SUPPORT DOCUMENT

Student traffic: Two-way movement between vocational education and training and higher education

Support document

ROGER HARRIS, ROBERT SUMNER AND

LINDA RAINEY

This document was produced by the author(s) based on their research for the report *Student traffic: Two-way movement between vocational education and training and higher education*, and is an added resource for further information. The report is available on NCVER's website: <http://www.ncver.edu.au>

Contents

Tables

Appendix A: Literature review

Introduction

The higher education sector, that is, the sector which formerly comprised universities and colleges of advanced education (CAE's) including institutes of technology and now largely comprises universities, and the Vocational Education and Training (VET) sector and which together form the Australian tertiary education sector are different but linked. They have different missions, structures and funding regimes. Higher education has as its primary focus the pursuit, preservation and transmission of knowledge, while for VET this is 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 (DEST 2002, para 6). Both sectors thus share responsibility for general and vocational education. They complement each other.

Background developments in collaborative arrangements

Although contact between the higher education and the VET sectors was minimal until the 1980's, collaboration has been growing (Burns 1997, p.4). The main emphasis has been on developing and implementing policy and mechanisms to facilitate smooth movement of students who have studied in the Technical and Further Education (TAFE) sector (a major component of the VET sector), into the higher education sector. Much of the focus of these arrangements has been on articulation, which has also been a focus internationally (see for example, Haas 1999; Kintzer 1999; Scott 2001), credit transfer or recognition of prior learning. Parkinson (1985) reported, from an investigation into student movement from TAFE to Australian universities and colleges of advanced education (CAE's) in the early 1980's, that the majority of higher education institutions admitted students on the basis of successfully completed relevant TAFE middle level courses and many of the institutions were prepared to grant some status for these prior studies (p. xiii). Such an emphasis on providing a pathway for movement paralleled that in the United States, for example, where institutions similar to those in the tertiary sector in Australia, that is, TAFE colleges, CAEs and universities, accepted student transfer as a key component of their missions (Parkinson et al. 1986, p.210).

Stimulus for these collaborative arrangements between Australian tertiary institutions in the early 1980's came from governments, government authorities and from the institutions themselves. In 1983, a Commonwealth Tertiary Education Commission (CTEC) report argued for greater cooperation between TAFE colleges, CAE's and universities in terms of credit transfer between TAFE and higher education (Parkinson 1985, p.38). Further the CTEC report for the 1985-1987 triennium emphasised that increased portability of credit between TAFE and higher education was an important way of meeting two key Federal Government objectives at the time, that is, the need for equity and the need for growth in tertiary education (Parkinson et al. 1986, p.2). However, it was noted in a report of a review of the CTEC structure in 1985 that enhancing these

arrangements would be difficult with the then complex, cumbersome administration of tertiary education (Parkinson et al. 1986, p.19). Further, as pointed out by the Federal Minister for Education in 1986, the TAFE, CAE and university sectors had developed various barriers making movement from one sector to another difficult (Parkinson et al. 1986, p.1).

Despite these concerns and in the absence of a coordinated national policy framework relating to inter-sector collaboration and cooperation, in this period to the mid-1980's, various institutions had developed or were developing collaborative and cooperative arrangements. These were not system wide but rather they were put in place at the local level between individual higher education institutions and the TAFE sector (see for example, Parkinson 1985, p.25, pp.61-69; Parkinson et al. 1986, pp.57-59). The precursor institutions to the University of South Australia, namely the South Australian College of Advanced Education and the South Australian Institute of Technology, had such arrangements with the South Australian TAFE sector. (Ramsay et al. 1997, pp.23-24). At the time, there was some support for these voluntary arrangements such as articulation and credit transfer between sectors. In a national study on articulation and credit transfer, Parkinson et al. (1986) emphasised the importance of the voluntary arrangements between institutions when they argued that CTEC, through the TAFE Council, invite the Australian Conference of TAFE Directors to consider development of national policies to inform and encourage qualified students to move from TAFE to higher education (p.197). Then through the TAFE Council and in consultation with State TAFE authorities, hold discussions with the Colleges of Advanced Education and Universities Councils with a view to developing national guidelines for acceptance for admission and status of suitable and relevant TAFE courses (p.202).

However, there were also those opposed to relationships which would enhance pathways the between TAFE and higher education institutions, particularly the universities. Objections included, a perceived lack of correspondence, such as differences in conceptual complexity and required intellectual effort, between TAFE and higher education courses; TAFE courses being seen as insufficient and even unsuitable preparation for higher education; TAFE courses being regarded as ends in themselves; differences in the teaching and learning environments in TAFE and higher education creating difficulties for transferees between the sectors, and higher education admission processes being complicated by TAFE applicants (Parkinson et al. 1986, p.193-196). These and other objections, particularly from universities, impeded comprehensive system wide developments in articulation and credit transfer between TAFE and higher education during most of the decade.

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

In this environment, the Australian Vice Chancellors Committee (AVCC) and the Australian Committee of Directors and Principals of Colleges of Advanced Education (ACDP) developed credit transfer guidelines which were endorsed by the Federal Government as part of the higher education reform package. Importantly, the acceptance of the guidelines by higher education institutions was a condition of entry to the UNS (Ramsay et al. 1997, p.12). Hence no longer were transfer policies an option. Voluntarism had been replaced. However, the Federal Government did not publish any credit transfer or articulation requirements of the TAFE sector. Its emphasis was one way, ie TAFE to higher education. It was concerned to ensure a smooth "upward" pathway between the two sectors and to meet its growth and equity objectives. Movement from university to TAFE was not of central concern to policy makers at the time. Universities were able to dominate policy development and implementation arrangements.

With the Government's reform package in place, greater national emphasis was given to enhancing pathways and to the need for consistency in articulation and credit transfer arrangements. Recognition of TAFE studies and hence accepting such studies as a basis for both admission and

advanced standing by universities were central in the debate. The Finn Review of 1991 for example, recommended on the importance of improved articulation between compulsory school and post compulsory education sectors. The Baldwin Report of 1991 noted the need for higher education institutions to be more flexible in their recognition of prior learning and experience. The Carmichael Report and the Mayer Committee also argued for improved credit transfer. With the establishment of the Australian National Training Authority (ANTA) in 1993 further national emphasis was given to the importance of smooth pathways between the sectors (Golding 1999b, p.7).

In the early to mid-1990's the AVCC Credit Transfer Project reviewed and revised credit transfer principles originally outlined in the Federal Government's higher education reform package. Recommendations on minimum levels of credit to be given by universities in a number of fields were developed. At the time, policy and procedures on recognition of prior un-credentialed learning were also formulated and subsequently the AVCC expanded its focus in this area and considered recognition of prior learning by universities for training and education offered by industry and private providers. So the nature of prior learning being considered for admission to, and for advanced standing in, universities was being broadened to include un-credentialed learning as well as credentialed learning where TAFE had been the dominant provider. The range of providers also expanded across the VET sector to include both government and non-government organisations.

By 1994, Department of Employment Education and Training (DEET) reports concluded that most states and territories had credit transfer arrangements, at least in some fields of study, and arrangements seemed to cater for the needs of most students (Burns 1997, p.15). In the following year, the AVCC Credit Transfer Project was subsumed by a newly established Australian Credit Transfer Agency which had a role to provide advice on prior learning, and this agency remained under AVCC, ie., universities' control, until its demise in 1997. Also in 1995 the Australian Qualifications Framework (AQF) was launched. This framework ensured uniformity of qualifications across sectors and made provision for nationally consistent recognition of achieved outcomes in post-compulsory education. The AQF defined bachelor's degrees, graduate certificates and diplomas, master's degrees and doctorates as higher education qualifications. Certificate level qualifications were defined as VET qualifications while diplomas and advanced diplomas were dual sector awards, ie could be offered by either the VET or the higher education sector. However, advanced diplomas and diplomas offered by VET have been attracting increased numbers of students at the expense of students enrolled in these awards in universities (DEST 2002, para.46). Institutions in one sector can also offer qualifications from the other sector provided that they meet relevant accreditation and other requirements (DEST 2002, para.44). However higher education institutions have tended to concentrate on degrees and graduate certificates and graduate diplomas, while advanced diplomas, diplomas, advanced certificates and certificates have tended to be the main vocational focus of VET institutions.

The development and implementation of policy fostering greater collaboration and cooperation in the 1990's was 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; changes in the workplace and the organisation of work and market advantages generated by collaboration and the growing trends for lifelong learning (DEST 2002, paras.14-19; Eltis 2002, p.77, 80). These have also been influential internationally where greater emphasis is being given to learning throughout life in a number of countries (see for example OECD 1996: UNESCO 1996). Environmental factors such as these, the implementation of various review recommendations, policy initiatives and the creation of relevant mechanisms have resulted in stronger relationships between VET and higher education in Australia. This was not only in the areas of articulation and credit transfer, but also in areas such as joint award offerings, shared campuses and research.

By the final years of the twentieth century more emphasis was being given to ensuring flexibility in movement into and out of sectors in tertiary education and to provide for seamless pathways.

However, it has now become urgent to see that these pathways also extend to the compulsory school sector (Golding 1999b, p.9). There are emerging strategies for secondary schools where young people are involved in schooling, training and employment. The schools sector now has a responsibility to provide vocational courses at senior school level through "VET in schools" programs which comply with the National Training Framework and are part of the Senior Secondary School Certificate (Komopoulis 2002 p.6). This development has significant implications for the tertiary education sector, particularly in terms of movement into the sector and implementation of arrangements to ensure efficiency objectives are met. Such an outcome has been made more possible in vocational areas with the implementation of Training Packages and their provision to recognise prior learning. (Training Packages are sets of nationally endorsed standards and qualifications for recognising and assessing people's skills. They describe the skills and knowledge needed to perform effectively in the workplace, but do not prescribe how an individual should be trained. Teachers and trainers develop learning strategies - the "how" - depending on learners' needs, abilities and circumstances.)

Considerable advances have been made in cooperative and collaborative relationships between education sectors and particularly the VET and the higher education sectors over the last two decades. However, for much of the period, universities have dominated the debate over issues such as articulation and credit transfer with attention being paid to upward movement from VET to university. In an era of high technology, when knowledge is growing exponentially, social and economic changes are occurring rapidly, the demand is for adaptable people who learn throughout life. Seamless pathways between the education sectors are imperative to meet the challenges.

Two-way student movement between the VET and higher education sectors

Generally, research into student traffic between the VET and higher education sectors has focused on movement from VET, and particularly the TAFE component of VET, to higher education, ie, unidirectional and perhaps "upwards" movement. Much emphasis has been given to investigating articulation, credit transfer, recognition of prior learning, general transition issues, and experiences and performance of TAFE students transferring to universities.

Parkinson in his major national studies in the mid-1980's, for example, investigated a range of matters surrounding relationships between the TAFE and higher education sectors and movement of students from TAFE to CAE's and universities (Parkinson (1985), Parkinson et al. (1986)). McPhee (1988), Lewis (1992), Alba et al. (1993) and Cameron (1999) monitored the performance of TAFE students moving to higher education. Lewis (1995) examined admission to universities in New South Wales and the Australian Capital Territory in 1991-1994, while Hawke and Quirke (1996) examined the university selection processes for applicants with VET qualifications. Ramsay et al. (1997) researched linkages such as articulation, credit transfer and recognition of prior uncredentialled learning between TAFE in South Australia and the University of South Australia. Cohen et al. (1997) investigated New South Wales universities admissions procedures for TAFE applicants and the admissions outcomes of TAFE applicants to New South Wales and Australian Capital Territory universities. These are a very small selection of studies that have addressed the issue of movement from the VET sector to the higher education sector. However, VET is a legitimate post-university destination and during the 1990's, and particularly post-1992 (Werner 1998, p.5), researchers began investigating movement in this direction ie., movement now commonly referred to as "reverse articulation" (Golding and Eedle (1993), Golding (1995b), Millican (1995)). However, in was only in the latter years of decade that national authorities such as the National Board of Employment Education and Training (NBEET) and ANTA sought advice on such movement (Golding 1999b, p.8).

Researchers discovered that so called "reverse articulation" was significant. They also discovered detail on, for example, the magnitude of multi-sectoral backgrounds of students who moved,

delayed shifts, concurrent enrolment in different sectors and changes to Field of Study among students moving between sectors. A one way inter-sector movement model which focuses simply on VET to higher education movement was deemed inadequate and not inclusive. A model embracing two- way movement between the sectors better accommodates not only the movement in either direction, but also its complexity. To meet their personal and vocational needs, people engage in knowledge and skills acquisition at various stages throughout their lives in processes that ignore sectoral boundaries.

As Golding and Vallence (2000) argue,

> …a two-way movement model linked to the notion of lifelong learning is more useful than a one-way articulation and credit transfer model in explaining movement and recognition between the VET and higher education sectors in Australia (p.2)

Magnitude of student movement

For many years, there has been considerable student traffic between the higher education and VET sectors. Parkinson et al. (1986) noted that in the period 1980-1983, over 15,000 students with a prior TAFE qualification had entered higher education (p.11). Just over a decade later, 1994 Department of Employment Education and Training (DEET) statistics showed that 15,750 students, or 7% of those commencing in higher education, had a completed TAFE award compared with 6,159 students, or 4.3% of commencements, in 1988 (Burns 1997, p.4). 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 universities in Australia (Cohen et. al. 1997, p.5). Moodie (2003, pp.3-4) reported on a similar situation in the United States of America where significant numbers of students in universities in states such as California and Texas have community college backgrounds.

In the mid-1990s, research in New South Wales found that applications from former TAFE students to universities in 1991 represented 6.3% of all applications while in 1996, this had increased to 10.6%. In fact the number of applicants with a TAFE record increased by 58.6% from 1991 to 1996 (Cohen et al. 1997, pp.65, 77). The number of these applicants who received an offer of a university place, rose from 3,100 in 1991 to 6,392 in 1996 ie., 10.9% of all offers, although it was noted that TAFE applicants were relatively unsuccessful in being admitted to courses with high cut-off scores (Cohen et. al. 1997, pp.66-67). In a study conducted at the University of South Australia by Ramsay et al. (1997), the authors reported that commencing undergraduate students with TAFE experience as a percentage of total commencing undergraduate students at the University increased from 17.6% (966 of 5,503 students) in 1993 to 23.7% (1,510 of 6,362 students) in 1996 (p.56). Clearly the growth in university applications from people with prior VET experience and the success of these applicants in being admitted to higher education has been substantial over the last decade.

Furthermore, student traffic in the reverse direction has also been significant and increasing - a feature of inter-sector movement internationally. The Organisation for Economic Cooperation and Development (OECD) (1991), for example, reported an increase in applications from university graduates for professionally oriented programs offered in the non-university system (p.76). In research undertaken in Victoria, Golding and Eedle (1993) reported that although some individual student data was incomplete, approximately a quarter of TAFE Associate Diploma and Advanced Certificate commencers in the period 1990 to 1992 had prior university experience (p.146). Subsequently, Golding (1995b) concluded from an analysis of Victorian data from 1990-1993 that, although accurate data on traffic between sectors was unavailable and numbers fluctuated annually, it was likely that there were eight times as many TAFE enrollees with university experience as there were university enrollees with TAFE experience.

In his investigation into university to TAFE movement in Queensland, Millican (1993) found that in 1992, 9% and, in 1993, 10% of TAFE enrollees reported university was their highest prior level of study (p.1). Werner (1998), in an analysis of national data noted that, in 1992, 7.3% and, in 1993, 6.5% of TAFE students had a university background (p.8). In addition, Golding and Vallence (2000) 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%. This represented about 40,000 VET clients holding a degree each year in vocational programs. Furthermore, and although data on those students with incomplete higher education qualifications who shifted were not collected nationally, Golding concluded that a similar number of VET clients would have had an incomplete university qualification (p.3). Interestingly, in a summary of research from 1993 to 1996, Golding (1998b) noted that students with a TAFE background moving to university were more likely to have a completed qualification than those moving from university to TAFE, and those shifting often had a combination of complete and incomplete prior qualifications (p.8). Werner (1998) however, in his analysis of state and territory data for 1992 and 1993, concluded that TAFE students with a university background were more likely to have a complete rather than an incomplete qualification; relative percentages being, of the 1992 students, 63% who had moved with a complete qualification and 37% with an incomplete qualification, while in 1993 the relative percentages had changed somewhat to 56% and 44% respectively (p.9).

