthermore, Golding (1995b) reported that, for those students who had either a complete or an incomplete TAFE qualification, the main TAFE fields of study had included business. However, for university students with a complete qualification moving to TAFE, their main university fields of study were humanities and social sciences, education, engineering and science, while for those with an incomplete university qualification, the main university fields of study were business and engineering (p.20). Many of the students who move from TAFE to university make an early decision about shifting to the same or similar field (see, for example, Pitt 2001; Golding 1995b), while university students shifting to TAFE often make a later decision (Golding 1995b, p.8).

Hence the business field of study is an attractive destination for students, irrespective of the direction of movement. Furthermore, those going to university are much more likely to move to a field similar to their VET studies and to make an earlier decision on shifting than are those going in the reverse direction.

Reasons for movement between sectors

Golding (1995b) reported from his 1994 Victorian research that students shifting from university to TAFE were most likely to have moved to acquire specific vocational training, update existing practical skills, develop links with industry or to retrain for a new career. Those moving in the other direction did so to gain specific training, update existing practical skills, change direction or reduce the chance of being unemployed (p.6). Most of the students in both groups had chosen to undertake further studies to change direction (p.9). Millican (1995), in his Queensland study, confirmed that the main reason for students with a complete or incomplete university qualification enrolling in TAFE was to gain employment-related skills. Updating existing knowledge and skills

however, was also found to be important (pp.28–30). Research by Golding, Marginson and Pascoe (1996), Trembath, Robinson and Cropley (1996) and Werner (1998) further confirmed the vocational motivations of students in changing sectors, although the latter researcher also noted that personal interest was a significant factor for many. Walstab et al. (2001), in their Victorian study, supported the vocational focus of those shifting, particularly for those going to TAFE from university. Such a priority is similar to student motivations for initially choosing to study in VET or similar further education sectors in Australia (Maxwell, Cooper & Biggs 2000, p.x), Britain (Miller, Kellie & Acutt 2001, pp.216–17) and Scotland (Connelly & Halliday 2001, p.190). Furthermore, it is similar to reasons for moving intersectorally in some overseas countries. Trembath, Robinson and Cropley (1996) quoted an earlier study by Vaala (1993) on movement between four-year and two-year institutions in Alberta, Canada, in which the author found that a major reason for shifting related to efforts to improve future employment prospects (p.6). Hence, the vocational focus is dominant among reasons for intersectoral movement.

Transition issues

Much research into intersectoral movement both internationally and in Australia has focused on movement to university and has concentrated on articulation, credit transfer and experiences of students in the early part of their higher education studies (see for example Parkinson, Mitchell & McBeath 1986; Vaala 1993; Hawke & Quirk 1996; Ramsay et al. 1997; Kintzer 1999; Haas 1999; Scott 2001).

Provision of information relevant to the new sector

A key factor for students wishing to move from one sector to another is the ready availability of accurate and relevant information on entering and studying in the new sector. However, it is clear that such accurate information is often not provided. Parkinson, Mitchell and McBeath (1986, p.136), Alba, Lewis and Dawes (1993, p.14), Trembath, Robinson and Cropley (1996) quoting Ling and Devlin (1993) and Cohen et al. (1996, p.38) have all pointed to such inadequacies in relation to students with a TAFE background moving to higher education. However, there is a dearth of research into provision of information to university students wishing to go on to VET, although Conroy, Pearce and Murphy (2000) and Golding (1995b) have stressed the importance of better informing these students.

Credit transfer

Credit transfer, particularly between TAFE and higher education, has been the subject of much research and policy development over the past two decades. Arguments for improvements here have centred around equity, efficiency and, over more recent years, the need for multi-skilling associated with award restructuring. Burns (1997, p.16) noted that growing numbers of credit transfer arrangements were being put in place and there was favourable assessment of the way in which these were operating. However, she also noted that there were deficiencies in the dissemination of information on credit transfer, a key information issue noted above (p.22). Fooks (1997, p.2) agreed about progress, but noted that other countries such as Canada and the United States of America had made greater progress in developing solutions to issues of advanced standing in universities.

In research in New South Wales, Alba, Lewis and Dawes (1993) found that TAFE students seemed to have an inadequate understanding of university policies regarding credit transfer. They also reported that the amount of credit given for prior TAFE studies varied between universities (p.14). In contrast, in a Victorian study in 1994 and 1995, Trembath, Robinson and Cropley (1996) noted that TAFE students generally found it easy to get relevant information and most agreed that the articulation and credit transfer arrangements for their university course were appropriate (pp.19–20). Ramsay et al. (1997, pp.98–9) reported from their South Australian study that, while most TAFE students were satisfied with the credit transfer process, there were criticisms which included inconsistencies in the amount of credit granted, duplication of work required when credit was not granted and the provision of unclear and inconsistent information. Cohen et al. (1997,

p.xvii) indicated that students responding to their survey in their 1996 New South Wales investigation often raised the appropriateness of credit transfer arrangements as a concern.

From his 1994 Victorian research, Golding (1995b, p.19) found that, of those moving from TAFE to university, if credit was awarded, students received, on average, credit for 22% of the university program, while for those shifting in the reverse direction and who received credit, on average this was for 28% of the TAFE course. Subsequently, Golding, Marginson and Pascoe (1996, p.85) noted from further research undertaken in Victoria, that of the students moving from TAFE to university who were given credit, the mean amount was 28% of the university program while, for those going from university to TAFE and who received some credit, the mean was 20% of the TAFE course. These are slightly different from the outcomes in the earlier Golding study. Burns (1997) concluded from her review of research that advanced standing for up to a third of a degree was commonly credited to applicants going from TAFE to university (p.16), an outcome confirmed by Ramsay et al. (1997, p.59). Most credit given for TAFE studies by universities was for higher-level TAFE courses (Golding 1995b, p.19; Trembath, Robinson & Cropley 1996, p.21).

However, not all students apply for credit. For those moving in either direction, reasons include a realisation that none of their prior studies are relevant for credit, perhaps because of movement to a different field of study, or being prepared to repeat studies (Golding 1995b, p.19). Ramsay et al. (1997) confirmed this in relation to TAFE students moving to university who had not applied for credit (p.98). Further reasons for being prepared to repeat studies, particularly among VET students with a university background, could relate to the fact that there is often a delay in movement, and so students might find repetition of studies appropriate to refresh specific knowledge and skills. However, for students moving in either direction, credit transfer may simply not be seen as an important issue as Golding found from his research (Golding 1995b, pp.10, 19).

There are still issues surrounding the credit transfer process, although important advances have been made in the last decade and many applicants are satisfied with the process and outcomes.

The teaching and learning environment

Continuing efforts are made to smooth the passage between sectors. However, there are many challenges, with the teaching and learning environment in a new sector being of significance.

Parkinson, Mitchell and McBeath (1986) in their national research noted differences in teaching styles between the TAFE and higher education sectors, differences in content of courses (the more theoretical nature of university courses) and the greater responsibility for managing their own learning in universities. These factors were all seen to create difficulties for the students who move (p.138). Dickson (2000) reporting on a study undertaken in New South Wales agreed that these differences existed and also noted that the higher academic standards at university required repetition of some TAFE studies, and that differences in interactions with staff between the two sectors created difficulties (p.2). Trembath, Robinson and Cropley (1996, p.20) confirmed from their study of two multi-sectoral institutions in Victoria that, for most of those moving to university from TAFE, the university program was seen as more theoretical. They also noted that students reported that the workload was heavier (p.20), a difference raised by Golding (1995b, p.18) and Cameron, Kennedy and O'Brien (2000, p.36). From his 1994 Victorian study, Golding (1995b) indicated that many of the TAFE students going on to university found university studies to be more intellectually stimulating (pp.6, 18). However, the large impersonal nature of university classes, and some repetition caused concerns (p.18). Meanwhile for university students shifting to TAFE, lack of challenges and repetition of studies were included among concerns (p.18). Some of the outcomes from this research by Golding were similar to those identified by Millican (1995, p.31).

Conroy, Pearce and Murphy (2000, p.3) suggested that there was a major dysfunction between the theoretical and practical underpinnings of the university and TAFE curricula respectively. Moodie (2003) has confirmed these issues by comparing curriculum bases, arguing, for example, that the implementation of training packages with their industry relevant competencies in VET has inhibited systematic efforts to map curricula from VET to higher education. (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.) This emphasis on competencies rather than curriculum in VET is different from that in universities and 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.21–3).

Students moving between sectors, therefore, face numerous challenges in adapting to different teaching and learning environments.

Summary

Cooperation and collaboration between the vocational education and training and the higher education sectors have been evident over several decades. Initially much of this took place between technical and further education institutions and colleges of advanced education, and concentrated on articulation and credit transfer. Arrangements were agreed on an institution-to-institution basis and were of a voluntary nature. There was no coordinated national policy framework until the late 1980s when the federal government introduced its higher education reform package creating the Unified National System of higher education. Universities were then obliged to develop policies to facilitate movement from VET to the higher education sector. This resulted in their dominance over policy development and implementation in these relationships.

At the time of implementation of the reform package, movement from universities to VET was not of major interest to policy-makers. However, in the early 1990s, in a rapidly changing global environment and with a growing emphasis on lifelong learning, more attention began to be paid to movement in this direction, movement commonly referred to as reverse articulation. In addition, the complexity of enrolment in the tertiary sector, and the growing role of secondary schools in VET provision was more strongly acknowledged. It was thus believed that a two-way model of intersectoral movement might more adequately embrace the complexity of movement than a one-way 'upwards' model, providing a framework within which vertical, lateral, concurrent and multi-sectoral enrolment could be explained.