DEST (2002, Executive Summary p1) reported that in 2001, 7% (15,000 of a total of 220,000) commencing undergraduate students were admitted to Australian universities on the basis of TAFE studies (complete or incomplete). And of these, the older established (Group of 8) universities admitted 2% of their bachelor's degree commencers on the basis of such studies compared with 8% of bachelor's degree commencers at the other universities, a difference in movement rates which Moodie (2003) noted was greater than those between highly selective and less selective institutions in California, Texas and Colorado in the United States of America (p.3). The total admitted to universities on this basis had grown from 3.9% in 1993. Conversely, in 2001, 4.8% (83,900) of total VET students had a degree or postgraduate diploma as their highest prior qualification, ie a completed award. This figure was 43,700 (3.4%) in 1995. (It needs to be noted that some VET students would have obtained their diplomas from institutions other than universities).

However, as is clear from the above data on applicants to university with TAFE experience, not all students with VET experience are admitted to university on the basis of their prior VET studies. The number of university undergraduate commencers with VET experience is considerably greater than the figure for basis of admission. Many more commencing higher education undergraduate students have VET experience but are admitted on other bases such as year 12 results, or complete or incomplete higher education qualifications (Golding and Eedle 1997, pp.58-59; Ramsay et al. 1997, p.65, Moodie 2003, pp.7-8). Golding (1995b, p.8) noted that 1995 national data suggested that TAFE to university movement was at least one and a half times greater than data derived from basis of admission data.

But a cautionary note needs to be made about data. Fookes (1997) and Golding (1995b, 1998a) for example have raised questions on the comprehensiveness of data from which conclusions can be drawn on the magnitude of traffic between sectors. Pitt (2001) in her study of commencing students in one sector who had completed a qualification in the other sector found, for example, that many of those who were studying for TAFE qualifications having indicated that they had complete university qualifications, in fact had incomplete qualifications (p.121), a matter affecting overall data quality.

Teese and Polesel (1999) have reviewed the national VET and higher education student information systems. They raised a number of issues about data on the systems including the fact that students did not always complete all fields on enrolment forms, resulting in incomplete aggregated data elements. In the VET system, students are asked if they have completed an undergraduate diploma or degree or a post-graduate diploma. Whether or not this was completed overseas is not recorded. Furthermore, because of the emphasis on "completed" qualification,

those with incomplete higher education qualifications are not recorded as having a university experience (unless they incorrectly complete the field). This is in contrast to the higher education collection where students are asked to indicate whether prior VET qualifications are complete or incomplete. Teese and Polesel (1999) also found problems with the basis of admission field in the higher education statistical collection. Particularly in terms of "complete TAFE qualification", they noted that many students complete selected modules rather than a complete award as such and hence may incorrectly enter data in the field. In their research into cross sectoral linkages, Ramsay et al. (1997) found that similar problems existed with basis of admission data in the recording of complete/incomplete TAFE qualifications data. While Moodie (2003) cited several studies which also questioned the accuracy of basis of admissions data (p.70). However, Teese and Polesel concluded that both the higher education and the VET information systems could be used to track cross-sectoral movement in a general way.

Despite these issues with recorded data, there is sufficient evidence to conclude that the movement between the sectors and, particularly, from higher education to VET is now significant

Personal characteristics of students moving between sectors

Golding (1995b) undertook a survey of 1994 commencing students with a university background in four Victorian TAFE colleges and of commencing students with a TAFE background at certificate level or higher in four Victorian universities (excluding single subject enrolment). He found that, of the university students moving to TAFE, 56% were female while of TAFE students moving to university, 47% were female (p.5). In a subsequent Victorian study conducted as part of an NBEET funded project of a sample of students who had commenced study in one of the sectors in 1995 after at least one previous experience in the other sector, the researchers found that there were similar percentages of females and males in each group ie 54% female and 46% male (Golding et al. 1996, p.89). Ramsay et al. (1997) in their investigation of commencing undergraduate students at the University of South Australia noted that in each of the years 1993 to 1996, 57% of the commencers with TAFE experience were women (p.71). Millican (1995) reported from his survey of a sample of 1993 Queensland TAFE students with a university background, that 46% were women (p.1) while Werner (1998), in his analysis of the movement of higher education graduates to TAFE in South Australia (including those enrolled in TAFE non-award subjects), found that in 1995, females comprised 56% of enrolments (p.20). Although there is some variation in research outcomes, females tended to be dominant among students with a university background shifting to VET, a conclusion reached in an analysis of national data from 1997-2001 in this current study and reported later in this research report.

In the 1994 Victorian study, the average age of both groups of students who moved inter sectorally was found to be 30 years while, in the 1995 study, the median age for those moving from university to TAFE was 33 and for those moving from TAFE to university was 23 years (Golding et al. 1996, pp.5, 13). Werner (1998) found from his survey that the average age of those with higher education achievement shifting to TAFE in South Australia was 39 years (p.31). This finding supported Millican's research into Queensland TAFE students with a university background where two thirds of survey respondents were in the 30+ year age group (1995, p.16). Golding (1998b) summarised findings from various of his research surveys conducted between 1993 and 1996. He reported that two groups of those moving from university to TAFE stood out viz older people who had completed a university course and younger people who had not completed their university course.

Millican (1995) also noted that 80% of respondents to his survey were enrolled part time in TAFE in 1993 (p.28). Meanwhile, Golding(1995b) from his 1994 Victorian research indicated that 55% of the students shifting from university to TAFE were studying part-time, while those moving from TAFE to university were more likely to be studying full time or by distance mode (p.5). Hence, it appears that those moving from higher education to TAFE tend to be female, in a mature age group, noting variability in age groups of those with complete or incomplete higher education

qualifications, and studying part time. Those shifting from TAFE to university tend to be male, younger and more likely to be studying full time.

In terms of employment in the year prior to shifting inter-sectorally, from his 1994 research, Golding (1995b), found that of those moving from university to TAFE, 50% were retraining, 38% were working full-time and 25% were not working, while for those moving from TAFE to university, 42% were retraining, 46% were working full- time and 27% were not working (p.18). In a subsequent Victorian study of a sample of students who had commenced in one of the sectors in 1995 after at least one previous experience in the other sector, Golding et al. (1996) noted that 11% of those moving had been retrenched or made redundant within the last six years; 25% of those moving from university to TAFE had been unemployed at some stage over the twelve months preceding the study compared with 17% of those moving from TAFE to university (p.85). Millican (1995) indicated from his Queensland study that, for the university students who had shifted to TAFE, patterns of employment had been fairly constant over a five-year period to the time of the survey and, in 1994, 70% of respondents were working full-time with 21% in part-time employment. In his South Australian study Werner (1998) supported this finding on full-time employment when he noted that 52% of university graduates shifting to VET were in full time employment (70% of male respondents and 40% of female respondents) at the time of enrolment in TAFE; 26% were in part-time employment (p.34).

Thus it seems that while there are a number of students moving in either direction who have 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 VET / higher education backgrounds of students moving inter-sectorally

Movement between the sectors is not necessarily immediate. In his 1994 Victorian study Golding (1995b) found that many of the students commenced in one sector some time after having studied in the other sector (p.1). In particular, there was relatively high demand for delayed movement from university to TAFE across fields of study that were often unrelated. This, the author concluded, appeared to be linked to difficulties encountered in the labour market by both university graduates and non-graduates lacking specific vocational skills. In his South Australian study Werner (1998) confirmed Golding's findings on students delaying movement to TAFE after having obtained their highest university qualification (p.33).

Golding (1995b) noted that multi-sectoral backgrounds were common among those shifting in either direction with about half of those conventionally described as having TAFE or university backgrounds, having multiple tertiary backgrounds (p.2). A study conducted in the Australian Capital Territory in the early 1990's had also pointed to the multiple tertiary backgrounds of those moving from university to TAFE (Golding 1998b, p.8). In his subsequent 1995 Victorian research, Golding confirmed the significance of multiple-sectoral backgrounds among students who move when he found that 28% of TAFE students with higher education experience had previously crossed sectors in either direction on at least one occasion while of the students moving from university to TAFE, 19% had previously crossed sectors. Furthermore, many students were found to have various combinations of complete and incomplete tertiary awards (Golding et al. 1996, pp.76-77). The authors also noted that 12% of those in a TAFE course in the year of the survey (1995) had been enrolled in a university course that year while 6% of university students had been enrolled in a TAFE course in that year, that is, concurrent enrolment (p.73). Earlier research had revealed that at least one in ten of the students were concurrently enrolled in both sectors (p.10). Of those in TAFE with university experience, 91% had first studied in the tertiary sector in university while 9% had studied in TAFE whereas, for those university commencers with a TAFE experience, 19% had first gone to university while 81% had firstly gone to TAFE (p 75). Movement is complex.

The most recent experience of students moving between sectors, may not have been movement to the other tertiary education sector. This may, in fact, have been within the sector in which they were currently enrolled. Furthermore, some may also have been concurrently enrolled in both sectors. These factors add to the complexity of any analysis of inter-sectoral movement.

Field of study destinations of students moving between sectors

The VET field of study destinations of university students who shift often varies from that of their prior university study, while that for VET students who move to university is often similar to prior VET studies.

Golding (1995b) reported from his 1994 Victorian study that most TAFE students moving to university enrolled in business (35%), arts (16%), computing (11%) or engineering (7%) while most of the university students moving to TAFE enrolled in business (39%), applied arts (20%) or engineering (12%) (p.20). For those students who had a complete TAFE qualification, their main TAFE fields of study were business or engineering while for those with an incomplete TAFE qualification, the main TAFE fields of study were business, engineering, art & design. For the university students with a complete qualification moving to TAFE, their main university fields of study were humanities & social sciences, education, engineering, science, while those with an incomplete university qualification, their main university fields of study were business and engineering (p.20).

In his survey of 1993 Queensland TAFE students with a university background, Millican (1995) concluded that the business field of study was most attractive, with 18% of respondents enrolled in this field. Thirteen percent were in applied science, science and computing, 8% in education and 7% in engineering and surveying. Females tended to be more highly represented than males in the business and education fields while males tended to be more highly represented in engineering and surveying and in applied science, science and computing (p.26).

In research by Ramsay et al. (1997) of commencing undergraduate students at the University of South Australia, the authors reported that of those students with a TAFE background, up to 38% enrolled in business faculty over the years 1993 -1996 (p.56). In Golding's 1995 investigation in Victoria reported by Golding et al. (1996), the dominance of the business field of study as a destination was confirmed. They found that most of the TAFE to university movement was to business (40%), with 13% to applied science and 10% to arts (p.75). Of those shifting from university to TAFE, the major fields of study in which they were enrolled in TAFE were business (25%), computing and information technology (22%) and engineering (12%) (p.14). Most of those moving to university (80%), enrolled in bachelors degrees, while of those moving to TAFE, 47% enrolled in associate diplomas, 35% in certificates and 18% in advanced certificates ie 65% enrolled in advanced certificate or higher level courses (p.14).

Of those moving from TAFE to university, 22% were enrolled in a completely different field of study, at university, while 14% were in an identical field, 24% in a very similar field and 31% were in a somewhat similar field to their prior TAFE studies. In contrast, 67% of the students going on to TAFE were moving into a completely different field of study from their university studies, with 15% being in a somewhat similar field and with only 9% enrolled in a similar or identical field (Golding et al. 1996, p.77). Werner (1998) confirmed this change in study field destination when he noted from his survey that of the students shifting from higher education, 57% of their TAFE enrolments in South Australia were in a field of study that was not at all similar to that of their highest university qualification (pp.37-38). 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). Hence, movement from VET to university is likely to be to a similar field of study while university to VET movement is likely to be to a different field of study.

Many of the students who move from TAFE to university make an early decision about shifting and so move from a lower level TAFE qualification to a higher level university qualification in the same or similar field in a planned process. Pitt (2001) investigated the movement of students between sectors in a multi-sectoral institution in Victoria. She reported that a large number of students enrolled in business studies in TAFE with the specific intention of articulating to university (p.124). Most students interviewed had been unsuccessful in getting into university and so had accepted a place in TAFE. They saw the TAFE qualification as insufficient and in fact needed a degree. Golding (1995b) reported from his 1994 Victorian study that, of the TAFE students, 58% had started their TAFE course with an intention to go on to university. This is in contrast to those moving from university to TAFE where many make a later decision to shift. Golding (1995b) reported that almost all (97%) of university students in his 1994 Victorian study who moved indicated that when they enrolled in their university course they had not intended to later go to TAFE (p.8). Their shift was perhaps thus not such a planned process as for many of those moving from TAFE to university.

For students moving in either direction, the business field of study was attractive. Furthermore, those moving from VET to university are much more likely to move to a somewhat similar, similar or identical field than those moving to VET who are much more likely to move to a different field. Many of those going from university to VET appear to make late decisions on shifting while a number of those moving to university studies from VET seem to make a decision earlier in their VET studies, or indeed even before commencing their VET studies, in what is perhaps a more planned decision-making process.

Reasons for movement between the higher education and VET sectors

Many people choose to move inter-sectorally, a number study concurrently in more than one sector and numerous among those who shift have multi-sectoral backgrounds. What drives students to move between sectors to pursue their studies?

Golding (1995b) has noted from his 1994 Victorian study that students shifting from university to TAFE were most likely to have moved between sectors to acquire specific vocational training, update existing practical skills, develop links with industry or to retrain for a new career. Those with a TAFE background moving to university 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). Golding et al. (1996) reported on 1995 Victorian research which indicated that, of those going from university to TAFE, approximately 20% had previously completed a generalist degree in arts or science. They perceived that they needed to change vocational direction (37% strongly agreed). A further 17% of the respondents had an incomplete generalist arts or science degree as their first incomplete tertiary course. Of these, 40% had discontinued because they considered their university course to be insufficiently practical and 37% because they considered it to be not vocationally useful (p.69). Many of these students may have decided that to shift to TAFE to acquire needed vocational skills in a shorter less expensive program was preferable to undertaking post-graduate study in either the field of study of their undergraduate award or in a different field, or another university undergraduate qualification in a different but perhaps more vocationally relevant field. There is a demand for multi-skilling in a changing and highly competitive labour market and so a university graduate might see a shorter, cheaper VET course as an attractive avenue to develop relevant vocational skills. For those moving from university, TAFE was thus a particularly useful vocationally focussed destination for university graduates with general backgrounds as well as for those who had discontinued their university studies.

Millican (1995), in his Queensland study, found that the main reason for students with a complete or incomplete university qualification, enrolling in TAFE was to gain employment related skills.

Updating knowledge and skills was also important (pp.28-30). This focus seems to be a motivation for moving for students in some overseas countries. Trembath et al. (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). Walstab et al. (2001) reported on a study undertaken in 2000 in Victoria where it was concluded that, of those commencing students changing courses within six months of having received an offer for a tertiary education place, the direction of movement tended to be university to TAFE for reasons of perceived greater relevance to career needs of the changed course (pp.25-26). Hence, the vocational focus is a clear motivating factor.

In his study in South Australia Werner (1998) found that higher education graduates moved to TAFE for personal development, to gain practical skills not acquired at university and for interest or recreation (p.65). Half of the enrolling students agreed that increasing the chances of gaining employment, and almost 44% agreed that retraining for a different career were reasons for shifting (p.41). Females were significantly more likely than males to have moved to study their course for interest or recreation or to retrain for a different career while males were significantly more likely to have enrolled as a result of current employer demands (p.66). Further analysis, by categories of full-time, part-time employment, unemployed or not in the work force, revealed no significant differences between the categories for the two most popular reasons of personal development or gaining practical skills not obtained in higher education qualifications (p.66). However, those in part-time employment or not in the labour force were significantly more likely to have enrolled for interest or recreation than those in full-time employment or unemployed (p.66). Werner supported other research when he concluded that recent higher education graduates undertook studies in VET for employment related reasons, while also noting the importance of shifting for reasons of personal interest.