Researchers investigating student traffic between the VET and higher education sectors have noted that there are large numbers of commencing students in either sector, with backgrounds in the other sector or who have multi-sectoral backgrounds, or indeed who may be concurrently enrolled in both sectors. Women, mature-aged students in part-time study in the VET sector dominate university-to-VET traffic, while those moving from VET to university tend to be younger and studying full-time. Many shifting in either direction are employed at the time of enrolling. Movement from university to VET seems to be more commonly based on a decision made later in the student's university career and is often to a different field of education. Meanwhile, the decision on movement to university seems to be made earlier, and in a number of cases, before the student embarks on the VET study program. Such movement is frequently to the same or a similar field of education. For both groups of students, business studies areas are a popular destination, with students frequently moving for vocational reasons, although those relating to personal interest are also important.

Students shifting intersectorally often experience some difficulties with the process. The absence of adequate or indeed accurate information on admission requirements is evident in some cases and is of concern. Furthermore, expectations made of them, different teaching styles encountered, differences in workloads and assessment, differences in underpinnings of curricula, and differences in facilities and support mechanisms can create problems. And although there have been improvements in matters associated with articulation and credit transfer, the fact that work already completed in one sector often has to be repeated in the new sector raises concerns.

Seamless inter- and indeed intrasectoral pathways are increasingly being recognised as important in the context of global changes, including the need to make lifelong education accessible for all. Policy development in Australia is addressing this priority.

Methodology

Design of the study

Apart from an extensive content analysis of the literature, data for this study were obtained from two other main sources—Australian and South Australian extant data, and surveys of 2003 commencing students in the VET and higher education sectors in South Australia. Together, these three different sources were used to increase confidence in the robustness of the findings.

South Australian and national data on commencing VET vocational students with higher education achievement who had moved to the VET sector over the years 1997 to 2002, and commencing undergraduate students in the higher education sector over the same period and who had VET experience were obtained from the National Centre for Vocational Education Research (NCVER) and the Department of Education, Science and Training (DEST) national student statistical databases respectively. Full fee-paying overseas students were excluded. NCVER provided South Australian and national data on age, gender and field of study for the years 1997 to 2002 inclusive. Stream of study was sought for VET students but this was unavailable for the six-year period. The Department of Education, Science and Training provided South Australian and national data on age, gender, field of education and basis of admission for the period 1997 to 2002. While stringent data verification procedures are in place in relation to both these national statistical systems, as noted in the literature review there are some data quality issues which arise at times (Teese & Polesel 1999; Pitt 2001; Ramsay et al. 1997). As stated by Karmel and Nguyen (2003, p.2), the ‘statistical collections for both sectors are not comprehensive’. In particular, it is important to be aware that there are some inconsistencies in national reporting of the commencing course identifier for VET. However, the quality of data on both systems is entirely acceptable for this current analysis.

Following a preliminary reading of the relevant literature, a questionnaire was developed, compared with others used in similar studies, independently reviewed, and piloted. Between September and October 2003 it was sent to all students who had commenced study in 2003 at all South Australian TAFE institutes, the three universities and a sample of five private VET providers. As privacy legislations prevented access to students’ previous educational history, it was not possible to identify which students qualified for the survey. The questionnaire, therefore, had an initial question which filtered out those who were ‘eligible’ to complete the survey, namely, commencing VET vocational students with prior higher education experience (hereafter, called ‘VET commencers’) and commencing undergraduate university students with VET experience (hereafter called ‘university commencers’).

Permissions were obtained from all participating institutions for their students to be included in the survey. To comply with the policies and practices of the different participating organisations, a variety of survey mediums were used. The format of the questionnaire was adjusted to ensure consistency in data gathering between the various mediums. Follow-up was undertaken in all cases, either online or by post. Data from both the UniSA and TAFE online survey instruments were downloaded into Excel and transported into Statistical Package for the Social Sciences (SPSS) for analysis, while data from the paper questionnaires used with the other institutions were manually entered into SPSS.

Sample details

A total of 366 valid responses were obtained from the higher education sector and 190 valid responses from the VET sector (see appendix E for a full breakdown and explanation of the survey procedures). Analysis of estimated response rates for the two samples follows.

Sample of commencing university (with VET experience) students

The total number of 2003 commencing university students surveyed was 15 664. Not all were 'eligible' for inclusion in this project; that is, who had studied previously at a VET institution. An approximate total number of eligible students in South Australia in 2003 can be estimated by calculating the mean number recorded in Department of Education, Science and Training statistics over the past six years. The annual numbers fluctuated between 2140 and 2532, with the average being 2447.

The total number of completed responses obtained from the survey was 372 (of which six were ruled invalid). Therefore, the response rate of all completed responses was 372 from 2447, that is, 15.2%.

Sample of commencing VET (with HE achievement) students

Estimating a response rate for this sample was more difficult. The total number of 2003 TAFE commencing vocational students is estimated to be approximately 16 873 (4733 online, plus 12 140 not on TAFE SA's electronic database). The number of university to TAFE commencing students (with university achievement) surveyed was 4723 (4733 online minus 1224 whose electronic addresses failed, plus 1214 by post which was a 10% sample of all those without electronic addresses).

An approximate total number of students eligible for this project (that is, only those commencers with previous higher education experience) in South Australia in 2003 was estimated from NCVER statistics. The total numbers of such students has risen each year over the past six years (except in 2000), and so taking an average over this time would probably be misleading as it would actually be fewer than the most recently available two years (2001 and 2002). Instead, the 2003 figure was calculated by raising the 2002 figure by the same percentage increase as from 2001 to 2002. This gave an estimate for South Australia in 2003 of 6183—which would include both TAFE and private providers. An indicative figure for TAFE only may be 5000.

The total number of completed responses obtained from the TAFE survey was 326 (of which 140 were ruled invalid). Therefore the response rate of all completed responses was 326 from 5000, that is, 6.5%.

Representativeness of the samples

Both the commencing university (with VET experience) and commencing VET (with university experience) student samples from the survey can be compared with their approximately equivalent total groups of South Australian students with prior VET experience and higher education achievement respectively. This comparison is possible using three characteristics—gender, age group and field of study.

Sample of commencing university (with VET experience) students

The 2003 commencing university survey sample was broadly representative of the total South Australian university students with prior VET experience of 2002 (as obtained from the Department of Education, Science and Training) in terms of age and field of study. By age group, the survey sample was slightly under-represented in the under-20 year cohort and slightly over-represented in the 35 to 44-year cohort. By field of study, the survey sample was under-represented in education and society and culture. Gender was the main difference between the two groups, with the survey sample being considerably over-represented in females (survey 70.5%; South Australia total 60.5%).

Sample of commencing VET (with university achievement) students

The gender of the 2003 commencing VET survey sample, compared with the total South Australian VET students with prior university achievement of 2002 (as obtained from NCVER), was similarly over-represented in females (survey 65.3%; South Australian total 54.3%). By age group, the survey sample was over-represented in the less than 25-year-old cohorts (survey 22.6%; South Australian total 12.0%) and correspondingly under-represented in the 35 to 54-year brackets (survey 36.3%; South Australian total 49.2%). In terms of field of study (based on 2001 data which was the most recent available to the research team at the time of the survey), the survey sample was over-represented in business, administration and economics; arts, humanities and social sciences; and science, while being considerably under-represented in VET multi-field education, and to a lesser extent, in engineering and surveying; land and marine resources and animal husbandry and services; and hospitality and transportation.

Description of the samples

There was a higher proportion of females in the university group (71%) than in the VET group (65%). The university group was younger, with 35% under 25 years (cf. 21% VET) and only 9% 45 years or older (cf. 25% VET), had a lower percentage of Australian nationality (university 88%; VET 92%) and a higher proportion with a South Australian home address (university 97%; VET 89%). They were more recent school leavers with twice as many leaving in the last five years (university 27%; VET 13%) and twice as many had taken VET studies while at school (university 14%; VET 7%). In terms of employment, far fewer university students were full-time employed (university 16%; VET 55%), with twice the proportion not employed at all (university 35%; VET 18%). Accordingly, their equivalent full-time employment experience was considerably less: for almost half, this was five years or less (university 44%; VET 37%) and only one-tenth reported 20 years or more (university 10%; VET 23%).

Limitations

The major limiting factor with this study was the survey, in particular the low response rates, largely resulting from difficulties encountered in undertaking the online survey and in using the incomplete database on TAFE students. These and other difficulties are reported in detail in appendix E. Nevertheless, this study was designed to draw on three different sources of information—a comprehensive literature review, extant data on Australian and South Australian commencing students, and a survey of all commencing students in the VET and higher education sectors in South Australia. The findings from all three sources are notably consistent and serve to increase confidence in the robustness of the information and reinforce the key messages. Thus the low response rates are less of a problem than if only one source had been used.

The likely standard error for all cited percentages is of the order of 5% for the total sample and higher for the sub-groups.

A further restriction was the impact of institutional policies relating to privacy, particularly in relation to the surveying of students in one university and among private providers.

Another limitation on the study was the necessity, for reasons of time and cost, to restrict the focus to South Australia. Again, however, the findings support in large measure those derived from samples in other states.

What do the available statistics for Australia and South Australia indicate?

Commencing vocational education and training students with prior higher education achievement

The number of commencing VET students (excluding full fee-paying overseas students) with prior higher education achievement increased from 3840 in 1997 to 5299 in 2002 (by 38%) in South Australia, while nationally, the increase was from 57 330 in 1997 to 73 492 in 2002 (by 28.2%). These figures represent significant growth.

Gender and age group

In both South Australia and nationally, females comprised well over half of the enrolments each year. Furthermore, in most years, close to 30% of the commencing students were less than 30 years of age, while over 50% were in the 30 to 49-year age group. Hence in both South Australia and Australia, these students tended to be in the older age group.

Field of study destinations

In 1997 in South Australia, the most popular VET fields of study destinations were VET multi-field education; business, administration and economics; education; science; and health and community services. Nationally these were business, administration and economics; VET multi-field education; arts, humanities and social sciences; engineering and surveying; and science. In 2001 in South Australia the first two most popular fields were as for 1997, but with a reversal in appeal, followed by engineering and surveying; health and community services; and education, while for Australia, these were business administration and economics; arts humanities and social sciences; science; VET multi-field education; and education. In 2002 a change was made to field of education classifications and in that year, the most appealing fields were management and commerce; mixed field programs; engineering and related technologies; education; and society and culture. Over the six-year period, the business-related fields have consistently been the most attractive destinations for these students. VET multi-field education/mixed field programs were also popular, as were arts and science related studies, particularly for Australia as a whole. Towards the end of the period, education had strong appeal.

For the years 1997–2001, there was general growth in the proportion of the annual cohorts in South Australia in the fields of study of land and marine resources and animal husbandry; arts, humanities and social sciences; engineering and surveying; health and community services; law and legal studies and services; and hospitality and transportation. Three of these fields, namely land and marine resources and animal husbandry; arts, humanities and social sciences; and health and community services were also fields to experience national growth. Others to experience growth nationally were education; science and veterinary science and animal care.

VET field of study destinations by gender

As a proportion of total VET commencing students with prior higher education achievement, the female cohort dominated, both in Australia and South Australia, in the fields of arts, humanities and social sciences; business, administration and economics; education; health and community services; VET multi-field education; and veterinary science and animal care, in each of the years

1997 to 2001. Meanwhile, males were more highly represented in the fields of engineering and surveying; and land and marine resources and animal husbandry nationally, and in South Australia, in each of the five years. In other fields, there was some variation between the proportional representation of females and males. In 2002 females had the higher proportion of enrolments in Australia and South Australia in fields such as health; education; management and commerce; and society and culture, while males were a majority in fields such as information technology; architecture and building; engineering and related technologies; and agriculture, environmental and related studies.

The most appealing fields for females as a percentage of the VET female cohort in 1997 in South Australia were VET multi-field education; business, administration and economics; and education. Nationally these were business, administration and economics; VET multi-field education; and arts, humanities and social sciences. In South Australia in 2001, the first two most attractive destinations for females were the same as for 1997, but with a reversal in order, followed by health and community services. For Australia, the first field was the same as in 1997, followed by arts, humanities and social sciences and VET multi-field education.

For males the most popular destinations as a proportion of total commencing male cohorts in South Australia in 1997 were VET multi-field education; business, administration and economics; and education. Nationally, these were business, administration and economics, engineering and surveying; and VET multi-field education. In 2001 in South Australia, the most attractive fields were again headed by VET multi-field education and business, administration and economics, but followed by engineering and surveying. Australia-wide in 2001, business, administration and economics was most popular followed by science; and engineering and surveying. Management and commerce had strong appeal in 2002 in both South Australia and Australia. Mixed field programs were also popular with both groups, as was society and culture for females and engineering and related technologies for males.

Clearly there are similarities and differences in attractiveness of particular fields for females and males. Arts and business-related areas, health, education and VET multi-field education/mixed field programs were popular destinations for female students from the cohort. Meanwhile, engineering and business-related fields, education and VET multi-field education/mixed field programs were attractive to males. Science appealed to both males and females, particularly nationally.

VET field of study destinations by age group

In South Australia, approximately two-thirds or more of enrolments in architecture and building; arts, humanities and social sciences; education; engineering and surveying; science; and VET multi-field education were in the 30+ year age group. For business, administration and economics, for two of the five years, two-thirds of the students were aged in this group, while for the other three of the five years, just over 60% were in the group. Further, in three years for health and community services and for land and marine resources and animal husbandry in two years, two-thirds or more of the cohort were in this older group. For Australia, two-thirds or more of the students in land and marine resources and animal husbandry; business, administration and economics; education; engineering and surveying; science; and VET multi-field education were in the older group. In three years, over two-thirds of those in architecture and building; and health and community services were also in the 30+ year age. Eight of twelve fields in South Australia had more than two-thirds of the students in the older group, while nationally, ten of the 12 fields had similar proportions of this age group in 2002.

Commencing vocational students with prior university achievement in the overwhelming majority of fields of study in both South Australia and nationally were in the 30+ year age group.

Commencing higher education undergraduate students with prior vocational education and training experience

The number of commencing higher education undergraduate students (excluding full fee-paying overseas students) with VET experience declined from 2865 in 1997 to 2532 in 2002, that is, 11.6%, while nationally, the decline was from 38 455 in 1997 to 35 835 in 2002, that is, 6.8%. This decline contrasts with substantial increases, both nationally and in South Australia, in the numbers of commencing VET vocational students with prior university achievement.

Gender and age group

Over each of the six years, females comprised over 50% of enrolees, with their percentage steadily increasing both in South Australia and nationally across the period. This dominance is similar to that for females among the VET cohort. Furthermore, in both South Australia and nationally, in each of the six years, more than 50% were less than 30 years of age. Thus younger students, that is, those less than 30 years, and within this group, those less than 25 years, dominated the undergraduate group, a profile which contrasts with the dominance of the 30+ year age group among VET commencing students with prior university achievement. These outcomes are consistent with those of research cited in the literature and may indicate that, for some young students in particular, VET provides an alternative route to higher education.

Field of education destinations

The most popular destinations in 1997 in South Australia and nationally, were arts, humanities and social sciences; business, administration and economics; education; science; and health. The most attractive fields in South Australia in 2002 were society and culture; health; education; management and commerce; and information technology. Nationally these were society and culture; management and commerce; education; health; and creative arts. Overall in the six-year period, consistently the most popular destinations were arts and business-related studies, education and health. Science-related studies were also relatively popular.

From 1997 to 2000, there was general growth in the proportions of the annual cohorts in South Australia in land and marine resources and animal husbandry; architecture and building; health; law and legal studies; and science, while nationally there was general growth in architecture and building; health; law and legal studies; science; and veterinary science. Following changes to field of education classifications in 2001, general growth in proportions of annual cohorts from 2001 to 2002 occurred in architecture and building; health; education; and creative arts in South Australia and in information technology; engineering and related technologies; health; education; and creative arts, nationally.

There are some similarities between the destinations of those moving to higher education and those moving to VET. For both groups nationally and in South Australia, business-related studies and for Australia, arts-related studies were popular. Science studies have also been relatively appealing. Health and education were consistently more attractive destinations for those moving to higher education, both nationally and in South Australia, than for those moving to VET.

Field of education destinations by gender

Both in South Australia and nationally, female undergraduate commencing higher education students with prior VET experience as a percentage of the total cohort with prior VET experience comprised a greater proportion than males in arts, humanities and social sciences; education; and health in each of the years 1997 to 2000. In contrast, in engineering and surveying; and science, males made up a greater percentage of the cohort. In business, administration and economics in South Australia, males were more highly represented in 1997 and 1998, with females assuming this dominance in 1999 and 2000. Nationally, females made up the greater proportion each year.

In 2001 and 2002, with the changes to field of education classifications, female commencers as a proportion of the cohort were greater than males in society and culture; health; education; management and commerce; and creative arts, in both South Australia and nationally. By contrast, males formed a greater proportion in each year in information technology; engineering and related technologies; agriculture, environmental and related studies; and architecture and building, in South Australia and nationally. In natural and physical science in South Australia, males comprised a higher percentage in each year, while nationally, females made up the greater proportion.

As a proportion of total annual cohorts, female enrolments in arts-related fields were consistently the most significant. Female enrolments in business-related fields and education were strong. Male enrolments in business-related fields were also relatively high, as were their enrolments in arts-related fields, particularly in South Australia. Furthermore, female enrolments in health have strengthened over the period. Again, the general similarities with destinations of those moving to VET are evident, where female enrolments in business related fields were most significant, both in South Australia and nationally, while those for males in this area were also high, as were arts-related fields for females, particularly nationally.

Among females in the years 1997 to 2000, arts, humanities and social sciences; business administration and economics; education; and health were particularly attractive. In South Australia, over 85% each year, and nationally over 80% each year, were enrolled in these fields. Science was also a popular destination. Of the annual male cohorts, the most attractive destinations in South Australia and nationally were business, administration and economics; arts, humanities and social sciences; and science, with over 60% enrolling in these fields each year at both a national and state level. Education was also a popular destination. In the years 2001 and 2002, health; education; management and commerce; and society and culture were popular among females, with these fields attracting over 80% each year, both nationally and in South Australia. And these were similar to those in 1997 to 2000 prior to the change in field of education classifications. Meanwhile, for males, the fields of management and commerce; society and culture; education; and information technology attracted over 60% of the enrollees each year in both South Australia and nationally.

For females from the VET and higher education cohorts, arts and business-related fields were popular, with education and health-related fields less so, but nevertheless of strong appeal. For males, business-related and science fields were consistently popular, with education and engineering and related studies also attractive.

Field of education destinations by age group

Nationally, in all fields of education in 1997 to 2000, the younger students, that is, less than 30 years of age, formed a majority of the enrollees from the cohort for each year except for one in veterinary science, a field with small enrolments. The same was the case for South Australia, except in education and health in each year, and law and legal studies in each year except 1998, when there were the same percentages under 30 years as there were 30 years and over. In 2001 and 2002, those less than 30 years of age were more highly represented than those 30 years and older in all fields nationally and in all except health and education in both years in South Australia.

The profile of higher education students contrasts with those in VET. For the former group, the overwhelming majority of fields of education comprised students who were aged less than 30 years, while for the latter group, the reverse applied.

Summary

In South Australia and nationally, over the period 1997 to 2002, for those commencing VET students (excluding full fee-paying overseas students) with higher education achievement and for those commencing university (excluding full fee-paying overseas students) with VET experience, females comprised the greater proportion. Nationally and in South Australia, for almost all fields of

study in each year, the majority of the VET cohort was in the 30+ year age group, while for the higher education cohort, students aged less than 30 years formed a majority in most fields of education.