Golding and Volkoff (1999) undertook a major longitudinal study of the experiences of various groups of students in the VET sector. The interviewees included one who had commenced a university engineering degree, found it too theoretical and subsequently enrolled in an apprentice course in carpentry (p.98); several newly arrived migrants who had professional qualifications and were studying in VET to move to a new career in their new country (pp.148, 152) or to gain English language skills (pp.226,270); a person who was long term unemployed and undertaking VET studies as a preparation to enter a university nursing degree (p.363), and a prisoner with a university business qualification studying in a different field in VET so that on release from prison, he could move into a different career (p.413). These selections from their detailed study again highlight the importance of vocational related reasons for inter-sectoral movement. And this vocational focus is similar to reasons for people choosing to study in VET/further education, whether or not having had previous experience in higher education in for example, Britain, (Miller et al. 2001), Scotland (Connelly and Halliday 2001) or Australia (Maxwell et al. 2000).

Research conducted by Golding in Victoria in 1995 and reported in Golding et al. (1996) confirmed the earlier work. Students moving from higher education to TAFE (about half of whom, it was concluded, had a completed higher education qualification), were likely to be shifting in response to an immediate or anticipated need for skills which were frequently, but not always, vocational in character. Often they were complementing their university studies, particularly those who had engaged in generalist studies, with more practical skills in VET. Vocational motivations also played a strong role for students moving from TAFE to university. Golding et al. (1996) concluded that those going from TAFE to higher education were generally more interested in the qualification than skills, while those moving from higher education to TAFE were more interested in acquisition of new skills (p.14). Never the less, the vocational focus is a significant motivating factor. This was further supported in research by Trembath et al. (1996), into the experiences of TAFE students moving to higher education in two of Victoria's multi-sectoral institutions. They noted that most respondents enrolled to get a higher qualification not available at TAFE, to improve future employment prospects or for personal development (pp.21, 40). In fact, 80% undertook their university studies to enhance future employment prospects, for career development, to enhance prospects of promotion in their job or to improve the prospects of

increased financial reward (p.28). Almost 30% indicated that they undertook the university studies for personal development, to develop particular skills or to meet new people (p.29). But a university degree was seen as providing better job prospects and financial rewards (p.40)

Students move between sectors for a range of reasons but dominant among these is the importance of acquiring new knowledge, skills and qualifications to meet current and anticipated needs, which are frequently vocational in nature.

Transition issues for students moving between sectors

There has been considerable research into transition from one sector to another. Much of this 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 university studies (see for example, Parkinson et al. 1986; Vaala 1993; Hawke & Quirke 1996; Ramsay et al. 1997; Kintzer 1999; Haas 1999; Scott 2001).

Preparation for movement 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. This includes, for example, how to apply for admission, necessary prerequisites for an award which they wish to study, financial costs of undertaking such study, credit transfer possibilities and expectations of them in studying the course of their choice. However, it is clear that this information has not always been readily available and there is evidence that some of that which has been provided to applicants has been inaccurate.

Parkinson et al. (1986) reported from their national study that higher education institutions varied in the advice they gave to TAFE applicants and conflicting information about entry was often provided (p.136). Alba et al. (1993) noted from their New South Wales study that TAFE students seemed to have an inadequate understanding of university admission policies, although they seemed to be adequately prepared for university (p.14). Trembath et al. (1996) quoted a study by Ling and Devlin (1993) who investigated the experiences of students moving from TAFE to higher education and which supported findings of the inadequate provision of information prior to enrolling.

In a later 1996 New South Wales survey of TAFE diploma, associate diploma and advanced certificate students in their final semester, Cohen et al. (1997) found that many students obtained information on university entry from their TAFE lecturers (p.38). However, it was clear that there was a level of inadequacy and inaccuracy and in the university admission related information, including detail on credit transfer possibilities, which were provided (p.38). The authors concluded that TAFE students applying for university have difficulty in getting reliable information to assist them with their applications (p.12). Cameron et al. (2000), in a study on TAFE to university movement, argued that the TAFE sector needed to be aware that many TAFE students proceed to study at university and that they had to better prepare and inform them better for this transition (p.39). TAFE and universities needed to work together more closely. Conroy et al. (2000) reported from their research into TAFE business students moving to business/law studies in higher education at the same institution that TAFE staff recognised that TAFE had a role in preparing students for higher education studies.

The emphasis in these studies has been on VET to university movement. There is a dearth of research into provision of information to university students wishing to go on to VET although Conroy et al. (2000) and Golding (1995b) have stressed the importance of better informing these students. When VET is more widely seen by university staff as an appropriate post university destination, it is likely that more consideration will be given to adequately preparing and informing students about admission to, and studying in, that sector. Clearly there are issues about the

adequacy of transition information provided for movement into either sector from the other sector.

Credit transfer

The provision of credit for prior formal studies, particularly by higher education institutions, has been the subject of much research over the past two decades. Driving the needs for improvements here have been arguments centred around equity and efficiency issues, and over more recent years, in an era of award restructuring, the need for multi-skilling. As outlined earlier in this review, there have been significant advances in the area over the past 15 years. However, in a major national study undertaken prior to the development of a national policy framework, Parkinson et al. (1986) highlighted some of the concerns about credit transfer. They reported that there was a lack of recognition of TAFE courses, a lack of status given to students for prior TAFE studies by some higher education institutions and a lack of consistent policy in higher education institutions in making assessments for status (p.137). There was also a high frequency of TAFE graduates having to repeat work in higher education which had already been undertaken at TAFE, a requirement which placed a further financial burden on students and particularly those who were in receipt of a tertiary education assistance scheme (TEAS) allowance. Such students would be denied this allowance for work already completed in TAFE and which had to be repeated as part of a higher education qualification (p.137).

Subsequent research carried out in the 1990's has revealed progress, though repetition of work completed in the prior sector has continued to be a concern (Golding 1995b, p.18). This has been raised for a range of reasons including those related to efficiency. Burns (1997) quoted research from the early 1990's and concluded 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. Although she noted that there were deficiencies in the dissemination of information on credit transfer (pp.16, 22), a key information issue noted above. Alba et al. (1993) in research into the effectiveness of credit transfer arrangements in New South Wales, found that TAFE students seemed to have an inadequate understanding of university policies regarding credit transfer and that the amount of credit given for prior TAFE studies varied between universities (p.14). In contrast, in an examination of the experiences of TAFE students moving to university in 1994 and 1995 in two of Victoria's multi-sector universities, Trembath et al. (1996) reported that students generally found it easy to get information on articulation and credit transfer, with female respondents finding this easier than males (51% compared with 40% of males). Sixty-three percent agreed the articulation and credit transfer arrangements for their university course were appropriate (pp.19,20) Ramsay et al. (1997) in their South Australian study reported that 71% of the students were satisfied with the credit transfer process (p.98). Criticisms included inconsistencies in the amount of credit granted, duplication of work required when credit was not granted, lack of knowledge about the process by some staff, and the provision of unclear and inconsistent information about credit transfer (p.99). Cohen et al. (1997), in their New South Wales study in 1996, indicated that those diploma, associate diploma and advanced certificate students in their last semester at TAFE and responding to their survey often raised the appropriateness of credit transfer arrangements as a concern (p.xvii). Hence, despite much progress over recent years, there are some concerns over factors such as the adequacy of information and the appropriateness of credit transfer processes across the system.

As an outcome of his 1994 research in Victoria, Golding (1995b) reported that 40% of those with a TAFE background moving to university sought or were seeking credit compared with 19% of those with a university background who were moving to TAFE. For those in the former group, an average of 8% of the university award was awarded as credit for prior TAFE studies compared with an average of 4% of the TAFE course being awarded for prior university studies (p.19). If credit was awarded, however, those with a TAFE background moving to university and who were in this category were awarded, on average, credit for 22% of the university program, while those

shifting from university to TAFE and who received credit were awarded, on average, credit for 28% of the TAFE course. For both groups, a high 93% of those who sought credit gained some (p.19).

Subsequently, Golding et al. (1996) noted from further research undertaken in Victoria in 1995, that 13% of those going from university to TAFE had received some credit for their university studies while a much larger 63% of those shifting to university with a TAFE background had received some credit for prior TAFE studies (p.82). For the those moving from TAFE to university, of the students 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 (p.85). These are slightly different from the outcomes of credit applications in the earlier study above. Interestingly, the prospect of credit transfer was not an attraction for moving from one sector to another, particularly for those moving from university to TAFE, although 25% of those moving from TAFE to university found the prospect of credit an attraction (p.81). Burns (1997) reviewed early 1990's research and concluded that advanced standing for up to a third of a degree was commonly granted to those going from TAFE to university and who had applied for credit (p 16), an outcome confirmed by Ramsay et al. (1997) in their study of commencing students at the University of South Australia who had previously undertaken TAFE studies or had acquired learning outside the formal tertiary or secondary education sectors. From 1993 to 1996 there was a gradual increase in the amount of credit given on the basis of prior TAFE studies. Despite problems in the accuracy of recording credit data on the student information system, it was found that the most common amount of credit given to commencing undergraduates was approximately one year of the university degree (p.59). Further they reported that about half of the respondents to their survey on credit transfer processes indicated that they had applied for credit and of these, 65% expressed satisfaction with the amount of credit they had received (p.98).

Credit given by universities for prior TAFE studies tends to be for the higher level awards. In his 1994 Victorian study, Golding (1995b) reported that 67% of the credit given by universities for those with a TAFE background was for prior Associate Diploma studies, 19% was for Advanced Certificate studies and 10% for Certificate studies (p.19). Trembath et al. (1996) also noted that those respondents with prior TAFE studies at Associate Diploma level were found to have been more likely than those with lower level TAFE studies to have applied for and received credit for their TAFE studies (p.21). For those going from university to TAFE, 84% of credit given for prior university studies was for undergraduate degree studies (p.19). Eltis (2002) has also confirmed this awards focus for credit transfer activity (p.83).

However, not all students apply for credit. From his 1994 investigation Golding (1995b) found that reasons for this among TAFE students going on to university included a realisation that none of their prior TAFE studies would give them credit at university (46%), being prepared to repeat prior studies (14%) or being aware that credit was unavailable for their particular studies (14%). Ramsay et al. (1997) reported from their South Australian study, that about half of the students responding to their survey had applied for credit on the basis of previous TAFE studies and for those who had not applied, a common reason was because they believed that their previous TAFE studies did not have relevance to their university studies (p.98). Golding (1995b) noted that for those moving from university to TAFE, the main reasons for not applying for credit included a realisation that none of their prior university studies would give them credit (51%), being prepared to repeat prior studies (23%) and being unaware that they could apply for credit (16%) (p.19). The two main reasons for not applying were similar for each group and it is interesting to note the relatively high percentages, particularly among those with a university background moving to TAFE, who were prepared to repeat studies that had already been undertaken. This could be in part explained by Golding's finding that credit transfer was not seen as an important issue for most students moving in either direction (Golding 1995b, pp.10,19). Furthermore there is often a delay in movement between sectors and so students might find repetition of studies appropriate to refresh specific knowledge and skills.

There are still issues surrounding the credit transfer process, although important advances have been made in the last decade. However as Fooks (1997, p.2) has argued, countries such as Canada and the United States of America have made more progress in developing solutions to the issue of advanced standing in universities for prior VET level studies than has been the case in Australia. But many students moving inter-sectorally in either direction in Australia are satisfied with the credit transfer process and outcomes. For some the prospect of repeating studies in the sector to which they are shifting is not a major issue, for others it is a concern. Some feel adequate information is available while others are critical of this. There are varying views about consistency in application of policy and transparency of the process. Commonly, those who move and who apply for credit are awarded some and frequently for those going on to university, this is for higher level TAFE studies while for those moving to TAFE, this is for bachelors level studies.

Appropriateness of the teaching and learning environment in the new sector

Although efforts have been, and continue to be, made to ensure smooth pathways between the sectors, as has been shown from research studies cited above, students who move inter-sectorally often face significant challenges in the transition process. A key component of this process is the initial teaching and learning environment which they face as they commence their courses in a new sector. Parkinson et al. (1986) have highlighted several of the differences in study expectations in higher education compared with TAFE. They pointed to differences in teaching styles between the two sectors, differences in content of courses (the more theoretical nature of university courses) and the greater responsibility for management of their own learning in higher education, all factors seen to create difficulties for the transferring students (p.138).

In a later report Trembath et al. (1996) quoted a study by Ling and Devlin (1993) who investigated the experiences of students moving from TAFE to higher education and reported that, although there were differences in delivery between the two sectors, students felt that TAFE studies had been helpful in preparing them for university, a finding supported by Alba et al. (1993, p.14) and Golding et al. (1996, p.77). However, almost half thought that it was easier to learn and understand work in their prior TAFE studies than in their current university program (p.5), a point also made by Cameron et al. (2000) when they noted that those going from TAFE to university commonly found difficulties with the academic standards required of university studies (p.36). This may in large part have been because of the more practical underpinnings of the TAFE curriculum compared with the more theoretical basis in higher education.

Conroy et al. (2000) reported from a pathways project focussing on TAFE business students moving into university business/law programs at a Victorian multi-sectoral university that there was a major dysfunction between the theoretical and practical underpinnings of the university and TAFE curricula respectively (p.3). Moodie (2003) has confirmed these issues with the bases of curriculum. He identified a range of issues for students shifting from VET to higher education (p.5). He argued for example, that the implementation of Training Packages in VET has inhibited systematic efforts to map curricular from VET to higher education since the Packages are based on competencies. Industry takes a leading role in identifying these, (unlike the situation in some overseas countries such as Korea (Choi et al. 2001, pp104-105)), and then the workplace skills are assessed in the workplace/simulated workplace. Moodie proceeds to quote Wheelahan (2003) who argued that Training Packages do not develop knowledge that underpins all skills, including workplace skills. Skills such as learning how to learn are not developed nor are students' capacities in the areas of critical reflection (p.5), a view that is challenged (p.6). Furthermore statements of achievement related to Training Packages record only workplace skills assessed in a real or simulated workplace, a potential difficulty for universities in assessing TAFE studies as bases for admission. The emphasis on competencies rather than curriculum in VET is different from the curriculum bases in universities. This may present difficulties for students in adapting to university studies. Students moving from university to VET may similarly face difficulties in adapting to a competency-based approach (Golding 2001, pp.21-23)

Dickson (2000) analysed variables which impacted on the first year experiences of a group of TAFE Child Studies graduates who enrolled in an Early Childhood teacher education degree at a New South Wales university. It was noted that issues for these students included: differences in teaching styles between TAFE and university; the theoretical knowledge expected at university compared with the vocational knowledge required at TAFE; the higher academic standards and uncertainties of the level of expectations in higher education compared with TAFE; repetition of TAFE content; contrasts in staff student interactions and time management difficulties (p.2). Trembath et al. (1996) found in their study of two multi sectoral institutions in Victoria that 70% of those who shifted found the university program to be more theoretical, 80% found the university workload to be heavier than that at their prior TAFE studies. 59% found it harder to consult university lecturers/tutors and 38% found university work more difficult than they had expected. However, 63% reported that university assessment was appropriate (p.20). Many of these outcomes from research by Dickson and Trembath et al mirrored those highlighted by Parkinson et al. (1986).

From his 1994 Victorian study, Golding (1995b) reported that of students with a university background moving to TAFE, half of those who had an incomplete university qualification said their university course was unenjoyable or uninteresting and 44% said the mode of teaching had not suited them (p.6). Those going from TAFE to university with a complete TAFE qualification were less likely to have found previous TAFE studies unenjoyable or uninteresting, or that the TAFE teaching mode did not suit them. The most attractive aspects for those TAFE students moving to university were the more prestigious nature of a university qualification, better job prospects and the more intellectually stimulating nature of university study (p.18). Pitt (2001) supported this, in part noting that many students valued the VET sector for providing an alternative pathway to higher education (p.124). For university students going on to TAFE, Golding (1995b) identified the most attractive aspects as being the more practical nature of the TAFE course, the smaller, more personal TAFE classes and the financially less demanding nature of TAFE studies. The most unattractive aspects for the students going to university were the difficulty in coping with the amount and level of work, the large impersonal nature of university classes, and some repetition while, for those university students shifting to TAFE, the most unattractive aspects were the less prestigious nature of TAFE qualification, poorer campus life/facilities, lack of challenges and repetition of studies (p.18). Again repetition of prior completed studies was raised as a concern as were differences in work levels and expectations of students.

Some of the outcomes from this research by Golding were similar to those identified by Millican (1995) in his survey of 1993 Queensland TAFE students with a university background. He reported that 57% of the survey respondents rated their prior university teaching approaches, and 63% rated their TAFE teaching approaches, as good or very good (p.31). Werner (1998), meanwhile, in his South Australian investigation, noted that of those TAFE enrolments with a university background responding about their TAFE experience, 83% felt that contact with lecturers was appropriate, 77% felt that the challenges offered by the TAFE course were appropriate and most were happy with their course for example in respect to theoretical and practical balance (pp.67-68). Furthermore 78% agreed that the pacing of the TAFE course was appropriate and 75% were happy with the level of feedback on their progress. Interestingly, 83% were satisfied with the repetition in delivery (pp.48,51). Perhaps this was due to many of the students studying in a different field of study from their university studies. For the TAFE students with a university background, the most satisfying aspects of their prior university experience had been the quality of their course, personal satisfaction in completing their course and lecturer/tutor support, while the most satisfying aspects of their TAFE experience were the relevance of their course to employment, the quality of teaching and the quality of learning resources. The least satisfying aspects of their university experience were the quality of university teaching, excessive workloads and the rigidity in course approaches, while for TAFE these were the quality of teaching, excessive workloads and enrolment/admission procedures (p.33).

Students moving between sectors face numerous challenges in adapting to different teaching and learning environments. There are differences for example in underpinnings of curricular, assessment processes, expectations by staff, work/study requirements, teaching styles, facilities and support mechanisms. Given the magnitude of movement between sectors, processes need to be in place to ensure smooth pathways with adequate support for these students.

Summary

Cooperation and collaboration between the VET and higher education sectors has been evident over several decades. Initially much of this was between Technical and Further Education institutions and Colleges of Advanced Education and concentrated on articulation and credit transfer. Arrangements were on an institution to institution basis and as such were of a voluntary nature. There was no national policy framework until the late 1980's when the Federal Government introduced its higher education reform package creating the Unified National System of higher education. Growth, efficiency and equity objectives in particular drove policy in areas such as articulation and credit transfer. Universities were obliged to develop relevant policies with the focus being on movement from the VET sector to universities. Universities thus had a strong influence over policy development and implementation. At the time, consideration of movement from universities to the VET sector was of no apparent concern to policy makers.

However, in the early 1990s, in an environment of globalisation, restructuring, rapid economic, social and technological change and a growing emphasis on lifelong learning, more attention began to be paid to movement from the higher education to the VET sector, movement commonly referred to as "reverse articulation". In addition intra-sector transfer, concurrent enrolment in different sectors, and the role of secondary schools in VET provision gained more attention. Movement within and between sectors was acknowledged as complex. Simply considering "upwards movement" from VET to higher education employing a one way movement model was seen as inadequate. It was thought that a two-way model might better embrace the complexity of movement providing a framework within which, vertical, lateral, concurrent and multi-sectoral enrolment could be explained.

Researchers investigating student traffic between the two 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. Women, mature aged students in part-time study 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 is often to a different field of study while that from VET to university is often to the same or a similar field of study. This latter movement seems to be earlier and planned compared with those going on to VET. For both groups of students, business is a popular destination. Movement is often delayed and students frequently move for vocational reasons although personal interest is also important.

Students shifting inter-sectorally experience difficulties with the transition process. Frequently they do not have adequate or indeed accurate information on admission requirements. They encounter difficulties with, for example, expectations of them, different teaching styles, differences in workloads and assessment, differences in underpinnings of curricula and differences in facilities and support mechanisms. Further, 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. Factors such as these need to be addressed to promote seamless pathways between the VET and higher education sectors.

Appendix B: Questionnaire for higher education commencing students

UNIVERSITY OF SOUTH AUSTRALIA
CENTRE FOR RESEARCH IN EDUCATION, EQUITY AND WORK

INFORMATION SHEET FOR COMMENCING UNIVERSITY STUDENTS

Title of Project: **Student traffic: two-way movement between Vocational Education and Training and Higher Education**

Researchers: Dr Roger Harris, Dr R Sumner and Ms L Rainey
Centre for Research in Education, Equity and Work
University of South Australia, Holbrooks Road, Underdale, SA 5032
Phone: (08) 8302 6438; Email: linda.rainey@unisa.edu.au

We are writing to invite you to participate in the above research study. This research is being conducted by the University of South Australia as part of the National Research and Evaluation Committee (NREC) program of research.

It is an important study. It is designed to gather data on the extent and nature of the two-way movement of students between Vocational Education and Training (VET) and Higher Education. The findings will assist students and others in understanding transition between these sectors, as well as policy-makers and institutional leaders with insights into how best to position the relationship between Vocational Education and Training and Higher Education to the advantage of students with changing needs and expectations.

Participation in the study will involve you completing this questionnaire. The first question asks whether you have previously studied at a Vocational Education and Training institution (e.g. college of Technical and Further Education (TAFE) or some other training provider).

* If you have **not** studied in Vocational Education and Training, then you do not need to complete this questionnaire, and we thank you for your time.

* If you **have** studied in Vocational Education and Training, then we invite you please to answer the remaining questions. It should take you about 20 minutes.

All information collected which might identify you will remain confidential. All data collected during the study will be retained by the Centre for Research in Education, Equity and Work and will be stored for a period of seven years.

Information obtained during the study will be published. However, at no time will you be identified and any personal details you provide during the course of your participation will remain confidential.

The researchers will take every care to remove responses from any identifying material as early as possible. Likewise, individual responses will be kept confidential by the researchers and not be identified in the reporting of the research. However, the researchers cannot guarantee the confidentiality or anonymity of material transferred by email or the internet.

Participation in this study is voluntary. If you would like to participate, please complete the questionnaire and forward it directly to the researchers at the university in the reply paid envelope . If you have any further questions, please do not hesitate to contact one of us using the contact details above.

Alternatively, further information about your rights as a participant or any ethical concerns you may have about this project can be obtained by contacting the Executive Officer of the Human Research Ethics Committee at the University of South Australia, Ms Vicki Allen on tel: (08) 8302 3118, fax: (08) 8302 3921 or email: vicki.allen@unisa.edu.au

Roger Harris

Student Traffic: Two way movement between Vocational Education and Training & Higher Education
Questionnaire for 2003 commencing students at South Australian universities

Thank you for assisting with the 'Student Traffic' research project. Would you please answer the questions by ticking the appropriate box or entering text, as indicated. When you have completed the questionnaire, please follow the directions on the back page.

Previous Studies

1 Have you previously studied at an Australian Vocational Education & Training (VET) institution eg TAFE or some other training provider?

Please tick one box	
Yes	
No	

If 'no', there is no need to complete this questionnaire – thank you for your time.
If 'yes', please continue completing this questionnaire.

2 Would you please state the name of the Vocational Education & Training (VET) institution where you studied **most recently**.

Institution .....

3 What calendar year did you finish studying/last study at this most recent VET institution?

4 At this most recent VET institution, were you enrolled in the **whole** course or in **part** of the course/**modules** only?

	Please tick one box
Whole course? (tick box and go to question 5)	
Part of the course/modules? (tick box and go to question 10)	

5 If you selected 'whole course' in the previous question, did you complete this course?

	Please tick one box	
If 'yes', tick box and go to question 6	Yes	
If 'no', tick box and go to question 7	No	

6 If you completed this most recent course, please state year of completion, then go to question 10.

7 If you did **not** complete this most recent course, what is your status on this course?

	Please tick one box then to to quest^{n} 10
Currently enrolled?	
Failed/unsuccessful?	
Withdrew? Tick box and go to question 8	
Just incomplete?	

8 If you withdrew from this most recent course, what was your main reason for withdrawing?

	Please tick one box then to to quest^{n} 10
To start a job/work longer hours in an existing job	
To take up an offer at a university	
The course didn't fit in with my career plans	
I didn't enjoy the course	
Because of personal/family difficulties	
Other (tick box then to question 9)	

9 If your main reason for withdrawing from this most recent course is **not** listed above, please state below your reason for withdrawing.

……

……

10 What was the level of this most recent course/modules?

	Please tick one box then go to quest^{n} 12
Advanced Diploma	
Diploma	
Associate Diploma	
Advanced Certificate	
Certificate	
Other (tick box then go to question 11)	

11 What was the level of this most recent course/module, if **not** listed above?

……

12 What was the broad field of study of this most recent course/module?

	Please tick one box Then go to quest^{n} 14
Land & marine resources, animal husbandry	
Architecture, building	
Arts, humanities & social sciences	
Business, administration, economics	
Education	
Engineering, surveying	
Health, community services	
Law, legal studies	
Science	
Veterinary science, animal care	
Services, hospitality, transportation	
Tafe multi-field education	
Not sure (tick box and go to question 13)	

13 If you are unsure about the field of study of this most recent course, please state name of course/module.

……

14 Was this most recent course also the highest level Vocational Education and Training course you have studied?

If 'yes', tick box and go to question 17

Please tick one box	
Yes	
No	

15 If this most recent course was not the highest level Vocational Education and Training course you have studied, please name the highest.

.....

16 Did you complete the highest level course you described in question 15?

Please tick one box	
Yes	
No	

17 Some people have studied at more than one previous institution. As we are researching all two way movement between Vocational Education and Training (VET) and Higher Education (HE), could you please give

- a chronological **list** of all VET and HE institutions at which you have studied (whether or not you completed the course/award) and, if possible,
- the calendar **year** you last studied at that institution eg 1999

	Please tick one box		
Name of institution	VET	HE	Last year of study

Current Studies

18 What is the level of your current university award program?

	Please tick one box then go to quest^{n} 20
Bachelor's Degree	
Advanced Diploma	
Diploma	
Other (please tick and go to question 19)	

19 If the level of your current university award program is not listed above, please state the level of your current award here.

.....

20 What is the broad field of study/education of the university award program in which you are currently enrolled?

	Please tick one box then go to question 22
Natural & Physical Sciences	
Information Technology	
Engineering & Related Technologies	
Architecture & Building	
Agriculture, Environmental & Related Studies	
Health	
Education	
Management & Commerce	
Society & Culture	
Creative Arts	
Food, Hospitality & Personal Services	
Mixed Field	
Non-award	
Not sure (please tick box then go to question 21)	

21 If you are unsure about the field of study of your current award program, please state name of award here. Otherwise go to question 22.

……

22 In your current award program, are you enrolled full time or part time?

	Please tick one box
full-time	
part-time	

23 Were you admitted to your current award program on the basis of prior Vocational Education and Training studies (either complete or incomplete)?

Please tick one box	
Yes	
No	
Unsure	

24 Did you apply for credit for previous Vocational Education and Training studies in your current award program?

If 'no' please tick box and go question 27

Please tick one box	
Yes	
No	

25 If you applied for credit, for approximately what percentage of your current award program did you get credit?

	Please tick one box
None	
1-9%	
10-24%	
25-49%	
50% or more	
don't know	

26 If you got status in your current award program. was this on the basis of your most recent Vocational Education and Training study?

	Please tick one box
yes	
no	
some was	
don't know	

Your transition to further study

There are many **reasons for choosing** to undertake further study. In questions 27-46 we list some of those reasons. Please indicate your level of agreement with each of these.

	I enrolled in my current award program ...	Please tick one box for each question					
		strongly agree	agree	neutral	disagree	strongly disagree	not applicable
27	...for personal interest, development or recreation						
28	...to improve my English language skills						
29	...to be eligible for financial assistance (eg Austudy, Abstudy)						
30	...to fill time, meet people or be with friends						
31	...to be eligible to apply for permanent residency status						
32	...to refresh my study skills after a period out of education						
33	...to get a vocationally specialised education						
34	...to get a broad education						
35	...to gain or improve my practical skills						
36	...to get a prestigious qualification						
37	...to update my previous qualification						
38	...to improve my employment prospects						
39	...to improve my career prospects in my current field						
40	...to retrain for a different career						
41	...to qualify for workforce re-entry after a period out of the workforce						
42	...to fulfil a requirement for another award/course						
43	...to please my family						
44	...because I was advised to by someone I respected						
45	...because it was required by my employer						
46	...because I could get status for my previous qualification						
47	Is there another important reason for choosing to undertake your current award program, not mentioned above? If so, please state below						

A number of issues influence people when choosing to undertake further study. We have listed some of these issues in questions 48-63 and ask you to indicate how easy or difficult you found each of these.

	When making your decision to undertake your current award program, how easy/difficult did you find ...	Please tick one box for each question					
		very easy	fairly easy	neutra	fairly difficult	very difficult	not applicabl
48	... getting careers guidance to help you make a decision?						
49	... meeting the entry requirements for the award program?						
50	... getting your prior qualifications recognised?						
51	... having sufficient income to study?						
52	... paying HECS and other fees?						
53	... making changes in your life so that you had enough time to study?						
54	... finding an the award program you wanted to do close to home?						
55	... getting adequate information about this award program?						
56	... getting adequate information about the employment prospects of this award program?						
57	... getting your employer's support to study?						
58	... getting your family's agreement to you undertaking this award program?						
59	... doing something different to your friends?						
60	... having the confidence to undertake further study?						
61	... going through the application process?						
62	... getting advice from staff at the current institution?						
63	Is there another important issue you found easy/difficult when making the decision to undertake your current award program, not mentioned above? If so, please state below.						

64 Did the publicity about this award program make you feel that your reasons for choosing it would be met?

Please tick one box	
Yes	
No	
Don't know	

65 At this stage of your study, how confident are you that your reasons for choosing this award program will be me

Please tick one box				
very confident	fairly confident	neutral	not very confident	not at all confident

How similar or different are each of the following **aspects** of your current Higher Education (HE) educational experience compared with that at Vocational Education and Training (VET) institution at which you studied most recently?

	How similar is your current HE institution to the VET institution at which you studied most recently ….	Please tick 1 box for each question					
		very similar	fairly similar	about the same	fairly different	very different	not applicable
66	… in respect to assessment processes?						
67	… in respect to teaching style?						
68	… in respect to class size?						
69	… in respect to institutional climate?						
70	… in respect to the structure of the course/award?						
71	… in respect to the amount of work in the course/award?						
72	… in respect to the level of work in the course/award?						
73	… in respect to practical content?						
74	… in respect to theoretical content?						
75	… in respect to the cost of studying?						
76	… in respect to the provision of support services and facilities?						
77	Is there some other significant way in which your current HE experience and that at the VET institution at which you studied most recently are **similar**? If so, please state below. …… ……						
78	Is there some other significant way in which your current HE experience and that at the VET institution at which you studied most recently are **different**? If so, please state below. …… ……						

79 How comfortable do you feel with moving from the Vocational Education and Training sector to the Higher Education sector?

Please tick one box				
very comfortable	fairly comfortable	neutral	fairly uncomfortable	very uncomfortable

80 In relation to your studies at the most recent Vocational Education and Training (VET) institution you attended, when did you decide you would study at a Higher Education institution

	Please tick one box
Before starting your most recent VET course/part course/modules?	
During your most recent VET course/part course/modules?	
After finishing your most recent VET course/part course/modules?	
Don't know?	

Section 4 About you

81 What is your gender?

	Please tick one box
Male	
Female	

82 What is your age group (in years)?

	Please tick one box
under 19	
20-24	
25-29	
30-34	
35-44	
45-54	
55-64	
65 or over	

83 In terms of nationality – are you Australian?

	Please tick one box
Yes (please tick box and go to question 85)	
No	

84 If not Australian, would you please state your nationality? ,,,

85 What is the postcode of your current home address?

86 What year did you leave secondary school?

87 Did you undertake any Vocational Education and Training studies while at secondary school?

Please tick one box	
Yes	
No	

88 What is your current employment status?

	Please tick one box
Employed full time	
Employed part time	
Casual employment	
Not employed	

89 Approximately how many years of equivalent full-time employment experience do you have?

	Please tick one box
0-5 years	
6-10 years	
11-15 years	
16-20 years	
more than 20 years	

Section 5 Additional Comments

90 You may feel there is some additional comment you would like to make about your experience of moving between the Vocational Education & Training sector and the Higher Education sector – please make any such comments below.

91 We may find it useful to discuss some of the issues raised by this survey with interested students. If you would be willing for us to contact you on any issue relating to this topic, would you please give us your contact details below?

E-mail .....

Phone .....