There were some similarities between the destinations of the annual cohorts moving to higher education and those moving to VET. For both groups nationally and in South Australia, business-related studies and for Australia, arts and related studies were popular. Science studies have also been relatively appealing. Health and education tend to have been more attractive destinations for those moving to higher education, both nationally and in South Australia, than for those moving to VET.

In terms of gender, among the annual female cohorts in both VET and higher education in South Australia and nationally, arts and business-related studies, education and health were fields that consistently attracted large proportions of female enrolments. For males, business-related and science fields were popular, with engineering and education also attractive. The dominance of business-related fields as destinations for those moving in either direction is evident and supports the findings of studies cited in the literature.

What do survey respondents in South Australia say?

Previous studies in the other sector

Respondents were asked to indicate when they had finished studying most recently at a higher education or a VET institution. (A detailed breakdown of responses is shown in appendix F, table 17.) Of the higher education students who answered the question, more than half had finished studying at their most recent VET institution in the years 2001–03. This is in contrast with almost 40% of the VET students finishing studies at their most recent higher education institution in the same period. However, almost 30% of this latter group had completed studying before 1995, compared with just over 10% of the university commencers. Hence, those students going from VET to higher education generally appeared not to have had such lengthy delays before movement compared with those going in the reverse direction. This finding is consistent with those from research, for example by Golding, cited earlier in the review of literature. Notably, however, it appears that a greater proportion of commencing VET students was either concurrently enrolled in higher education and VET in 2003, or had studied at university in 2003 and had decided to discontinue these studies and move immediately to VET. These findings reinforce the complex nature of intersectoral movement as detailed from research cited earlier in this report.

Respondents were then asked whether they had completed their most recent course in the other sector. Sixty per cent of the 190 VET commencers reported that they had completed their university course, while 80% of the 304 university commencers who answered the question had completed their VET course. The figure of 60% corroborates Werner's (1998, p.9) South Australian figures of 63% in 1992 and 56% in 1993. Given that official statistics include 'experience' (that is, complete *and* incomplete qualifications) in the other sector within higher education commencements, but 'achievement' (that is, only completed qualifications) in the other sector within VET commencements, this incomplete proportion of around 40% helps to make comparisons of movement between the sectors more realistic. Thus, adding 40% to the national and South Australian figures on VET commencements given in table 4 (appendix D) provides an estimated number of students moving from higher education to VET that is almost three times nationally and in South Australia, the movement from VET to higher education.

When asked for the date of completion, 224 university commencers and 112 VET commencers gave details (appendix F, table 18). Almost two-thirds of the university respondents who indicated they had completed their most recent VET qualification had done so in the years 2001–03. In contrast, almost a third of those in VET completed their most recent higher education award in the same period. Less than 10% of the former group completed their VET course before 1995 compared with nearly a third of the latter group having completed their most recent higher education qualification within this period. Hence, of those with complete awards/courses, students moving from VET to higher education are more likely to have completed their most recent VET course closer to the time of moving than are those going from higher education to VET.

These outcomes support findings in the literature and suggest that among those with completed higher education awards/VET whole courses, students moving from VET to higher education tend to do this in a more planned way, without a substantial time delay than do those moving in the reverse direction.

Of students who did not complete their previous course in the other sector, the majority claimed that they had withdrawn (higher education 48%; VET 58%) or that it was 'just incomplete' (higher education 38%; VET 12%). Small proportions reported failure (higher education 3.3%, VET 6.5%), while 10% of the university students and 22% of the VET students said that they were still currently enrolled (appendix F, table 19).

Those who had withdrawn from their previous VET course (28 students) stated that the main reason was starting a job or working longer hours in their existing job (21%), followed by lack of enjoyment of the course (18%) and the award not fitting with career plans (14%), or to take up a university offer (14%). Those withdrawing from their previous higher education award (45 students) claimed personal/family difficulties (24%), lack of enjoyment (18%) and starting a job or working longer (16%) as the main reasons for withdrawal (appendix F, table 20).

Of those moving to university from VET, for over half, the most recent course/modules studied in VET were at the certificate level, while for those VET commencers, the most recent higher education studies for almost two-thirds were at the bachelor's degree level (appendix F, table 21).

Most university commencers had been studying in the VET sector: business/administration/economics (26%); health and community services (16%); services/hospitality/transportation (14%); and arts/humanities/social sciences (12%); and science (9%). Most VET commencers had been studying in the higher education sector: society and culture (17%); management/commerce (16%); health (14%); education (11%); and engineering and related technologies (10%). Hence for both groups of students moving to a new sector, business, arts and health-related studies were popular (appendix F, tables 22a and b). Furthermore, for about 85% of each group, this most recent course/module/award in their prior sector was the highest level studied in that sector. Fifty-three (14.6%) of the 364 higher education commencers who answered this question indicated that the most recent qualification was not their highest in the VET sector. Similarly, 28 (14.7%) of the 190 VET commencers who responded indicated that this most recent higher education award was not the highest level they had studied at university.

Those who said that this most recent course/award undertaken in the prior sector was not the highest were asked to identify the highest and to indicate whether or not they had completed these studies. Thirty-one (58.5%) university commencers said they had completed this highest level VET course, while 22 (41.5%) said they had not. Seventeen (60.7%) of the VET commencers indicated that they had completed their highest level university award, while 10 (35.7%) said that they had not.

Movement between and within sectors

Previous state-based studies of student movement have tended to focus on the most recent or highest qualification (see for example, Millican 1995; Werner 1998), but generally have not addressed the history of intra- and intersectoral movement for the target population. National studies have explored this educational history further. Golding and Volkoff (1999), in their study of VET students in Australia, asked for a record of all programs and courses attempted or completed since leaving school, and Golding, Marginson and Pascoe in their 1996 study of generic skills, asked students in both sectors for all post-secondary courses successfully completed. The current study attempted to gather data relating to the educational history, both complete and incomplete, of commencing students in both higher education and VET in South Australia. This was done by tracking intersectoral and intrasectoral moves of respondents. Despite difficulties in analysing the data (as detailed in appendix E), some very interesting trends were noted, although the details should be taken as indicative only. (For a detailed breakdown of these movements, see appendix F, table 23.)

Commencing VET students

All the respondents (190) had one move from higher education to VET, which qualified them to participate in the survey; however, 25% (n=48) of the current VET students had two intersectoral moves (VET to higher education to VET). A pattern of intrasectoral moves was evident, as over 59% (n=112) of the students had multiple moves—but they were not always intersectoral. For these students there was a strong pattern of multiple prior university attendances. Indeed, if intrasectoral movement is taken into account, some 51% (n=97) of respondents had between three and eight moves. It is possible that this sometimes reflected a move ‘upwards’ in the university sector, for example, pass degree to honours/postgraduate/higher degree before moving into the VET sector. Another characteristic of these students was that the year of first sectoral admission was often much earlier than for the respondents in the higher education sector.

Commencing university students

All the respondents (n=366) had one move from VET to higher education, which qualified them to participate in the survey, however 17% (n=62) of the current university students had two or more intersectoral moves, with three and four moves not uncommon. Approximately 49% (n=181) of the students had multiple moves, but not always intersectoral. Again, a pattern of intrasectoral moves was evident: some 49% (n=181) of respondents had between three to eight moves. For these students, also, nearly 4% (n=14) had three or four intersectoral moves, a degree of movement that was not evident in the VET cohort, and there was a corresponding decrease in multiple higher education attendances.

Current studies

The university commencers were predominantly studying in bachelor degree programs (93%) with small numbers in advanced diploma and diploma programs. Two-thirds of the VET commencers were in certificate programs, some were taking diplomas (13%) and a small number were in advanced diplomas (6%) (appendix F, table 24). The university students were concentrated in fewer fields of study than the VET students. Those in higher education were mainly enrolled in health (22%); society and culture (21%); and management/commerce (19%), while by far the most VET students were in business/administration/economics (43%), followed by smaller proportions in a wide spread of fields of study such as arts/humanities/social sciences (13%); education (8%); health/community services (8%); science (8%); and engineering/surveying (7%). Again, the dominance of enrolments in business, arts and health-related areas for both groups is evident (appendix F, tables 25a and b). Not surprisingly, most university commencers were enrolled full-time (69% of the 364 who answered the question), by contrast with most VET commencers who were enrolled part-time (76% of the 188 who answered the question). These enrolment patterns are consistent with those identified in studies cited in the literature (see appendix A).

Twice the proportion of university (38%) as VET (18%) commencers were admitted to their current course on the basis of their prior study in the other sector (appendix F, table 26). When enrolled in their current program, again a greater percentage of university students (39%) applied for credit for previous VET studies than did VET students (21%) for previous higher education studies. Interestingly, therefore, 61% of the university students and 79% of the VET students did not seek credit for their prior studies. For those who did apply, only very small numbers in both sectors did not receive any credit (higher education 4%; VET 5%) and similar proportions in both samples received credit (for example, between 40% and 45% in both sectors received up to one-quarter of their current course/award). It was in the proportions who received half or more of their current course in credit that the main difference in the sectors was evident: for university students 18% reported this amount of credit granted for previous VET studies, while 5% of the VET students reported this amount for prior university studies (appendix F, table 27). This significant

difference can largely be explained by the fact that VET commencers were moving into different fields of study from their higher education studies.

Reasons for choosing to undertake further study

The students' responses to a series of questions on reasons for choosing to undertake further study in the other sector are described in table 1. Rankings are also discussed and these are clearly presented, in terms of agreement for both cohorts of students, in table 28 in appendix F.

The first point to notice in table 1 is that the strength of motivations for these two student groups is quite different. The two groups of commencers responded significantly differently to 13 of the 19 given reasons for undertaking further study in the other sector, two at the 0.05 level and 11 at the more stringent 0.01 level of significance. On all but one of the 13 items, significantly more university commencers than VET commencers agreed with these as reasons for undertaking study. The one clear exception was that more VET commencers (25%) were studying, because it was required by their employer (cf. 2.4% of university commencers).

The second striking feature is that there are important differences in the nature of their motivations. One important area is related to their perceptions of the educational experience they would be receiving: getting a 'broad education' (higher education 69%; VET 38%); a 'prestigious qualification' (higher education 65%; VET 28%); and an update of their previous qualification (higher education 51%; VET 30%). In fact, these last two motivations were the two major areas of disagreement between the two cohorts of students. Another area relates to their occupational motivations: retraining for a different career (higher education 63%; VET 41%) and improving their employment prospects (higher education 94%; VET 81%). While the majority of the VET commencers were studying to improve prospects in their current career (65%), the university commencers favoured studying to retrain for a different career (63%) as well as to improve prospects in their current career (58%). It also appears that the university commencers have a wider range of motivations for undertaking study, reflected in over half of them agreeing with nine of the given reasons compared with over half of the VET commencers agreeing with only five of these reasons.

Significant among the reasons not mentioned so far is that more university commencers (83%) agreed that they were studying for 'personal interest, development or recreation' reasons than did VET commencers (70%). Nevertheless, it is interesting to note that, in both groups, this reason figured highly alongside their occupational motivations. The top three choices, in fact, for both groups were the same. The main reason for all students was 'to improve my employment prospects', followed by 'for personal interest, development or recreation' and 'to gain or improve my practical skills' as second and third choice for university students, and as third and second choice for VET students. The data clearly demonstrate that students perceive their moving to another sector for the purpose of undertaking further study is driven by a combination of occupational and personal interests.

The picture drawn of student movement is the outcome of a process which starts at a very personal level. This is the process of career planning undertaken by each of the respondents, a process which starts with a goal or vision and its associated objectives. This study sought to identify the goals and objectives which motivated the targeted students to study in the other sector. These reasons, for the purposes of this study, were clustered as non-career-related, career-related and passive. The responses to this section, in the context of this clustering, are discussed below.

Table 1: Respondents' reasons for choosing to undertake further study

Questionnaire number and item	HE students with VET experience				VET students with HE experience				Level of significance
	Agree (%)	Neutral (%)	Disagree (%)	Total (%; N)	Agree (%)	Neutral (%)	Disagree (%)	Total (%; N)	
I enrolled in my current award program/course:									
27 for personal interest, development or recreation	82.9	8.7	8.4	100 (357)	70.1	11.4	18.5	100 (184)	**
28 to improve my English language skills	21.7	23.6	54.7	100 (212)	7.8	7.8	84.4	100 (90)	**
29 to be eligible for financial assistance (e.g. Austudy, Abstudy)	5.4	8.3	86.4	100 (242)	8.3	4.6	87.2	100 (109)	
30 to fill time, meet people or be with friends	9.2	22.0	68.8	100 (336)	7.4	11.5	81.1	100 (148)	*
31 to be eligible to apply for permanent residency status	6.0	6.0	88.0	100 (133)	-	-	-	-	
32 to refresh my study skills after a period out of education	30.5	20.8	48.7	100 (308)	32.2	14.6	53.0	100 (164)	
33 to get a vocationally specialised education	76.3	14.2	9.5	100 (346)	65.1	19.8	15.1	100 (172)	*
34 to get a broad education	69.0	19.6	11.4	100 (352)	37.9	30.2	32.0	100 (169)	**
35 to gain or improve my practical skills	76.9	13.4	9.7	100 (351)	78.9	12.2	8.9	100 (180)	
36 to get a prestigious qualification	65.1	21.1	13.8	100 (355)	28.2	23.3	48.5	100 (163)	**
37 to update my previous qualification	50.5	18.3	31.1	100 (289)	29.6	18.3	52.1	100 (142)	**
38 to improve my employment prospects	93.8	4.0	2.3	100 (353)	80.7	9.1	10.2	100 (176)	**
39 to improve my career prospects in my current field	58.3	15.0	26.7	100 (307)	65.2	13.4	21.3	100 (164)	
40 to retrain for a different career	63.2	14.0	22.8	100 (307)	41.4	18.5	40.1	100 (162)	**
41 to qualify for workforce re-entry after a period out of the workforce	24.6	12.1	63.3	100 (207)	17.2	8.2	74.6	100 (122)	
42 to fulfil a requirement for another course/award	11.1	13.5	75.5	100 (208)	18.6	12.4	69.0	100 (129)	
43 to please my family	11.1	16.8	72.2	100 (316)	2.7	8.2	89.0	100 (146)	**
44 because I was advised to by someone I respected	25.9	18.0	56.1	100 (305)	17.7	10.9	71.4	100 (147)	**
45 because it was required by my employer	2.4	9.7	87.9	100 (207)	25.0	16.7	58.3	100 (144)	**
46 because I could get status for my previous qualification	21.4	16.5	62.0	100 (266)	6.0	13.4	80.6	100 (134)	**

Note: HE = higher education

In relation to the non-career-related reasons, there was broad agreement between respondents in both sectors that the reason they were undertaking study in the other sector was for 'personal interest, development or recreation'. The finding is consistent with those of other studies, such as Werner's study of South Australian higher education graduates participating in TAFE courses (1998) which found that the first and third most likely reason for undertaking the study was 'for personal development' and 'for interest or recreation' and, also, Millican's study (1995) of Queensland TAFE enrollees with a university background, where the third most common reason was 'personal interest/development'.

In relation to other non-career-related reasons for undertaking further study, although there was overall disagreement that further study had been undertaken to 'improve my English language skills', there were significantly more VET students who disagreed with this statement (84%) than university students (55%). This may be due to the lower percentage of Australian nationals in the university sample (higher education 88%; VET 92%). There was strong agreement from students in both sectors that they were not undertaking study 'to be eligible for financial assistance' (higher education 86%; VET 87%), 'to fill time, meet people or be with friends' (higher education 69%; VET 81%) or 'to refresh my study skills after a period out of education' (higher education 49%; VET 53%), although in the last case, almost one-third of students in both sectors agreed that this was a valid reason.

The texture of the educational experiences in the VET and higher education sectors have been variously described as broadening (Golding 1999a), generalist and vocationally specific, offering workplace skills or academic skills (Golding, Marginson & Pascoe 1996), offering practical skills and theoretical understandings (Werner 1998; Millican 1995), providing knowledge (Golding 2002) and as higher and lower (Golding 1999a; Golding, Marginson & Pascoe 1996). It was considered that the essential elements of these qualities would be captured in the questions relating to 'vocationally specialised education', 'practical skills', 'broad education' and 'prestigious education'. The survey responses revealed that the majority of students in both sectors agreed with the first two descriptors; both VET and university students, when making the decision to undertake their current study, considered that the educational sector they had chosen was vocationally specialised and gave them the opportunity to gain or improve their practical skills. Nevertheless, university students expressed a greater preference for a 'vocationally specialised education' (higher education 76%; VET 65%), and VET students expressed a marginally greater preference for 'practical skills' (higher education 77%; VET 79%).

While 'to get a vocationally specialised education' was the fourth and fifth most common reason for students in higher education and VET respectively to undertake their selected further study, this aspect does not seem as important to the students in this study as those in earlier studies. Golding's (1995b) Victorian study of commencing students found that the most common reason for Victorian TAFE and university students, with a background in the other sector, studying in that sector was 'to gain vocationally specific training', and Millican's (1995) survey found that 'gaining employment-related skills' was the most influential factor for the targeted students. On the other hand, it could be argued that the questions in these earlier studies focused more on 'training' and 'skills' rather than 'education', which may account for these differences in ranking.

Rather surprising is the emphasis on gaining or improving practical skills ranked highly as a motivation for the university students. In his South Australian study, Werner (1998) found that university graduates moved to TAFE to gain practical skills not acquired at university. However, in the current study, 'to gain or improve my practical skills' was the third most common reason given by university students and the second most common one given by VET students. This finding is supported by Golding (1995b), where 'updating existing practical skills' was the second most common reason selected by students from both sectors.

It is informative that nearly twice as many university as VET students were seeking a 'broad education' through their sectoral move. While traditionally, and especially in relation to a general

arts or science degree, a university education has been viewed as generalist, a normal career progression would be to move from a general to a more specialised qualification. In the current study, there is an indication that a broad education is perceived as a pathway to employment, seeing that the most popular reason for VET students making the change to higher education was to improve their employment prospects. However, the second most popular reason for this group of students making the change was 'for personal interest, development or recreation', which would support the selection of a 'broad' education.

There was significant disagreement between the two cohorts of students in relation to the chosen study awarding a 'prestigious qualification'. This difference in perception on the relative prestige of the two sectors was also the finding in Golding's (1995b) Victorian study where students with a TAFE background moving to university considered the most attractive aspect was the more prestigious nature of a university qualification, whereas the most unattractive aspect for those moving from university to TAFE was the less prestigious nature of a TAFE qualification. It is noted, however, that a similar percentage of each cohort in the current study was neutral on this issue, with one-fifth of all respondents indicating that it was not an important consideration.

Student movement between educational sectors may be viewed as an inevitable characteristic of the continuum of lifelong learning. Sectoral movement in this context was explored by questions asking whether students' reasons for choosing to undertake further study were to refresh their study skills after a period out of education, to update their previous qualification or to fulfil a requirement for another award/course. The responses to the first and last of these reasons was similar for respondents in both sectors who, in general, had not chosen their current course for these reasons, although these preferences were not significant. However, a significant point of disagreement was in regard to 'updating one's previous qualification': 51% of university students agreed with this statement compared with 30% of VET students. A fuller expression of these results might be that 51% of university students who had previously studied VET viewed the higher education study as an update of their previous qualification and, also, that 52% of students who had previously studied at university did not view their VET study as a qualification update. This finding may appear to contradict the findings in Millican's (1995) study where 'refreshing/updating knowledge and skills', and in Golding's study (1995b) where 'updating existing practical skills', were the second most common reasons for student movement from university to TAFE. On the other hand, these latter questions focused more on 'skills' than 'qualification'. The other arguable point is whether students perceived 'previous qualification' as the most recent qualification in the alternative sector, or whether they were referring to a qualification received in the same sector. Considering the educational history of these students, there is possibility for ambiguity here. However, what remains is that the university students were positive about undertaking a qualification update, while the VET students did not see this as a motivating factor.