Thank you for completing this survey. Your contribution will help us get a clear picture of this important topic. Would you please place it in the **reply paid envelope** supplied and return to

Centre for Research in Education, Equity and Work (CREEW)
Student Traffic Project
University of South Australia
Building C, Underdale campus
Holbrooks Road
Adelaide 5032

By Monday 8 September 2003

Appendix C: Questionnaire for vocational education and training commencing students

UNIVERSITY OF SOUTH AUSTRALIA
CENTRE FOR RESEARCH IN EDUCATION, EQUITY AND WORK

INFORMATION SHEET FOR COMMENCING VOCATIONAL EDUCATION AND TRAINING STUDENTS

Title of Project: **Student traffic: two-way movement between Vocational Education and Training and Higher Education**

Researchers: Dr Roger Harris, Dr Robert Sumner and Ms Linda Rainey
Centre for Research in Education, Equity and Work
University of South Australia, Holbrooks Road, Underdale, SA 5032
Phone: (08) 8302 6438; Email: linda.rainey@unisa.edu.au

We are writing to invite you to participate in the above research study. This research is being conducted by the University of South Australia as part of the National Research and Evaluation Committee (NREC) program of research.

It is an important study. It is designed to gather data on the extent and nature of the two-way movement of students between Higher Education and Vocational Education and Training. The findings will assist students and others in understanding transition between these sectors, as well as policy-makers and institutional leaders with insights into how best to position the relationship between Higher Education and Vocational Education and Training to the advantage of students with changing needs and expectations.

Participation in the study will involve you completing this questionnaire. The first question asks whether you have **previously studied** at Higher Education institution (e.g. university, college of advanced education, teachers' college).

* If you have **not** studied in Higher Education, then you do not need to complete this questionnaire, and we then thank you for your time.

* If you **have** studied in Higher Education, then we invite you please to answer the remaining questions. It should take you about 20 minutes.

All information collected which might identify you will remain confidential. All data collected during the study will be retained by the Centre for Research in Education, Equity and Work and will be stored for a period of seven years.

Information obtained during the study will be published. However, at no time will you be identified and any personal details you provide during the course of your participation will remain confidential.

The researchers will take every care to remove responses from any identifying material as early as possible. Likewise, individual responses will be kept confidential by the researchers and not be identified in the reporting of the research. However, the researchers cannot guarantee the confidentiality or anonymity of material transferred by email or the internet.

Participation in this study is voluntary. If you would like to participate, please complete the questionnaire and forward it directly to the researchers at the university in the reply paid envelope. If you have any further questions, please do not hesitate to contact one of us using the contact details above.

Alternatively, further information about your rights as a participant or any ethical concerns you may have about this project can be obtained by contacting the Executive Officer of the Human Research Ethics Committee at the University of South Australia, Ms Vicki Allen on tel: (08) 8302 3118, fax: (08) 8302 3921 or email: vicki.allen@unisa.edu.au

Roger Harris

Student Traffic: Two way movement between Vocational Education and Training & Higher Education

Questionnaire for 2003 commencing students at South Australian institutions of Vocational Education and Training

Thank you for assisting with the 'Student Traffic' research project. Would you please answer the questions by ticking the appropriate box or entering text, as indicated. When you have completed the questionnaire, please follow the directions on the back page.

Previous Studies

1 Have you previously studied at an Australian Higher Education (HE) institution eg University, Institute of Technology, College of Advanced Education, Teachers' College?

Please tick one box	
Yes	
No	

If 'no', there is no need to complete this questionnaire – thank you for your time.
If 'yes', please continue completing this questionnaire.

2 Would you please state the name of the Higher Education institution where you studied **most recently**.

Institution .....

3 What calendar year did you finish studying/last study at this most recent HE institution?

4 What was the name of this Higher Education award program you studied most recently?

Award.....

5 Did you complete this most recent award program?

If 'yes', tick 'yes' box then go to question 6
If 'no,' tick 'no' box and go to question 7

Please tick one box	
Yes	
No	

6 If you completed this most recent award program, please state year of completion, then go to question 10.

7 If you did **not** complete this most recent award program, what is your status on this award program?

	Please tick one box then go to quest^{n} 10
Currently enrolled?	
Failed/unsuccessful?	
Withdrew? (Tick box and go to question 8)	
Just incomplete?	

8 If you withdrew from this most recent award program, what was your main reason for withdrawing?

	Please tick one box then go to quest^{n}10
To start a job/work longer hours in an existing job	
To take up an offer at a Vocational Education and Training institution	
The award program didn't fit in with my career plans	
I didn't enjoy the award program	
Because of personal/family difficulties	
Other (tick box then go to question 9)	

9 If your main reason for withdrawing from this most recent award program is **not** listed above, please state below your reason for withdrawing

……

……

10 What was the level of this most recent award program?

	Please tick one bo ther go to quest^{n} 12
Bachelor's Degree	
Advanced Diploma	
Diploma	
Associate Diploma	
Other (please tick then go to question 11)	

11 What was the level of this most recent award program, if **not** listed above?

……

12 What was the broad field of study of this most recent award program?

	Please tick one box then go to quest^{n} 14
Natural & Physical Sciences	
Information Technology	
Engineering & Related Technologies	
Architecture & Building	
Agriculture, Environmental & Related Studies	
Health	
Education	
Management & Commerce	
Society & Culture	
Creative Arts	
Food, Hospitality & Personal Services	
Mixed Field	
Non-award	
Not sure (please tick box then go to question 13)	

13 If you are unsure about the field of study of this most recent award program, please state name of award.

……

14 Was this most recent award program also the highest level Higher Education award program you have studied?

If 'yes', tick box and go to question 17

Please tick one box	
Yes	
No	

15 If this most recent award program was not the highest level Higher Education award you have studied, please name the highest.

……

16 Did you complete the highest level award program you described in question 15?

Please tick one box	
Yes	
No	

17 Some people have studied at more than one previous institution. As we are researching all two way movement between Vocational Education and Training (VET) and Higher Education (HE), could you please give

- a chronological **list** of all VET and HE institutions at which you have studied (whether or not you completed the course/award) and, if possible,
- the calendar **year** you last studied at that institution eg 1999

	Please tick one box For each institution		
Name of institution	VET	HE	Last year of study

Section 2 Current Studies

18 What is the level of your current Vocational Education and Training course?

	Please tick one box then go to quest^{n}20
Advanced Diploma	
Diploma	
Associate Diploma	
Advanced Certificate	
Certificate	
Other (please tick and go to question 19)	

19 If the level of your current course is not listed above, please state the level of your current VET course here.

……

20 What is the broad field of study/education of the Vocational Education and Training course in which you are currently enrolled?

	Please tick one box Then go to question 22
Land & marine resources, animal husbandry	
Architecture, building	
Arts, humanities & social sciences	
Business, administration, economics	
Education	
Engineering, surveying	
Health, community services	
Law, legal studies	
Science	
Veterinary science, animal care	
Services, hospitality, transportation	
Tafe multi-field education	
Not sure (please tick box then go to question 21)	

21 If you are unsure about the field of study of your current course, please state name of course here. Otherwise go to question 22.

……

22 In your current Vocational Education and Training course, are you enrolled full time or part time?

	Please tick one box
full-time	
part-time	

23 Were you admitted to your current Vocational Education and Training course on the basis of prior Higher Education studies (either complete or incomplete)?

Please tick one box	
Yes	
No	
Unsure	

24 Did you apply for credit for previous Higher Education studies in your current VET course?

If 'no', please tick box and go question 27

Please tick one box	
Yes	
No	

25 If you applied for credit, for approximately what percentage of your current VET course did you get credit?

	Please tick one box
None	
1-9%	
10-24%	
25-49%	
50% or more	
don't know	

26 If you got status in your current course. was this on the basis of your most recent Higher Education study?

	Please tick one box
yes	
no	
some was	
don't know	

Your transition to further study

There are many **reasons for choosing** to undertake further study. In questions 27-46 we list some of those reasons. Please indicate your level of agreement with each of these.

	I enrolled in my current Vocational Education and Training course …	Please tick one box for each question					
		strongly agree	agree	neutral	disagree	strongly disagree	not applicable
27	…for personal interest, development or recreation						
28	…to improve my English language skills						
29	…to be eligible for financial assistance (eg Austudy, Abstudy)						
30	…to fill time, meet people or be with friends						
31	… *(question deleted)*						
32	…to refresh my study skills after a period out of education						
33	…to get a vocationally specialised education						
34	…to get a broad education						
35	…to gain or improve my practical skills						
36	…to get a prestigious qualification						
37	…to update my previous qualification						
38	…to improve my employment prospects						
39	…to improve my career prospects in my current field						
40	…to retrain for a different career						
41	…to qualify for workforce re-entry after a period out of the workforce						
42	…to fulfil a requirement for another course/award						
43	…to please my family						
44	…because I was advised to by someone I respected						
45	…because it was required by my employer						
46	…because I could get status for my previous qualification						
47	Is there another important reason for choosing to undertake your current course, not mentioned above? If so, please state below …… ……						

A number of issues influence people when choosing to undertake further study. We have listed some of these issues in questions 48-63 and ask you to indicate how easy or difficult you found each of these.

	When making your decision to undertake your current Vocational Education and Training course, how easy/difficult did you find ...	Please tick one box for each question					
		very easy	fairly easy	neutra	fairly difficult	very difficult	not applicabl
48	... getting careers guidance to help you make a decision?						
49	... meeting the entry requirements for the course?						
50	... getting your prior qualifications recognised?						
51	... having sufficient income to study?						
52	... paying the fees?						
53	... making changes in your life so that you had enough time to study?						
54	... finding a course you wanted to do close to home?						
55	... getting adequate information about this course?						
56	... getting adequate information about the employment prospects of this course?						
57	... getting your employer's support to study?						
58	... getting your family's agreement to you undertaking this course?						
59	... doing something different to your friends?						
60	... having the confidence to undertake further study?						
61	... going through the application process?						
62	... getting advice from staff at the current institution?						
63	Is there another important issue you found easy/difficult when making the decision to undertake your current course, not mentioned above? If so, please state below.						

64 Did the publicity about this Vocational Education and Training course make you feel that your reasons for choosing it would be met?

Please tick one box	
Yes	
No	
Don't know	

65 At this stage of your study, how confident are you that your reasons for choosing this VET course will be met?

Please tick one box				
very confident	fairly confident	neutral	not very confident	not at all confident

How similar or different are each of the following **aspects** of your current Vocational Education and Training educational experience compared with that at the Higher Education institution at which you studied most recently?

	How similar is your current VET institution to the HE institution at which you studied most recently ….	Please tick 1 box for each question					
		very similar	fairly similar	about the same	fairly different	very different	not applicable
66	… in respect to assessment processes?						
67	… in respect to teaching style?						
68	… in respect to class size?						
69	… in respect to institutional climate?						
70	… in respect to the structure of the course/award?						
71	… in respect to the amount of work in the course/award?						
72	… in respect to the level of work in the course/award?						
73	… in respect to practical content?						
74	… in respect to theoretical content?						
75	… in respect to the cost of studying?						
76	… in respect to the provision of support services and facilities?						
77	Is there some other significant way in which your current VET experience and that at the HE institution at which you studied most recently are **similar**? If so, please state below.						
78	Is there some other significant way in which your current HE experience and that at the VET institution at which you studied most recently are **different**? If so, please state below.						

79 How comfortable do you feel with moving from the Higher Education sector to the Vocational Education and Training sector?

Please tick one box				
very comfortable	fairly comfortable	neutral	fairly uncomfortable	very uncomfortable

80 In relation to your studies at the most recent Higher Education institution you attended, when did you decide you would study at a Vocational Education and Training institution

	Please tick one box
Before starting your most recent Higher Education award program?	
During your most recent Higher Education award program?	
After finishing your most recent Higher Education award program	
Don't know	

Section 4 About you

81 What is your gender?

	Please tick one box
Male	
Female	

82 What is your age group (in years)?

	Please tick one box
under 19	
20-24	
25-29	
30-34	
35-44	
45-54	
55-64	
65 or over	

83 In terms of nationality – are you Australian?

	Please tick one box
Yes (please tick box and go to question 85	
No	

84 If not Australian, would you please state your nationality? ,,,

85 What is the postcode of your current home address?

86 What year did you leave secondary school?

87 Did you undertake any Vocational Education and Training studies while at secondary school?

Please tick one box	
Yes	
No	

88 What is your current employment status?

	Please tick one box
Employed full time	
Employed part time	
Casual employment	
Not employed	

89 Approximately how many years of equivalent full-time employment experience do you have?

	Please tick one box
0-5 years	
6-10 years	
11-15 years	
16-20 years	
more than 20 years	

Section 5 Additional Comments

90 You may feel there is some additional comment you would like to make about your experience of moving between the HE sector and the Vocational Education & Training sector – please make any such comments below.

91 We may find it useful to discuss some of the issues raised by this survey with interested students. If you would be willing for us to contact you on any issue relating to this topic, would you please give us your contact details below?

E-mail .....

Phone .....

Other .....

Thank you for completing this survey. Your contribution will help us get a clear picture of this important topic. Would you please place it in the **reply paid envelope** supplied and return to

Centre for Research in Education, Equity and Work (CREEW)
Student Traffic Project
University of South Australia
Building C , Underdale campus
Holbrooks Road, Adelaide

By Monday 6 October 2003

Appendix D: Profile of students moving in either direction between the higher education and vocational education and training sectors

Data on commencing vocational students with higher education achievement who had moved to the VET sector and commencing undergraduate students in the higher education sector who had VET experience were obtained from NCVER and 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 2001 inclusive. Subsequently as the research project was nearing completion, 2002 data became available and was incorporated into the analysis. Stream of study was sought for VET students but this was unavailable for the six-year period. DEST 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 has been noted in the literature review, data quality issues arise at times. 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 most acceptable for this current analysis.

Commencing vocational education and training students with prior higher education achievement

Gender of VET commencing vocational students with prior higher education achievement

Table 4 shows the gender of VET commencing vocational students with prior higher education achievement (excluding full fee paying overseas students).

Table 4: VET students with prior higher education achievement

Vocational education commencing students (excluding FPOS) with prior higher education achievement, by gender

	1997	%	1998	%	1999	%	2000	%	2001	%	2002	%
					South Australia							
Male	1666	43.4	1805	43.9	1928	43.6	1731	39.9	2161	44.2	2420	45.7
Female	2174	56.6	2304	56.1	2495	56.4	2602	60.0	2726	55.9	2877	54.3
Total	**3,840**		**4,109**		**4,425**		**4,335**		**4,887**		**5,299**	
					Australia							
Male	26088	45.5	28126	44.5	31631	42.8	30315	41.5	30458	42.3	32330	44.0
Female	31230	54.5	35095	55.5	42244	57.1	42621	58.4	41492	57.6	41092	55.9
Total	**57,330**		**63,270**		**73,968**		**73,037**		**72,017**		**73,492**	

Note: In 1999, 2000 and 2002 for South Australia and for all years for Australia, gender was not given on a small number of student records

In both South Australia and nationally, females were consistently more highly represented than males. Female students comprised 56.6% of the cohort in South Australia in 1997 increasing to 60% in 2000 before declining to 54.3% in 2002. For Australia, females represented 54.5% in 1997 and 55.9% in 2002. This higher proportion of females among the VET cohorts is consistent with the outcomes of research studies cited in the literature review.

Age grouping of VET commencing vocational students with prior higher education achievement

Table 5 shows the age group distribution of VET commencing vocational students with prior higher education achievement (excluding full fee paying overseas students).

Table 5: VET students with prior higher education achievement

Vocational education commencing students (excluding FPOS) with prior higher education achievement, by age group

Age Group (years)	1997	%	1998	%	1999	%	2000	%	2001	%	2002	%
						South Australia						
<20	36	1.0	32	0.8	36	0.8	47	1.1	60	1.2	54	1.0
20 - 24	468	12.2	479	11.7	662	15.0	632	14.6	568	11.6	582	11.0
25 - 29	550	14.3	641	15.6	678	15.3	729	16.8	798	16.4	840	15.9
30 - 34	460	12.0	561	13.7	545	12.3	548	12.6	671	13.7	738	13.9
35 - 39	580	15.1	583	14.2	600	13.6	540	12.5	706	14.4	671	12.7
40 - 44	662	17.2	693	16.9	660	14.9	601	13.9	656	13.4	698	13.2
45 - 49	554	14.4	530	12.9	564	12.7	504	11.6	567	11.6	723	13.6
50 - 54	324	8.4	340	8.3	391	8.8	373	8.6	426	8.7	513	9.7
55 - 59	109	2.8	152	3.7	154	3.5	172	4.0	251	5.1	325	6.1
60 & 0ver	58	1.5	75	1.8	109	2.5	160	3.7	147	3.0	129	2.4
Unknown	39	1.0	10	0.2	26	0.6	29	0.7	37	0.8	26	0.5
Total	**3,840**	**99.9**	**4,109**	**99.8**	**4,425**	**100**	**4,335**	**100.1**	**4,887**	**99.9**	**5,299**	**100**
						Australia						
<20	369	0.6	436	0.7	442	0.6	464	0.6	322	0.4	793	1.1
20 - 24	6764	11.8	7141	11.3	8194	11.1	7349	10.1	6789	9.4	7420	10.1
25 - 29	9426	16.4	11225	17.7	12931	17.5	12099	16.6	11737	16.3	11808	16.1
30 - 34	8518	14.9	9030	14.3	10661	14.4	10663	14.6	10868	15.1	11276	15.3
35 - 39	8578	15.0	9373	14.8	10739	14.5	10311	14.1	9972	13.8	9741	13.3
40 - 44	7986	13.9	9119	14.4	10464	14.1	10064	13.8	9666	13.4	9657	13.1
45 - 49	6056	10.6	7283	11.5	8541	11.5	8823	12.1	8616	12.0	8656	11.8
50 - 54	3572	6.2	4730	7.5	5664	7.7	6087	8.3	6168	8.6	6118	8.3
55 - 59	1682	2.9	2167	3.4	2808	3.8	3195	4.4	3520	4.9	3820	5.2
60 & over	1226	2.1	1622	2.6	2489	3.4	2885	4.0	3145	4.4	3227	4.4
Unknown	3153	5.5	1064	1.7	1035	1.4	1097	1.5	1214	1.7	976	1.3
Total	**57,330**	**99.9**	**63,270**	**99.9**	**73,968**	**100**	**73,037**	**100.1**	**72,017**	**100.2**	**73,492**	**100**

Over the six-year period in South Australia and Australia, close to 30% of the students were less than 30 years of age, and in each year, over 50% were in the 30 to 49 year age group. Hence over the period, the large majority of the VET cohorts were in the 30+ year age group.

Field of study/education destinations of VET commencing vocational students with prior higher education achievement

Tables 6a and 6b show the field of study destinations of students in the annual cohorts from 1997 to 2001 and the field of education destinations for 2002 when the new classification was reported. As has been identified in other research studies, Business related studies were popular destinations. In South Australia, this field accounted for around one quarter of enrolments. Nationally, while in 1997 and 1998, almost 27% were enrolled in these fields, the proportion, while still the largest among all fields, declined to almost 22% in 2001 before increasing to around 24% in 2002. Nationally, between 10% and 14% of the students were enrolled in Arts, Humanities & Social Sciences or Society & Culture each year, with the proportion slowly increasing from 1998. For South Australia, annual percentages in this field have been lower than the national figures, but nevertheless have grown from about 5% in 1997 to around 9% in 2002.

Health & Community Services enrolments in South Australia increased to over 8% in 2001, while nationally, although fluctuating, showed overall growth to a similar level by 2001. In 2002, national enrolments in Health represented 6% of the cohort compared with 4.6% in South Australia. The proportion of students in the field of Education in South Australia was reasonably large in 1997 at 14.2%, but had effectively halved by 2001 before increasing to almost 10% in 2002. This contrasts with the national scene where in 1997, the proportion of students here comprised half those in the field in South Australia in that year, but by 2002 enrolments had risen to over 9% and were a similar proportion to those in South Australia. These state and national trends were reversed in the field of Engineering & Surveying. In South Australia in 2001, the proportion was over 11%, ie., more than double the proportion in 1997. However, nationally there was a decline over the period from almost 9% to below 7%. In 2002 in South Australia, the proportion in Engineering & Related Technologies was at almost 14% compared with 11% Australia-wide.

Nationally, enrolments in Science increased annually from around 8% in 1997 to just over 12% in 2001 while in South Australia, after an initial increase to almost 9% in 1998, there was a fall to about half this level by 2001. In Agriculture, Environmental & Related Studies, the proportion of students was around 7% in South Australia and 6% nationally. Services, Hospitality & Transportation enrolments in South Australia have followed a similar pattern to those in Science. These were at 4% in 1997, grew to over 7% in 1998 before declining to around 5% by 2001. Nationally the proportion increased from 8% in 1997 to over 10% in 2000 before also dropping to 7% in 2001. Food, Hospitality and Personal enrolments were at almost 4% Australia-wide and 2.5% in South Australia in 2002. VET multi-field education in South Australia has attracted consistently high student numbers, ranging from over 29% in 1997 to around 22% in 2001, and these have been significantly greater than the proportion of national enrolments in this field in these years. This is also the case for Mixed Field Programmes in 2002. Nationally in that year, the proportion of students in Information Technology was almost double that for South Australia while the reverse was the case for Creative Arts.

Architecture & Building had small enrolments with the proportions being similar at both the beginning and end of the six-year period in South Australia and nationally. For Land & Marine Resources & Animal Husbandry, the proportion increased to over 5% in South Australia and to almost 6% nationally by 2001. Student numbers in the fields of Veterinary Science & Animal Care and Law & Legal Studies were very small in the five-year period, as they were for Natural & Physical Science in 2002.

Those fields where there was general growth in the proportion of the annual cohorts over the period 1997 to 2001 in South Australia were Land & Marine Resources & Animal Husbandry, Arts Humanities & Social Sciences, Engineering & Surveying, Health & Community Services, Law & Legal Studies and Services, Hospitality & Transportation. Three of these fields, namely Land & Marine Resources & Animal Husbandry, Arts Humanities & Social Sciences and Health & Community Services were also fields to experience national growth. Others to experience growth nationally were Education, Science and Veterinary Science & Animal Care.

In 1997 in South Australia, the five most popular fields of study destinations were VET Multi-field Education, Business, Administration & Economics, Education, Science and Health & Community Services. Nationally these were Business, Administration & Economics, VET Multi-field Education, Arts Humanities & Social Sciences, Engineering & Surveying and Science. In 2001 in South Australia the first two most popular fields were as for 1997 but with a reversal in popularity, followed by Engineering & Surveying, Health & Community Services and Education while nationally these were Business Administration & Economics, Arts Humanities & Social Sciences, Science, VET Multi-field Education and Education. In 2002, the most popular fields of education in South Australia and nationally were Management & Commerce, Mixed Field Programmes, Engineering & Related Technologies, Education and Society & Culture. Over the six-year period, the Business related studies fields have consistently been the most attractive destinations. VET Multi-field Education and Mixed Field Programmes have also been popular. Arts and Science related fields have appealed, particularly Australia-wide, while towards the end of the period, Education has been attractive in South Australia and also nationally.

Table 6a: VET students with prior higher education achievement

Vocational education commencing students (excluding FPOS) with prior higher education achievement, by field of study

	1997	%	1998	%	1999	%	2000	%	2001	%
						South Australia				
Land and Marine Resources, Animal Husbandry	165	4.3	177	4.3	217	4.9	243	5.6	269	5.5
Architecture, Building	113	2.9	161	3.9	90	2.0	121	2.8	126	2.6
Arts, Humanities and Social Sciences	177	4.6	232	5.6	271	6.1	418	9.6	325	6.7
Business, Administration, Economics	986	25.7	955	23.2	1129	25.5	990	22.8	1177	24.1
Education	546	14.2	471	11.5	321	7.3	326	7.5	385	7.9
Engineering, Surveying	164	4.3	154	3.7	396	8.9	447	10.3	560	11.5
Health, Community Services	180	4.7	261	6.4	324	7.3	395	9.1	405	8.3
Law, Legal Studies	15	0.4	21	0.5	33	0.7	51	1.2	107	2.2
Science	213	5.5	355	8.6	302	6.8	312	7.2	213	4.4
Veterinary Science, Animal Care	9	0.2	12	0.3	5	0.1	12	0.3	5	0.1
Services, Hospitality, Transportation	157	4.1	304	7.4	261	5.9	211	4.9	248	5.1
VET Multi-field Education	1115	29.0	1006	24.5	1076	24.3	809	18.7	1067	21.8
Total	**3,840**	**99.9**	**4,109**	**99.9**	**4,425**	**99.8**	**4,335**	**100**	**4,887**	**100.2**
						Australia				
Land and Marine Resources, Animal Husbandry	2496	4.4	3127	4.9	3917	5.3	4352	6.0	4268	5.9
Architecture, Building	1739	3.0	1738	2.7	1662	2.2	1541	2.1	1551	2.2
Arts, Humanities and Social Sciences	5635	9.8	5935	9.4	8292	11.2	8429	11.5	9118	12.7
Business, Administration, Economics	15248	26.6	16875	26.7	18505	25.0	16763	23.0	15569	21.6
Education	4096	7.1	5016	7.9	5462	7.4	6758	9.3	7008	9.7
Engineering, Surveying	4984	8.7	5461	8.6	6296	8.5	4794	6.6	4742	6.6
Health, Community Services	4220	7.4	4553	7.2	5665	7.7	5544	7.6	6142	8.5
Law, Legal Studies	507	0.9	565	0.9	539	0.7	501	0.7	556	0.8
Science	4750	8.3	5837	9.2	7553	10.2	8538	11.7	8896	12.4
Veterinary Science, Animal Care	57	0.1	65	0.1	91	0.1	103	0.1	153	0.2
Services, Hospitality, Transportation	4559	8.0	4983	7.9	6703	9.1	7395	10.1	5211	7.2
VET Multi-field Education	9039	15.8	9115	14.4	9283	12.6	8319	11.4	8803	12.2
Total	**57,330**	**100.1**	**63,270**	**99.9**	**73,968**	**100**	**73,037**	**100.1**	**72,017**	**100**

Table 6b: VET students with prior higher education achievement
Vocational education commencing students (excluding FPOS) with higher education achievement, by field of education

	2002	%
	South Australia	
Natural & Physical Science	17	0.3
Information Technology	210	4.0
Engineering & Related Technologies	728	13.7
Architecture & Building	133	2.5
Agriculture, Environmental & Related Studies	368	6.9
Health	246	4.6
Education	520	9.8
Management & Commerce	1295	24.4
Society & Culture	481	9.1
Creative Arts	133	2.5
Food, Hospitality, Personal	130	2.5
Mixed Field Programmes	1038	19.6
Total	**5,299**	**99.9**
	Australia	
Natural & Physical Science	513	0.7
Information Technology	5258	7.2
Engineering & Related Technologies	7939	10.8
Architecture & Building	2401	3.3
Agriculture, Environmental & Related Studies	4364	5.9
Health	4301	5.9
Education	6858	9.3
Management & Commerce	17249	23.5
Society & Culture	10143	13.8
Creative Arts	3730	5.1
Food, Hospitality, Personal	2807	3.8
Mixed Field Programmes	7929	10.9
Total	**73,492**	**100.2**

VET field of study/education destinations of commencing vocational students with prior higher education achievement by gender

Tables 7a and 7b show the field of study/education destinations for males and females in the cohort as a proportion of total annual cohorts.

Females comprised a greater proportion than males both nationally and in South Australia in the fields of Arts, Humanities & Social Sciences, Business, Administration & Economics, Education, Health & Community Services, VET multi-field Education and Veterinary Science & Animal Care in each of the years 1997 to 2001. Meanwhile, males were more highly represented in the fields of Engineering & Surveying and Land & Marine Resources, Animal Husbandry both nationally and in South Australia in each of the five years. In other fields, there was some variation across the years. For example, female enrolments in Science nationally were greater than those for males in each of the five years while male enrolments in the field in South Australia were marginally greater than those for females in three of the five years. For Architecture & Building, males dominated in each year nationally and in all but 2000 (when the proportions were equal) in South Australia. In the Services, Hospitality & Transportation field, females made up a greater proportion of enrolments in each of the five years in South Australia, while nationally, male enrolments were greater in four of the five years – except for 1999 when the proportions were equal. For Law & Legal Studies,

nationally females dominated in four of the five years while in South Australia they were dominant in three years.

In 2002, females formed a greater proportion of overall national and South Australian cohorts in seven of the twelve fields, including Health, Education, Management & Commerce and Society & Culture. Males were larger proportions in fields of Information Technology, Engineering & Related Technologies, Architecture & Building and Agriculture, Environmental & Related Studies.

Female enrolments in Business Administration & Economics and Management & Commerce consistently ranked highly both in South Australia and nationally. Male enrolments in these fields also ranked highly as did female enrolments in VET Multi-field Education/Mixed Field Programmes.

Tables 8a and 8b show the field of study/education destinations of males as a proportion of the total annual male cohorts and similar data for females.

For both females and males in South Australia and nationally, the Business, Administration & Economics field in 1997 to 2001 and the Management & Commerce field in 2002 were popular destinations. Over a quarter of females in South Australia were in these fields in each year. Nationally female enrolments were also high over the six years. Over one fifth of the males were in these fields in South Australia in each year except 2000 when less were enrolled. Nationally the proportion was also high, although it declined each year from almost 23% in 1997 to over 17% in 2001. Almost 20% of male enrollees were in the Management & Commerce field in 2002.

Female students in Health & Community Services in South Australia have been above 10% in each of 1999 to 2001, while nationally they have been at a slightly lower level except for 1997. In contrast, both in South Australia and nationally, while the proportions of male students have grown, the field has not been as appealing. In South Australia, the percentage of males however, more than doubled from 1997 to over 5% in 2001 and nationally increased less dramatically to around 7%. The field of Health in 2002 has been much more appealing to females than males in South Australia, although only marginally more appealing nationally.

Females in Arts, Humanities & Social Sciences in South Australia, increased to around 9%, while nationally the proportion moved to 15% in 2001. With just over 3% of males enrolled in 1997 and just over 4% in 2001 in South Australia, and with more than double each of these percentages in 1997 and 2001 respectively nationally, this field has also not been as attractive to males as it has been to females. This has also been the case in Society & Culture in 2002, both nationally and in South Australia.