Lifelong learning, and the educational experience which is part of that continuum, may or may not be directed towards a career goal. When it is so directed, the educational experience itself becomes part of the career development process. For this reason, the aforementioned questions relating to lifelong learning have been included under the umbrella of 'career-related'. However, more specifically, respondents were asked whether their reasons for choosing their current study were career- or employment-related. These, together with the question relating to 'vocationally specialised education' reported above, may be categorised as the vocationally focused reasons for undertaking further study emphasised in previous studies and cited in the review of the literature.

There were similar responses from students in both sectors to questions relating to improving employment prospects, improving career prospects in their current field, retraining for a different career and 'qualifying for workforce re-entry after a period out of the workforce', in the sense that there was common agreement for the first three reasons as motivating factors, and common disagreement that the fourth reason was relevant. However, 'improve my employment prospects' and 'retrain for a different career' were more strongly preferred by university students, to 0.01 level of significance. Moreover, 'to improve my employment prospects' was the most favoured reason for undertaking further study for students in both sectors. This vocational motivation was strongly

supported by responses to questions relating to career development. However, while VET students (65%) felt more strongly than university students (58%) that their study would 'improve my career prospects in my current field', it is significant that 63% of university students agreed that 'to retrain for a different career' was a motivating factor while rather fewer (41%) VET students agreed with this statement. At 41% and sixth ranking for VET students, this reason is similar to previous studies: Golding's 1994 study (1995b) found that to 'retrain for a new career' was the fourth (50%) most important reason for TAFE students to have made the move from university, and Werner's 1998 study also found that 'retraining for a different career' was selected by 44% of his VET sample. However, the selection of this reason for university students is significantly higher than for VET students. These responses indicate that, while most students in both sectors moved to improve their employment prospects, those moving to VET favoured doing so to improve prospects in their current career, and those moving to university favoured doing so primarily to retrain for a different career and secondarily to improve prospects in their current career.

While it may seem confusing that those studying in the same or a similar field of education did so to retrain for a different career, and vice versa, it needs to be remembered that the fields of education are quite encompassing. For example, the 'business' field is very broad and includes areas of study such as accountancy, economics, banking, finance and marketing. So a student could move within the same field of education and yet be retraining for a different career—such as commencing study in management at university after having undertaken marketing in VET. Conversely, a person could move to a different field of education and yet be improving their career prospects in their current employment. For example, a person with a teaching qualification (in the 'education' field) may commence a business course in the VET sector (in the 'business' field or 'management and commerce' field) in order to enhance their career prospects in schools (such as becoming an educational manager).

Finally, there is a group of reasons for choosing to undertake further study which may be termed 'passive', in the sense they were instigated by an external person or factor: family, somebody they respected, their employer or simply because they could get status for a previous qualification (although this reason may be coupled with any of the career-related reasons above making it an active career planning decision). Although there was similarity in the responses from students in both sectors, there was significant disagreement with these reasons, indicating that the career planning process undertaken by these students was individualistic, independent and calculated. In all cases, there was a significantly higher level of disagreement with all these reasons from the VET students, except where the course was an employer requirement, when 58% of VET students disagreed with the statement, compared with 88% of university students. Indeed, this was the statement with greatest disagreement from the university commencers, indicating that, while this cohort of students selected 'to improve my employment prospects' as their main motivating factor, this career planning decision was independently assessed. Interestingly, 25% of VET students agreed with this statement, compared with only 2.4% of university students.

There were 163 responses to the question: 'Is there another important reason for choosing to undertake your current award program/course, not mentioned above'. Most of these responses, however, could be categorised under the survey questions. Two-thirds of these reasons were career-related, although some of them were so in a general sense only; that is, respondents had chosen to undertake the course of study due to a belief that it would be of some non-specific assistance in their career. This type of response was more common in the higher education sample:

Needed to begin going to work or study for work prospects in future and full-time work was too difficult with children, and with study I can be at home when children get home from school, but I am working towards the future.

To enable me to have a more varied choice of employment options.

The responses from the VET sample focused much more on skills acquisition, even when the career goal was undefined:

To further skills in an area which is currently a hobby, but may give an option for a further career change in the future.

I find my current job unfulfilling and unenjoyable; I wanted to study something I enjoy to broaden my skills and improve my chances of making a career move.

In summary, the focus on qualifications by university students reinforces findings in earlier studies, although the current study shows that it was not a prime motivating factor for these students, who were more focused on employment prospects, personal interest, development or recreation, practical skill development and vocational specialisation, with 50% to 70% of the respondents seeing broad education, prestigious qualification, retraining for a different career, improving career prospects in their current field and updating their previous qualification, as motivating factors. Similarly, the VET students' main focus was on 'employment prospects', development of 'practical skills', 'personal interest, development or recreation' and improving career prospects in their current field, closely followed by obtaining 'a vocationally specialised education'. For this group of students, however, these reasons were prime motivators, as less than a one-third of the students agreed with the majority of the remaining reasons.

The top three choices for both cohorts were the same, although second and third choices for university students became the third and second choice of VET students. Divergence was in the fourth choice which was 'to get a vocationally specialised education' for university students and 'to improve my career prospects in my current field' for VET students. There is an indication that VET students were not seeking to change direction as much as to get further training in an existing career area, and this was often at the instigation of employers. On the other hand, university students were clearly seeking to change direction and to get a vocationally specialised education. Also, besides the students' perception that higher education would offer a broader education than VET, there was a significantly stronger motivation regarding improving employment prospects and retraining for a different career by the university students. It is notable also, that the top ten reasons for both sectors were the same, with only small variation in the ranking of choice. Overall, this may reflect a closing of perception in regard to what can be gained from the sectors, both in terms of personal development and career outcomes.

Issues in moving between sectors

Having explored the reasons why the targeted students undertook further study, the research investigated the barriers that hindered or prevented these students from accessing opportunities in the other sector. While the previous set of questions explored personal motivation, questions 48 to 63 focused on personal issues which might have influenced the students when making their decision, such as self-confidence, finance, time, travel and relationships. They also explored external practical factors which might influence their decision, such as access to information, entry requirements and application processes.

The responses to these questions are described in full in table 2. Table 29 in appendix F ranks these responses in terms of 'ease' for both cohorts of students.

Although students in both sectors responded similarly, in terms of level of ease/difficulty, to 12 of the 14 issues influencing them when choosing to undertake further study, there were significant statistical differences in their level of response in nine of these areas. VET commencers found the process easier, particularly (at the .01 level of significance) in relation to 'meeting the entry requirements for the course', 'having the confidence to undertake further study', 'getting advice from staff at the current institution' and 'going through the application process' and to a lesser extent (at the .05 level of significance), to 'getting careers guidance to help you make a decision', 'getting your employer's support to study' and 'doing something different from your friends'. The

one common area of difficulty for both cohorts of students was in respect to 'making changes in your life so that you had enough time to study'. Two areas of significant disagreement were in relation to 'having sufficient income to study' and 'paying the fees' which VET commencers found substantially easier than university commencers.

Table 2: Respondents' views on issues influencing them when choosing to undertake further study

Questionnaire number and item	HE students with VET experience				VET students with HE experience				Level of significance
	Easy (%)	Neutral (%)	Difficult (%)	Total (%; N)	Easy (%)	Neutral (%)	Difficult (%)	Total (%; N)	
When making your decision to undertake your current award program, how easy/difficult did you find ...									
48 getting careers guidance to help you make a decision?	44.4	25.9	29.61	100 (324)	48.1	33.1	18.8	100 (133)	*
49 meeting the entry requirements for the award program/course?	69.6	14.2	16.2	100 (359)	91.8	5.3	2.9	100 (170)	**
50 getting your prior qualifications recognised?	53.6	25.1	21.3	100 (263)	52.8	29.2	17.9	100 (106)	
51 having sufficient income to study?	21.3	12.9	65.8	100 (348)	45.3	18.2	36.5	100 (148)	**
52 paying HECS and other fees/the fees?	21.2	22.1	56.8	100 (340)	50.3	19.6	30.1	100 (153)	**
53 making changes in your life so that you had enough time to study?	24.4	14.0	61.5	100 (356)	32.6	14.7	52.7	100 (184)	
54 finding an award program/course you wanted to do close to home	54.7	16.7	28.6	100 (329)	47.6	18.2	34.3	100 (143)	
55 getting adequate information about this award program/course?	68.1	15.7	16.2	100 (357)	72.2	13.3	14.4	100 (180)	
56 getting adequate information about the employment prospects of this award program/course?	48.6	29.8	21.7	100 (346)	45.9	34.1	20.0	100 (135)	
57 getting your employer's support to study?	53.9	28.0	18.1	100 (193)	67.7	16.9	15.3	100 (124)	*
58 getting your family's agreement to your undertaking this award program/course?	79.6	10.5	9.9	100 (294)	72.4	17.1	10.6	100 (123)	
59 doing something different from your friends?	62.8	20.9	16.2	100 (296)	69.4	25.2	5.4	100 (111)	*
60 having the confidence to undertake further study?	52.7	13.8	33.5	100 (355)	77.7	12.0	10.3	100 (175)	**
61 going through the application process?	54.8	17.1	28.1	100 (363)	78.9	11.1	9.9	100 (171)	**
62 getting advice from staff at the current institution	51.1	25.9	23.0	100 (348)	72.5	17.4	10.2	100 (167)	**

Note: HE=higher education

In effect, the majority of students in both sectors found most of these issues relatively easy, with the exception of 'making changes in your life so that you had enough time to study' which 62% of university students and 53% of VET students found difficult. There was major disagreement between the two groups of students in relation to financial issues: 66% of university students found 'having sufficient income to study' much more difficult compared with 37% of VET students; and 57% of university students found 'paying the fees' difficult compared with 30% of VET students. Indeed, the students moving into VET found, on average of all the factors, the move easier than did those moving into higher education (higher education 51%; VET 62%), with an impressive 92% of VET commencers finding 'meeting the entry requirements for the course' relatively easy.