Table 7a: VET students with prior higher education achievement
Vocational education commencing students (excluding FPOS) with prior higher education achievement, by gender and field of study (1)

	Field of study by gender as percentage of total students with higher education achievement for year									
	1997 Male %	1997 Female %	1998 Male %	1998 Female %	1999 Male %	1999 Female %	2000 Male %	2000 Female %	2001 Male %	2001 Female %
					South Australia					
Land and Marine Resources, Animal Husbandry	2.4	1.9	2.2	2.1	2.8	2.1	3.0	2.7	2.9	2.6
Architecture, Building	2.4	0.6	2.5	1.4	1.2	0.9	1.4	1.4	1.4	1.1
Arts, Humanities and Social Sciences	1.3	3.3	1.3	4.4	2.2	3.9	2.7	7.0	1.8	4.8
Business, Administration, Economics	10.1	15.6	8.8	14.4	10.3	15.2	7.4	15.4	8.9	15.1
Education	6.5	7.7	5.6	5.8	3.3	4.0	3.2	4.3	3.2	4.6
Engineering, Surveying	3.6	0.7	2.6	1.1	6.6	2.3	7.8	2.5	8.2	3.3
Health, Community Services	0.8	3.9	1.4	4.9	1.3	6.0	2.0	7.1	2.4	5.9
Law, Legal Studies	0.2	0.2	0.4	0.1	0.3	0.5	0.5	0.7	0.9	1.3
Science	2.6	3.0	4.7	4.0	3.5	3.3	3.5	3.7	2.3	2.1
Veterinary Science, Animal Care	0	0.2	0	0.3	0	0.1	0	0.3	0.02	0.1
Services, Hospitality, Transportation	1.7	2.3	3.5	3.9	2.4	3.5	1.7	3.2	2.3	2.8
VET Multi-field Education	11.8	17.2	10.9	13.6	9.7	14.6	6.7	11.9	9.8	12.1
Total	**43.4**	**56.6**	**43.9**	**56.1**	**43.6**	**56.4**	**39.9**	**60.2**	**44.1**	**55.8**
					Australia					
Land and Marine Resources, Animal Husbandry	2.5	1.9	2.8	2.1	2.9	2.4	3.2	2.7	3.5	2.4
Architecture, Building	2.1	0.9	1.9	0.9	1.4	0.8	1.4	0.7	1.4	0.7
Arts, Humanities and Social Sciences	3.3	6.5	3.1	6.3	3.7	7.5	3.7	7.9	4.0	8.7
Business, Administration, Economics	10.4	16.2	10.1	16.6	8.8	16.1	7.8	15.1	7.4	14.2
Education	2.8	4.3	3.1	4.8	2.7	4.6	3.4	5.9	3.7	6.0
Engineering, Surveying	6.6	2.1	6.7	1.9	6.4	2.1	4.6	1.9	4.7	1.8
Health, Community Services	2.7	4.7	2.3	4.8	2.5	5.2	2.6	5.0	2.9	5.6
Law, Legal Studies	0.4	0.5	0.5	0.4	0.3	0.4	0.3	0.4	0.3	0.4
Science	3.9	4.4	4.5	4.8	4.8	5.4	5.3	6.4	5.8	6.5
Veterinary Science, Animal Care	0.01	0.1	0.01	0.1	0.01	0.1	0.02	0.1	0.04	0.2
Services, Hospitality, Transportation	4.5	3.4	4.1	3.8	4.5	4.5	5.2	4.9	3.9	3.3
VET Multi-field Education	6.3	9.4	5.4	9.0	4.7	7.9	3.9	7.5	4.5	7.7
Total	**45.5**	**54.5**	**44.5**	**55.5**	**42.7**	**57.1**	**41.4**	**58.5**	**42.1**	**57.5**

Table 7b: VET students with prior higher education achievement
Vocational education commencing students (excluding FPOS) with higher education achievement, by gender and field of education (1)

	2002 Male %	2002 Fem %
	South Australia	
Natural & Physical Science	0.2	0.2
Information Technology	2.1	1.8
Engineering & Related Technologies	9.7	4.0
Architecture & Building	1.4	1.2
Agriculture, Environmental & Related Studies	4.1	2.8
Health	0.9	3.8
Education	4.1	5.7
Management & Commerce	10.0	14.4
Society & Culture	2.7	6.4
Creative Arts	0.7	1.8
Food, Hospitality, Personal	0.9	1.6
Mixed Field Programmes	9.0	10.6
Total	**45.8**	**54.3**
	Australia	
Natural & Physical Science	0.3	0.4
Information Technology	3.7	3.5
Engineering & Related Technologies	7.9	2.9
Architecture & Building	2.3	1.0
Agriculture, Environmental & Related Studies	3.5	2.4
Health	2.6	3.3
Education	3.6	5.7
Management & Commerce	8.7	14.7
Society & Culture	4.9	8.9
Creative Arts	1.3	3.8
Food, Hospitality, Personal	1.5	2.3
Mixed Field Programmes	3.8	7.0
Total	**44.1**	**55.9**

Table 8a: VET students with prior higher education achievement
Vocational education commencing students (excluding FPOS) with prior higher education achievement, by gender and field of study (2)

	Field of Study by Gender as Percentage of Total for that Gender with Higher Education Achievement in Year									
	1997 Male%	1997 Female%	1998 Male%	1998 Female%	1999 Male%	1999 Female%	2000 Male%	2000 Female%	2001 Male%	2001 Female%
					South Australia					
Land and Marine Resources, Animal Husbandry	5.6	3.3	5.0	3.7	6.4	3.8	7.4	4.4	6.6	4.7
Architecture, Building	5.5	1.0	5.8	2.5	2.6	1.6	3.5	2.3	3.2	2.1
Arts, Humanities and Social Sciences	3.1	5.8	2.9	7.8	5.0	7.0	6.7	11.6	4.2	8.6
Business, Administration, Economics	23.2	27.6	20.1	25.7	23.7	26.9	18.5	25.6	20.2	27.1
Education	15.1	13.6	12.9	10.4	7.5	7.1	8.1	7.1	7.3	8.3
Engineering, Surveying	8.3	1.2	5.9	2.0	15.2	4.1	19.6	4.2	18.6	5.8
Health, Community Services	1.7	6.9	3.3	8.8	3.0	10.7	5.0	11.8	5.3	10.6
Law, Legal Studies	0.4	0.4	0.8	0.3	0.6	0.8	1.3	1.1	2.1	2.2
Science	5.9	5.2	10.6	7.1	8.1	5.8	8.7	6.2	5.2	3.7
Veterinary Science, Animal Care	0	0.4	0	0.5	0	0.2	0	0.5	0.05	0.2
Services, Hospitality, Transportation	4.0	4.1	7.9	7.0	5.5	6.2	4.3	5.3	5.1	5.0
VET Multi-field Education	27.3	30.4	24.8	24.2	22.3	25.9	16.9	19.9	22.1	21.6
Total	**100.1**	**99.9**	**100**	**100**	**99.9**	**100.1**	**100**	**100**	**100**	**99.9**
					Australia					
Land and Marine Resources, Animal Husbandry	5.5	3.4	6.3	3.8	6.8	4.2	7.7	4.7	8.2	4.2
Architecture, Building	4.6	1.7	4.2	1.6	3.4	1.4	3.4	1.2	3.3	1.3
Arts, Humanities and Social Sciences	7.3	12.0	6.9	11.4	8.7	13.2	8.9	13.5	9.4	15.0
Business, Administration, Eonomics	22.8	29.8	22.7	29.8	20.6	28.2	18.9	25.8	17.5	24.7
Education	6.2	8.0	7.1	8.6	6.4	8.1	8.1	10.1	8.7	10.5
Engineering, Surveying	14.5	3.8	15.1	3.5	14.9	3.7	11.2	3.3	11.2	3.2
Health, Community Services	5.8	8.6	5.3	8.7	5.8	9.1	6.3	8.5	7.1	9.7
Law, Legal Studies	0.9	0.9	1.1	0.8	0.7	0.7	0.8	0.6	0.8	0.7
Science	8.6	8.0	10.0	8.6	11.3	9.4	12.8	10.9	13.7	11.3
Veterinary Science, Animal Care	0.01	0.2	0.02	0.2	0.03	0.2	0.04	0.2	0.1	0.3
Services, Hospitality, Transportation	9.9	6.3	9.2	6.8	10.6	7.9	12.5	8.4	9.2	5.8
VET Multi-field Education	13.9	17.3	12.2	16.2	10.9	13.8	9.4	12.8	10.7	13.4
Total	**100**	**100**	**100.1**	**100**	**100.1**	**99.9**	**100**	**100**	**99.9**	**100.1**

Table 8b: VET students with prior higher education achievement
Vocational education commencing students (excluding FPOS) with higher education Achievement, by gender and field of education (2)

	2002 Male %	2002 Fem %
	South Australia	
Natural & Physical Science	0.4	0.3
Information Technology	4.7	3.4
Engineering & Related Technologies	21.2	7.5
Architecture & Building	3.0	2.1
Agriculture, Environmental & Related Studies	9.0	5.2
Health	1.9	7.0
Education	9.0	10.5
Management & Commerce	21.9	26.6
Society & Culture	5.9	11.7
Creative Arts	1.4	3.4
Food, Hospitality, Personal	1.9	2.9
Mixed Field Programmes	19.7	19.5
Total	**100**	**100.1**
	Australia	
Natural & Physical Science	0.8	0.6
Information Technology	8.3	6.2
Engineering & Related Technologies	17.9	5.2
Architecture & Building	5.2	1.8
Agriculture, Environmental & Related Studies	8.0	4.3
Health	5.8	5.9
Education	8.2	10.2
Management & Commerce	19.8	26.4
Society & Culture	11.1	16.0
Creative Arts	3.0	6.7
Food, Hospitality, Personal	3.4	4.2
Mixed Field Programmes	8.6	12.5
Total	**100.1**	**100**

In contrast to Arts Humanities & Social Sciences, Engineering & Surveying has been popular with male students. In South Australia with over 18% in the field in 2001, the proportion was more than double that of 1997. However, nationally for males, there has been a decline from a high of just over 15% in 1998 to around 11% in 2001. Female enrolments in this field have been small but nevertheless have grown each year in South Australia, while nationally like that for males, have suffered a small decline. Male enrolments in Engineering & Related Technologies in 2002 in South Australia were over 20% compared with almost 19% nationally and these are around three times the female proportion of the female cohorts in this field.

Architecture & Building has been more appealing to males than females, although less attractive than Engineering & Surveying. In South Australia, the proportion of males fell from around 6% in 1997 to 3% in 2002 while nationally, there was a reduction from just below 5% to a similar level to that in South Australia in 2001 before increasing again to beyond 5% in 2002. For females in South Australia, however, the proportion while small, has doubled to 2.1% in 2002 while nationally the proportion in 2002 was similar to that of 1997.

Science has also been a more popular destination among males. In South Australia, they comprised 6% in 1997, rose to over 10% in 1998 before declining to just less than the 1997 level in 2001. Nationally there was an increase each year to around 14% in 2001, more than double the proportion in South Australia in that year. Female enrolments in Science in South Australia

increased from around 5% in 1997 to over 7% in 1998 before almost halving in 2001, while nationally they increased from 8% in 1997 to over 11% in 2001. The proportion of enrolments in Natural & Physical Science in 2002 was very small. However, for Agriculture, Environmental & Related Studies, the proportion of males was almost double that of females both nationally and in South Australia.

In Education, in South Australia in 2002, the proportions of both males and females were considerably less than those for 1997 while nationally, there had been some overall growth. For females in South Australia, the proportion declined from almost 14% in 1997 to above 10% in 2002 while male enrolments suffered a decline of even greater magnitude. Nationally female enrolments have increased to over 10% in 2002, while for males the increase has been to 8%.

The Land & Marine Resources & Animal Husbandry field in South Australia has seen fluctuating percentages of males, but an overall increase to almost 7% in 2001, and females, to 4.7% in 2001. Nationally, the proportions of males has also increased to beyond 8% in 2001 while those for females showed overall small growth to around 4% in 2001. Enrolments in the Services, Hospitality & Transportation field were stronger nationally for both females and males than for the respective groups in South Australia (except for females in 1998). In South Australia there were sharp increases for both males and females in 1998 from 1997 then a decline to around 5% in 2001. Nationally the percentage of females grew to the year 2000 and then dropped to a level less than 1997, that is, to around 6%, while male enrolments fluctuated but declined to over 9% in 2001. Enrolments in VET Multi-field Education and Mixed Field Programmes were very strong each year and were considerably greater for both males and females in South Australia than nationally. Percentages in the fields of Law & Legal Studies and Veterinary Science & Animal Care were very small each year.

In 2002 Information Technology was more appealing to males than females both in South Australia and nationally but for both sexes, there was stronger appeal nationally. Food, Hospitality & Personal Services and Creative Arts fields were more attractive nationally to both males and females and they were more popular among the female cohorts in both South Australia and Australia.

In South Australia, the most popular fields for females in 1997 were VET Multi-field Education, Business, Administration & Economics, Education, Health & Community Services and Arts Humanities & Social Sciences. Nationally these were Business, Administration & Economics, VET Multi-field Education, Arts Humanities & Social Sciences, Health & Community Services and Education and Science (equal appeal). In South Australia in 2001, the five most popular destinations for females were the same as for 1997 except with changed order - Business, Administration & Economics, VET Multi-field Education, Health & Community Services, Arts, Humanities & Social Sciences and Education. Nationally, the first field was the same as in 1997 followed by Arts, Humanities & Social Sciences, VET Multi-field Education, Science and Education.

For males in South Australia in 1997, the most popular destinations were VET Multi-field Education, Business Administration & Economics, Education, Engineering & Surveying, and Science. Nationally, these were Business Administration & Economics, Engineering & Surveying, VET Multi-field Education, Services, Hospitality & Transportation and Science. In 2001 in South Australia, the most attractive fields were VET Multi-field Education, Business, Administration & Economics, Engineering & Surveying, Education and Land & Marine Resources & Animal Husbandry. Nationally in 2001, Business Administration & Economics was most popular followed by Science, Engineering & Surveying, VET Multi-field Education and Arts, Humanities & Social Sciences. Management & Commerce was the most popular destination for males and females both nationally and in South Australia in 2002. Education, Society & Culture and Mixed Field Programmes were also popular with females as were Engineering & Related Technologies and Mixed Field Programmes for males.

Clearly there are some differences and similarities in attractiveness of particular fields for females and males. Arts and Business related fields, Education, Health related studies and VET Multi-field Education/ Mixed Field Programmes were popular destinations among females both nationally and in South Australia. Meanwhile, Engineering and Business related studies, Education and VET Multi-field Education/Mixed Field Programmes were popular with males. Science was popular among males and females particularly nationally.

VET field of study/education destinations of commencing vocational students by age group

Tables 9a and 9b show the ages of students as a proportion of the annual cohorts by field of study destinations. The students have been grouped into those aged less than 30 years and those 30 years and older.

In South Australia, approximately two thirds or more of the enrolments in Architecture & Building, Arts & Humanities & Social Sciences, Education, Engineering & Surveying, Science and VET Multi-field Education were aged in the 30+ year group. For Business, Administration & Economics, for two of the five years, two thirds of the students were aged in this group, while in the other three of the five years, over 60% were in the group. Further, in three of the five years in Health & Community Services and in Land & Marine Resources & Animal Husbandry in two of the five years, two thirds of the cohort were in this older group. In 2002, eight of the twelve fields had more than two thirds in the older group.

For Australia, two thirds or more of the students in Land & Marine Resources & Animal Husbandry, Business, Administration & Economics, Education, Engineering & Surveying, Science and VET Multi-field Education were in the older group. In three of the five years, over two thirds of those in Architecture & Building and Health & Community Services were also in the 30+ year age group. Nationally in 2002 for ten of the twelve fields, two thirds were in this older age group.

Commencing vocational students with prior higher education achievement in the overwhelming majority of fields of study in both South Australia and nationally were in the 30+ year age group, an outcome supported by studies cited in the literature review.