When making the decision to undertake further study, there are a number of issues to be considered, and respondents found it relatively easy to get careers guidance to help them in this (higher education 44%; VET 48%). Yet, even so, this issue was significantly less easy for university students than for VET students, with 30% and 19% respectively finding it difficult. In relation to the personal practical issues which had to be considered as part of the decision-making process, financial issues, as stated above, presented definite difficulties for those moving into the higher education sector but were easier for the majority of students entering the VET sector. Although convenience of location was not a major issue for students, finding an award program/course they wanted to do close to home was more difficult for VET students than for university students. 'Making changes in your life so you have enough time to study', however, was the single common difficult issue for the majority of students in both sectors.

'Getting your employer's support to study' must have been a relevant issue for these students, since 54% of university and 68% of VET students found this an easy issue with which to deal. Employer support would be advantageous when the goal in undertaking further study is relevant to one's current employment and the response to this issue corresponds with students' agreement, in the previous set of questions, that improving their career prospects in their current field was a driving force behind their career decision to undertake further study (higher education 58%; VET 65%). As also seen in the previous section, a higher percentage of VET students than university students agreed that undertaking their current study was an employer requirement and, appropriately, there is therefore a higher level of ease expressed by VET students in getting their employer's support to study.

With regard to other relevant relationships, 'getting [their] family's agreement to their undertaking the new course/award' was marginally easier for university students than for VET students, although this ranked as the easiest issue of all for the former, while it ranked fifth with the latter. It was noted earlier, however, that both groups of students had strongly disagreed with the statement that 'to please my family' was a motivating factor in their decision. Another interesting observation is that 24% of the VET students who had withdrawn from their previous higher education course gave personal/family difficulties as their reason for doing so. It would appear that there are definitely family influences/pressures at work here which should be taken into consideration for diverse student populations. 'Doing something different to [their] friends' was easier for VET students than for university students (higher education 63%; VET 69%). Not surprisingly, considering the ease with which the VET students dealt with all issues, 'having the confidence to undertake further study' was significantly less of an issue for them than for university students, ranking as the third easiest issue for VET students (higher education 53%; VET 78%).

So, in summary we have a picture of a group of personally more tentative individuals commencing in the higher education sector for whom financial issues are a major concern but for whom it was relatively easy to find a conveniently located program, to get support from their family and, to a lesser extent, from their employer. On the other hand, students moving to VET appear more confident and not so financially challenged, finding it easier to get support from their employer and with an almost equal level of support from family, but finding it slightly more difficult to find a course that suits them close to home.

Making a decision about undertaking further study requires not only exploration of personal issues connected with such a move, but importantly, acquisition of essential information about the educational program to be undertaken and, where employment issues are relevant, its employment prospects. Students in both sectors found it relatively easy to get ‘adequate information about the program/course’ (higher education 68%; VET 72%), although more difficult to get ‘adequate information about [its] employment prospects’ (higher education 49%; VET 46%), and VET students found it significantly easier to get ‘advice from staff at [their] current institution’ than did university students (higher education 51%; VET 73%). This group of VET students also found it significantly easier to go ‘through the application process’ (higher education 55%; VET 79%) and to meet ‘the entry requirements for the award program/course’ (higher education 70%; VET 92%), although the process of ‘getting [their] prior qualification recognised’ was the same, whichever sector they were moving into (higher education 54%; VET 53%). In summary, the movement into VET appears to be a smoother transition, in terms of support and process, for students with prior experience in the higher education sector, than the movement into higher education is for those with prior experience in VET.

There were 145 responses to the question: ‘Is there another important issue you found easy/difficult when making the decision to undertake your current award program, not mentioned above?’ (88 from university students and 57 from VET students). Comments were mainly variations on the themes identified in the survey questions, with one-quarter of the comments concerning information issues and getting advice from staff at the relevant institutions. Students had some difficulty accessing sufficient, appropriate and adequate information and comments on staff ranged from very positive to very negative. Many students also had problems with the enrolment processes, which were viewed as difficult and complicated in both sectors. External study options seem an important issue, either from the point of view of students choosing courses because they were offered externally, or having to relocate because the courses were not offered externally, or the advantages of studying externally for people with busy lives. Sometimes, there was an evident lack of flexibility with regard to the varied student profile, be it adjusting to the mature-age or working applicant, the applicant from interstate or overseas, or the disabled.

Comments included:

Finding people employed at the university who were willing to talk to me and give me accurate information was difficult. Most information came from other enrollees.

You cannot get enough information about the individual subjects on the website when you enroll [sic] in a subject. This is necessary to help balance work and study.

The enrolment process wasn’t very clear and I spent many hours trying to find the best way to organise my timetable. No staff were around to help me enrol.

Having sufficient time to study!!! Such a big issue—needs to be looked at. Youth allowance is no joke.

I live in country Queensland, am married and have a 10-year-old son. Have to leave both behind to study full-time in Adelaide next year. Very hard decision to make.

Some institutions provided excellent access to staff dealing with people with disabilities; other staff ... were dismissive unless you were offered a place. They would not talk to you till then. So I struck ... off the list

Difficult to get support/help from institution—too much red tape. Uni doesn’t accomodate [sic] mature-age students well.

Had to travel fair distances to study at this institution as the closer ones did not offer the course part-time and I could not afford to give up work completely to study full-time.

The literature regarding transition issues for students moving between sectors focuses mainly on VET students making the move to the higher education sector and finding some difficulty in accessing information and admission policies, and difficulties in adjusting to the higher education environment. There has been little research into transition issues for university students moving

into VET. The current study covers a range of issues relevant to two-way student movement between the sectors and finds that, although the transition was relatively easy for most students, there was real difficulty in making the necessary life changes in order to study. This is supported by the independent responses from 'non-traditional' students (mature-age, disabled, interstate, overseas and working applicants). There was disagreement on financial issues by the two cohorts of students, with the VET students being more positive on this issue as well as overall, these students appearing to find transition easier and seeming to be better resourced personally to manage it.

Having explored the opportunities the targeted students were seeking in this cross-sectoral movement and the barriers that hindered or prevented them from accessing opportunities in the other sector, the survey sought to explore the extent to which there was a gap between the opportunities which were being sought and what was promoted by the institutions.

The publicity about the program/course seems to have been fairly well targeted by the institutions, as 49% of university students and 57% of VET students agreed that the relevant publicity made them feel that their reasons for choosing it would be met. Again, the response was more positive for those moving into VET than for those moving into the higher education sector. Indeed, a substantial number of students in each sector (higher education 35%; VET 28%) responded 'don't know' to this question, indicating that the publicity promoted by the institutions could have been better targeted. Despite not being reinforced as well as it might have been by the institutions, the decision-making process undertaken by these students seems to have been successful since, at the time of the survey, 78% of university and 74% of VET students were confident that their reasons for choosing the award program/course would be met.

Transition between sectors

Transition between educational sectors necessarily involves adjustments to different systems of tertiary education. Thus, respondents were asked to judge how different they found various aspects of their educational experience in their current sector compared with those in their previous sector (table 3).

The striking feature in the data is the very high proportions of commencing students who found their transition a *different* experience. The second feature to note is the consistency in the figures between university and VET students. Not only are the various items in a similar sequence (for example, study cost, teaching style and assessment processes are in the top four in both lists), but the proportions of students from each sector tend to be similar on each item (for example, on assessment processes, 80% of university and 82% of VET commencers reported these were different). The statistically significant exceptions were cost of studying, level of work and class size, where more university commencers claimed differences than VET commencers on all three aspects.

Thus, the data show that the transition from one sector to the other, irrespective of direction of movement, is perceived as a quite different educational experience for around three-quarters of commencing students. These data signpost particular areas most likely to be stumbling blocks, leading to attrition if not carefully handled or negotiated.

An open-ended question on differences between these sectors yielded a large number of responses (65 from VET commencers and 100 from university commencers). The comments concentrated heavily on differences in interaction with and accessibility of staff, although other comments related to level of work, assessment approaches, nature of the study, course structure, degree of self-management and self-direction, available modes of study, timetabling issues and learning climate.

Table 3: Respondents' judgements on how similar or different aspects of their current educational experience are from those in the other sector

Questionnaire number and item	HE commencers with VET experience			VET commencers with HE experience			Level of significance * = <.05 ** = <.01
	Similar (%)	Different (%)	Total (N, %)	Similar (%)	Different (%)	Total (N, %)	
How similar or different are each of the following aspects of your current HE (or VET) educational experience compared with that at the VET (or HE) institution at which you studied most recently?							
66 assessment processes	20.3	79.7	100 (355)	18.2	81.8	100 (181)	
67 teaching style	16.5	83.5	100 (351)	20.5	79.5	100 (176)	
68 class size	26.5	73.5	100 (328)	37.7	62.3	100 (138)	*
69 institutional climate	31.6	68.4	100 (335)	25.5	74.5	100 (153)	
70 structure of course/award	22.8	77.2	100 (347)	18.3	81.7	100 (175)	
71 amount of work in course/award	22.2	77.8	100 (351)	29.9	70.1	100 (177)	
72 level of work in course/award	17.6	82.4	100 (347)	29.0	71.0	100 (176)	**
73 practical content	24.1	75.9	100 (344)	24.3	75.7	100 (173)	
74 theoretical content	25.8	74.2	100 (349)	28.5	71.5	100 (179)	
75 cost of studying	7.6	92.4	100 (353)	18.5	81.5	100 (162)	**
76 provision of support services and facilities	46.5	53.5	100 (342)	46.8	53.2	100 (158)	

Many comments by VET commencers were about teachers. Teachers in VET were generally seen as 'more caring and approachable'; 'very helpful'; life-experienced; 'a lot more personal'; and 'much nicer and kinder'. However, some respondents considered them 'less professional and academic'; 'inexperienced in teaching'; 'mostly HPIs [hourly paid instructors] and you can't speak with them'; 'need to be more in tune with adult learning principles, we are not children'; and 'seem to be very patronising and not as professional ... more like school teachers'.

VET courses were typically seen to be 'a lot more flexible' and 'far more applicable to getting a job, less theoretical and academic, more relevant'. Regarding the VET climate, respondents stated that 'we have school students studying at TAFE. This makes the place have a very different atmosphere—it makes it feel more like school instead of TAFE. I did not like this. It was very different to university', while others thought that the 'VET experience has a more friendly atmosphere'.

Some other typical comments included:

Homework requirements at VET, which have to be handed up and checked by the lecturer, unlike HE, which was based on adult learning theory—self-directed study with assistance available, as long as outcomes were met.

[A difference is the] amount of feedback on assignments. HE assignments were graded HD, D, C, P or F, with comments. VET, so far, after four topics, I have received ticks, and one question received 'good', and grading is simply pass or fail.

The HE institution provides a much better studying environment and the lecturers treat you with a lot more respect. Through my VET experience, everyone is treated like they are back at school. It is too much like school and not like the real world ...

The support, help and assistance offered at TAFE is much higher and you're not just another number, the lecturers actually do their best to help you out.

Comments by university commencers on the nature and level of work at university and the ways they were expected to study were very common, such as 'study is much more impersonal'; 'all my subjects are mainly theory'; 'HE is much harder than VET and involves a lot more work'; 'subjects [are] more theoretical'; 'onus is on me at uni to organise my time how I see fit—TAFE was more

like school!'; 'the workload is huge compared to anything I have experienced before'; 'this course is much more conceptual, abstract and theoretical'; 'my VET course was like a production line!'; 'uni is so much harder than TAFE'; 'material for course is so much more difficult at uni level. TAFE did not prepare me at all'; and 'workload is much more at HE level. Class sizes are substantially larger than at TAFE'. Positive comments about VET courses normally highlighted its relevance to the world of work: 'theory and content were more applied to the workplace in the TAFE course; 'used more work-based examples and course coordinators had practical experience in the area' and 'VET was competency-based'. Two students bluntly contrasted the level of work in the two sectors:

... the intensity of study is very different; uni is a hard slog, long hours, a mind-boggling amount of reading, but to get a good grasp of the topic, you need to do it

It took me about 5–10 hours a week to complete a full-time load at TAFE and do very well. It takes me 50–60 hours a week to complete a full-time load at uni and do very well.

Once again there were many comments also about differences in teaching. Positive comments about university teaching were that 'we are treated like adults. At ... we were treated like children'; 'current teaching staff are much more professional'; 'uni has a much better learning and helpful atmosphere—there are more opportunities for self-improvement'; and 'uni is much more relaxed and casual. TAFE's attitude and structure are very similar to high school'. Two other typical comments that made direct contrasts between the sectors were:

University has more student support, informed lecturers who engage more readily in industry, theoretical discourse, and international practice. TAFE needs injections of international speakers, guest lecturers and more theory to create an informed student.

University has required a much deeper level of research, theory and analysis—much more academic. VET is more practical in relation to the workforce, more relevant skills are taught. However, to get a decent job, you need a degree from uni.

However, again there were far more positive comments about approachability of VET staff, such as 'TAFE is more about people, and how you are coping and more helpful'; 'TAFE was more organised in terms of students knowing what was going on ... where services were and what department you went to for any issues you had'; 'the availability of lecturers and their willingness to help and support students was much greater at VET institution'; 'the lecturers/tutors are less accessible at uni than at TAFE'; and 'more individual teacher assistance at my VET institute'. Some other features of VET teaching were:

At TAFE, I had a much closer relationship with my lecturers in that I felt I could confide, ask advice, get support and even gain employment opportunities through their connections.

Level of personal interest in students was greater at TAFE and more flexible approach to work and more flexible, down-to-earth staff.

Much easier to communicate with staff/institution at TAFE. More practical focus and less emphasis on exam performance at TAFE.

Costs came in for some strong criticism; for example, 'Uni costs an arm and a leg, and I need at least one of them'; and 'the cost of HE is massive in comparison to TAFE'.

Many of the university commencers' responses hinted at the structural problems facing higher education in particular, including the following:

Class sizes for higher education are massive, cost is extreme and time spent studying at home is far greater. This has a large impact on the social and psychological wellbeing of students.

Due to smaller classes, high contact hours and the nature of the courses, the staff at TAFE are more like friends, are more approachable and it's easier to get help.

This course tends to lack the human contact and one-on-one attention. Much higher class numbers for external and internal lecturers, I feel like a number in the line ...

... uni has much more work and no personal contact with teachers; teachers don't know who you are due to no time to find out and to big classroom.

Such differences, however, do not appear to have caused much consternation for the commencing students. Almost three-quarters in both sectors reported feeling 'fairly' or 'very comfortable' moving from one sector to the other. Yet it is in the responses on discomfort that the differences show. While only 7% of the VET commencers stated that they felt uncomfortable, twice as many of those commencing university (14%) reported this (statistically significant at the .01 level). It is thus in the transition from the VET sector to the higher education sector that the greatest degree of discomfort occurs.

Almost one-quarter (23.5%) of the commencing university students had decided to enter university even before starting their most recent VET course, and another 22% during that course. This contrasts significantly with the VET commencers, where only 2% had decided before, and 14% during their most recent university course. Thus the decision to enter the VET sector is a later one. Almost three-quarters (73%) of these VET commencers decided after they had completed their university course (cf. one-half of the university commencers) and the timing of decisions to study in the other sector is consistent with outcomes in research studies cited in the review of literature (see appendix A).

Summary

The data summarised in this section reveal the complexity in intersectoral movement, and at the same time, highlight notable differences between the commencing higher education and VET student cohorts.

The movement from VET to higher education is more immediate than the reverse, where there are often lengthy delays before enrolment and where study is more often a requirement of employment. The decision to enter the VET sector is usually a later one: almost three-quarters of the VET commencers decided after they had completed their university course, compared with only one-half of the university commencers. More university than VET commencers had completed their previous course at the time of entering the other sector, and completed it closer to the time of moving. With both groups, enrolling in business, arts and health-related fields was popular. The data show considerable multiple intersectoral and intrasectoral movements, more in the instance of commencing VET students.

In their current studies, university commencers were concentrated in fewer fields of study, but again, for both groups, business, arts and health-related enrolments were common. The university commencers tend to be studying full-time while the VET commencers are part-time. Twice as many university as VET commencers gained admission on the basis of their studies in the previous sector, and applied for credit in their current course, and three times as many were successful in receiving half or more of their current course in credit.

There were statistically significant differences between the two groups of students on 13 of the 19 reasons for undertaking study. The key motivation for both groups in undertaking further study was to improve employment prospects, with the next two (in different sequence) being to gain or improve practical skills and for personal interest, development or recreation. While both groups were studying to obtain a vocationally specialised education and to improve employment prospects, the university commencers favoured studying in the same or similar field of education to retrain for a different career, whereas the majority of the VET commencers was studying in a different field of education to improve prospects in their present career. The other key differences concerned getting a broad education and prestigious qualification, improving their English skills, pleasing family, and studying because they were advised to by someone they respected and because they could obtain some status for their previous qualification (all of which were significantly more highly reported as

key reasons by university commencers), and studying because it was required by their employer (significantly more highly reported as a key reason by VET commencers).

Most students in both sectors found the actual transition between sectors relatively easy, with the exception of 'making changes in your life so that you had enough time to study', which both sets of students found difficult. There were statistically significant differences between the two groups of students on nine of the 15 issues influencing their decision to undertake further study. Overall, VET commencers found it easier than university commencers. The main differences related to finance, meeting entry requirements, going through the application process, self-confidence and obtaining advice from staff, for all of which the university commencers had the most difficulty.

Three-quarters of the students were confident that their reasons for choosing the award program/course would be met. Nevertheless, the transition from one sector to the other, irrespective of direction of movement, was perceived as a different educational experience. There were three statistically significant differences between the two groups on how similar or different aspects of their current educational experience were from those in the previous sector. These were cost of studying, level of work in the course/award and class size. On all three aspects, more university than VET commencers claimed difference.

Despite the strong sense of difference between the sectors, the students did not appear overly concerned. Almost three-quarters in both sectors reported feeling 'fairly' or 'very' comfortable moving from one sector to the other. Evidence suggests that it is in the transition from the VET sector to the higher education sector that the greatest degree of discomfort occurs.

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Seamless movement in Australia's tertiary sector—between and within higher education and vocational education and training—is vital to lifelong learning and to meeting labour force requirements in changing global economies. This report investigates the extent and nature of student traffic between the two sectors, nationally and in South Australia from 1997 to 2002.

Movement from university to VET was dominated by women and mature-aged students studying part-time, and the move occurred some time after completing university. Often they chose a different field of education to improve their prospects in their current career. On the other hand, VET to university students tended to be younger and studying full-time, and the move to higher education tended to occur soon after completing VET. Usually they chose the same or a similar field of study to retrain for a different career. Since 1997 the movement between university and VET has increased significantly, and in particular, the flow from university to VET is three times the flow in the reverse direction.

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