Table 9a: VET students with prior higher education achievement
Vocational education commencing students (excluding FPOS) with prior higher education achievement, by age group and field of study

	Field of study by age group									
	1997 <30 yrs %	1997 30+ yrs %	1998 <30 yrs %	1998 30+ yrs %	1999 <30 yrs %	1999 30+ yrs %	2000 <30 yrs %	2000 30+ yrs %	2001 <30 yrs %	2001 30+ yrs %
					South Australia					
Land and Marine Resources, Animal Husbandry	40.2	59.8	39.8	60.2	35.6	64.4	31.0	69.0	29.7	70.3
Architecture, Building	23.2	76.8	25.6	74.4	31.5	68.5	33.9	66.1	31.7	68.3
Arts Humanities and Social Sciences	29.9	70.1	26.0	74.0	26.7	73.3	35.1	64.9	29.3	70.7
Business, Administration, Economics	32.7	67.3	31.1	68.9	38.7	61.3	38.3	61.7	35.0	65.0
Education	9.3	90.7	17.3	82.7	18.8	81.2	23.3	76.7	19.6	80.4
Engineering, Surveying	28.0	72.0	32.5	67.5	30.9	69.1	28.3	71.7	31.6	68.4
Health, Community Services	33.7	66.3	34.6	65.4	30.2	69.8	31.7	68.3	25.5	74.5
Law, Legal Studies	46.7	53.3	42.9	57.1	60.6	39.4	72.5	27.5	52.9	47.1
Science	25.5	74.5	24.3	75.7	29.8	70.2	29.1	70.9	26.3	73.7
Veterinary Science, Animal Care	88.9	11.1	75.0	25.0	60.0	40.0	91.7	8.3	100.0	0
Services, Hospitality, Transportation	51.3	48.7	40.8	59.2	40.0	60.0	48.1	51.9	38.8	61.2
VET Multi-field Education	25.9	74.1	23.8	76.2	25.2	74.8	25.6	74.4	22.5	77.5
					Australia					
Land and Marine Resources, Animal Husbandry	31.0	69.0	33.0	67.0	29.8	70.2	26.0	74.0	25.1	74.9
Architecture, Building	34.9	65.1	33.6	66.4	28.2	71.8	29.8	70.2	28.0	72.0
Arts, Humanities and Social Sciences	35.3	64.7	35.3	64.7	35.7	64.3	33.8	66.2	35.0	65.0
Business, Administration, Economics	32.6	67.4	31.4	68.6	31.0	69.0	27.0	73.0	27.1	72.9
Education	15.2	84.8	18.7	81.3	18.0	82.0	18.1	81.9	16.9	83.1
Engineering, Surveying	32.8	67.2	32.9	67.1	31.1	68.9	30.7	69.3	31.6	68.4
Health, Community Services	36.0	64.0	35.4	64.6	32.2	67.8	31.5	68.5	27.9	72.1
Law, Legal Studies	44.6	55.4	42.7	57.3	42.4	57.6	42.3	57.7	41.2	58.8
Science	23.4	76.6	24.7	75.3	25.0	75.0	20.9	79.1	19.5	80.5
Veterinary Science, Animal care	64.9	35.1	69.2	30.8	63.7	36.3	53.4	46.6	51.0	49.0
Services, Hospitality, Transportation	44.0	56.0	42.9	57.1	39.3	60.7	42.3	57.7	39.5	60.5
VET Multi-field Education	22.1	77.9	20.9	79.1	21.1	78.9	19.6	80.4	19.9	80.1

Table 9b: VET students with prior higher education achievement
Vocational education commencing students (excluding FPOS) with higher education Achievement, by age group and field of education

	2002 <30 yrs %	2002 30+ yrs %
	South Australia	
Natural & Physical Science	35.3	64.7
Information Technology	26.4	73.6
Engineering & Related Technologies	27.5	72.5
Architecture & Building	27.1	72.9
Agriculture, Environmental & Related Studies	26.2	73.8
Health	24.4	75.6
Education	17.0	83.0
Management & Commerce	33.6	66.4
Society & Culture	37.0	63.0
Creative Arts	31.6	68.4
Food, Hospitality, Personal	37.2	62.8
Mixed Field Programmes	23.0	77.0
	Australia	
Natural & Physical Science	32.7	67.3
Information Technology	22.6	77.4
Engineering & RelatedTtechnologies	34.0	66.0
Architecture & Building	27.0	73.0
Agriculture, Environmental & Related Studies	27.0	73.0
Health	27.9	72.1
Education	16.4	83.6
Management & Commerce	27.7	72.3
Society & Culture	32.3	67.7
Creative Arts	30.9	69.1
Food, Hospitality, Personal	44.5	55.5
Mixed Field Programmes	20.4	79.6

Commencing higher education undergraduate students with vocational education and training experience

Gender of higher education commencing undergraduate students with prior VET experience

Table 10 shows the gender of commencing undergraduate students with prior VET experience (excluding full fee paying overseas students).

Over each of the six years, females formed the greater percentage of enrollees. Although there have been fluctuations in the proportions of males and females over the period, the percentage of females has steadily increased both in South Australia and nationally – moving from 56% in 1997 to 60.5% in 2002 in South Australia and from over 56% to almost 60% nationally. The dominance of females is similar to that for females among VET vocational commencing students with prior higher education achievement reported in Table 4.

Table 10: Higher education students with VET experience

Higher education commencing undergraduate students (excluding FPOS) with VET experience, by gender

	1997	%	1998	%	1999	%	2000	%	2001	%	2002	%
					South Australia							
Male	1261	44	1065	42.7	1046	41.9	848	39.4	844	39.4	1000	39.5
Female	1604	56	1427	57.3	1453	58.1	1306	60.6	1296	60.6	1532	60.5
Total	**2,865**		**2,492**		**2,499**		**2,154**		**2,140**		**2,532**	
					Australia							
Male	16819	43.7	16791	43.3	16160	42.4	15093	41.8	15319	41.2	14578	40.7
Female	21636	56.3	21969	56.7	21973	57.6	21044	58.2	21902	58.8	21257	59.3
Total	**38,455**		**38,760**		**38,133**		**36,137**		**37,221**		**35,835**	

Age group of higher education commencing undergraduate students with prior VET experience

Table 11 shows the distribution of higher education commencing undergraduate students (excluding full fee paying overseas students) with prior VET experience by age group.

In both South Australia and nationally, in each of the six years, more than 50% of the cohort were less than 30 years of age. In South Australia in each year, students in the 20-24 year age group comprised between 27% and 28% of the cohort, except in 1997 when they were around 32%. Furthermore between 18% to 22% were in the 25-29 age group. The patterns were similar nationally. Also, it is notable that nationally enrolments from students aged less than 20 years were increasing quite rapidly.

It is the younger students, that is, those aged less than 30 years and within this group, those less than 25 years, who dominated the cohort. This contrasts with the dominance of the 30+ year age group among VET commencing vocational students with prior higher education achievement. These outcomes are consistent with those of research cited in the review of literature and may lend support to the view that for some young students VET provides an alternative route to higher education.

Table 11: Higher education students with VET experience

Higher education commencing undergraduate students (excluding FPOS) with VET experience, by age group

	1997	%	1998	%	1999	%	2000	%	2001	%	2002	%
Age Group (years)						**South Australia**						
<20	199	6.9	160	6.4	158	6.3	172	8	182	8.5	252	10
20 - 24	909	31.7	676	27.1	695	27.8	604	28	598	27.9	686	27.1
25 - 29	584	20.4	547	22	536	21.4	431	20	401	18.7	464	18.3
30 - 34	377	13.2	335	13.4	349	14	302	14	340	15.9	363	14.3
35 - 39	310	10.8	336	13.5	294	11.8	263	12.2	250	11.7	307	12.1
40 - 44	256	8.9	235	9.4	219	8.8	182	8.4	180	8.4	225	8.9
45 - 49	149	5.2	115	4.6	156	6.2	136	6.3	120	5.6	145	5.7
50 - 54	57	2	53	2.1	66	2.6	41	1.9	56	2.6	59	2.3
55 - 59	16	0.6	26	1	19	0.8	14	0.6	10	0.5	16	0.6
60 & 0ver	8	0.3	9	0.4	7	0.3	9	0.4	3	0.1	15	0.6
Unknown												
Total	**2,865**	**100**	**2,492**	**99.9**	**2,499**	**100**	**2,154**	**99.8**	**2,140**	**99.9**	**2,532**	**99.9**
							Australia					
<20	3921	10.2	4227	10.9	4650	12.2	4750	13.1	5344	14.4	5651	15.8
20 - 24	12442	32.4	12003	31	11921	31.3	11117	30.8	10928	29.4	10705	29.9
25 - 29	7499	19.5	7900	20.4	7642	20	7158	19.8	7059	19	6464	18
30 - 34	4942	12.9	5040	13	4691	12.3	4535	12.5	4948	13.3	4472	12.5
35 - 39	4073	10.6	4041	10.4	3835	10.1	3537	9.9	3653	9.8	3383	9.4
40 - 44	2880	7.5	2891	7.5	2713	7.1	2509	6.9	2637	7.1	2515	7.2
45 - 49	1726	4.5	1622	4.2	1600	4.2	1522	4.2	1548	4.2	1564	4.4
50 - 54	674	1.8	698	1.8	737	1.9	660	1.8	712	1.9	681	1.9
55 - 59	205	0.5	233	0.6	223	0.6	233	0.6	251	0.7	284	0.8
60 & over	93	0.2	105	0.3	121	0.3	116	0.3	141	0.4	116	0.3
Unknown												
Total	**38,455**	**100.1**	**38,760**	**100.1**	**38,133**	**100**	**36,137**	**99.9**	**37,221**	**100.2**	**35,835**	**100.2**

Field of education for higher education commencing undergraduate students with VET experience

Tables 12a and 12b show the field of education destinations of students in the annual cohorts. As mentioned earlier, field of education classifications in higher education changed in 2001 and so data are presented in two tables to reflect this change.

In South Australia in the years 1997 to 2000, Arts Humanities & Social Sciences was the field attracting the highest percentage of enrollees with almost 29% in 1997 and over 25% in 2000. Similarly, nationally this field was the most popular with around 26% enrolled in 1997 and 2000. The next most popular destination in South Australia and nationally was Business, Administration & Economics with almost 20% here in South Australia in 2000 compared with almost 23% in 1997. Nationally the proportion also declined slightly from almost 24% in 1997 to just over 23% in 2000. Enrolments in the field of Education in South Australia have fluctuated but declined from 16.5% in 1997 to over 15% in 2000 before increasing marginally by 2002. Nationally, Education was the third most popular destination with 15% of the commencing cohort in 1997, increasing to over 16% in 2002. In South Australia, Engineering & Surveying attracted small enrolments and while percentages of students in this field fluctuated over the years, the proportion more than halved to be under 2% in 2000. Nationally, the proportion of enrolments also declined, but not as dramatically, from around 5% in 1997 to 3.5% in 2000.

In contrast to reductions in the percentages of students from the cohorts in these fields in South Australia, the Science and Health fields have seen gradual increases from almost 12% and around 10% in 1997 to 13% and close to 16% respectively in 2000. Nationally enrolments in Science increased marginally to almost 13% in 2000, while those in Health increased from around 9% to 11% over the same period. Student numbers in Animal & Animal Husbandry, while relatively small, have nevertheless increased slightly in South Australia to 4% in 2000 while nationally there have been annual fluctuations over the years but with similar proportions of around 3% in both 1997 and 2000. Law & Legal Studies had relatively small enrolments, particularly in South Australia where they increased to 3.5% in 2000. Nationally the proportion almost doubled between 1997 and 2000 to 6.5%. The proportion in Architecture & Building has also been small. In South Australia and nationally these were at a similar level in 2000 and 1997.

Over the period there was general growth in the proportions of the annual cohorts in South Australia in Animal & Animal Husbandry, Architecture & Building, Health, Law & Legal Studies and Science, while nationally there was general growth in Architecture & Building, Health, Law & Legal Studies, Science and Veterinary Science.

Table 12a: Higher education students with VET experience

Higher education commencing undergraduate students (excluding FPOS) with VET experience, by field of study/education

	1997	%	1998	%	1999	%	2000	%
				South Australia				
Animal, Animal Husbandry	98	3.4	82	3.3	92	3.7	87	4
Architecture, Building	50	1.7	70	2.8	51	2	40	1.9
Arts, Humanities and Social Sciences	821	28.7	649	26	630	25.2	544	25.3
Business, Administration, Economics	656	22.9	522	20.9	538	21.5	428	19.9
Education	472	16.5	456	18.3	413	16.5	330	15.3
Engineering, Surveying	110	3.8	73	2.9	84	3.4	34	1.6
Health	272	9.5	308	12.4	353	14.1	337	15.6
Law, Legal Studies	54	1.9	50	2	41	1.6	75	3.5
Science	332	11.6	282	11.3	297	11.9	279	13
Veterinary Science	0	0	0	0	0	0	0	0
Non Award	0	0	0	0	0	0	0	0
Total	**2,865**	**100**	**2,492**	**99.9**	**2,499**	**99.9**	**2,154**	**100.1**
				Australia				
Animal, Animal Husbandry	1197	3.1	1227	3.2	1062	2.8	1081	3
Architecture, Building	696	1.8	847	2.2	747	2	683	1.9
Arts, Humanities and Social Sciences	10205	26.5	10111	26.1	10108	26.5	9310	25.8
Business, Administration, Economics	9103	23.7	9087	23.4	8876	23.3	7713	21.3
Education	5756	15	5382	13.9	5245	13.8	5173	14.3
Engineering, Surveying	1877	4.9	1709	4.4	1634	4.3	1268	3.5
Health	3483	9.1	3879	10	3871	10.2	3977	11
Law, Legal Studies	1314	3.4	1727	4.5	1715	4.5	2339	6.5
Science	4813	12.5	4775	12.3	4859	12.7	4573	12.7
Veterinary Science	11	0.03	16	0.04	16	0.04	20	0.1
Non Award	0	0	0	0	0	0	0	0
Total	**38,455**	**100.03**	**38,760**	**100.04**	**38,133**	**100.14**	**36,137**	**100.1**

Table 12b: Higher education students with VET experience

Higher education commencing undergraduate students (excluding FPOS) with VET experience, by field of study/education

	2001	%	2002	%
		South Australia		
Natural & Physical Science	98	4.6	111	4.4
Information Technology	177	8.3	187	7.4
Engineering & Related Technologies	49	2.3	53	2.1
Architecture & Building	28	1.3	51	2
Agriculture, Environmental & Related Studies	112	5.2	111	4.4
Health	360	16.8	472	18.6
Education	309	14.4	394	15.6
Management & Commerce	365	17.1	365	14.4
Society & Culture	536	25	616	24.3
Creative Arts	106	5	172	6.8
Food, Hospitality, Personal	0	0	0	0
Mixed Field Programmes	0	0	0	0
Total	**2,140**	**100**	**2,532**	**100**
		Australia		
Natural & Physical Science	1909	5.1	1762	4.9
Information Technology	2694	7.2	2610	7.3
Engineering & Related technologies	1346	3.6	1416	4
Architecture & Building	678	1.8	651	1.8
Agriculture, Environmental & Related studies	1369	3.7	1141	3.2
Health	4129	11.1	4315	12
Education	5389	14.5	5897	16.5
Management & Commerce	7571	20.3	7174	20
Society & Culture	9481	25.5	7986	22.3
Creative Arts	2623	7	2881	8
Food, Hospitality, Personal	12	0.03	2	0.01
Mixed Field programmes	20	0.1	0	0
Total	**37,221**	**99.93**	**35,835**	**100.01**

Following changes to field of education classifications, the most popular destinations in each of 2001 and 2002, both in South Australia and nationally was Society & Culture, a field similar to Arts Humanities & Social Sciences. Around a quarter of the cohort in South Australia were in this field while nationally just over a quarter were in the field in 2001, with around 22% enrolled in 2002. In South Australia, well over 18% of the cohort were in Health in 2002, up from almost 17% in 2001, while enrolments in Education had increased from over 14% to above 15%. Those in Management & Commerce however, had declined from around 17% to over 14% across the two years. Nationally, enrolments in Health increased from around 11% in 2001 to 12% in 2002, a smaller proportion of the overall cohort than in this field in South Australia, and also a smaller increase over the two years. Meanwhile, the proportion in Education increased from 14.5% in 2001 to 16.5% in 2002, a greater increase than in South Australia from similar bases. Nationally, student numbers in Management & Commerce like those in South Australia declined, but only marginally. These were around one fifth of the cohort in each year, a much greater proportion of enrollees in this field than in South Australia and the decline over the two years was less dramatic. Nationally, enrolments in Information Technology increased marginally to over 7% in contrast to a small decline to a similar level in South Australia. Meanwhile, enrolments in Engineering & Related Technologies increased nationally to 4%, while in South Australia, there was a marginal reduction to around half the national percentage.

General growth in proportions of annual cohorts over the two years occurred in Architecture & Building, Health, Education and Creative Arts in South Australia and in Information Technology, Engineering & Related Technologies, Health, Education and Creative Arts, nationally.

The five most popular destinations in 1997 in South Australia and nationally, and in 2000 nationally, were Arts, Humanities & Social Sciences, Business, Administration & Economics, Education, Science and Health. In 2000 in South Australia, they were also the most popular although with a change in ranking. Health replaced Education as the third most popular, followed by Education and then Science. The five most popular fields in South Australia in 2002 were Society & Culture, Health, Education, Management & Commerce and Information Technology. Nationally these were Society & Culture, Management & 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.

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

Higher education field of education destinations of commencing undergraduate students with VET experience by gender

Tables 13a and 13b show the field of education destinations for males and females in the cohort as a proportion of total annual cohorts.

Table 13a: Higher education students with VET experience
Higher education commencing undergraduate students (excluding FPOS) with VET experience, by gender and field of education

	Field of education by gender as percentage of total for year							
	1997 Male %	1997 Female %	1998 Male %	1998 Female %	1999 Male %	1999 Female %	2000 Male %	2000 Female %
				South Australia				
Animal, Animal Husbandry	2.1	1.4	1.8	1.5	2	1.7	2.4	1.7
Architecture, Building	1.3	0.5	1.9	0.9	1.5	0.5	1.3	0.6
Arts, Humanities and Social Sciences	10.4	18.3	9.9	16.1	9.1	16.1	9	16.3
Business, Administration, Economics	12	10.9	10.6	10.3	10.6	11	9	10.9
Education	3.9	12.6	4.2	14.1	4	12.5	3.1	12.3
Engineering, Surveying	3.5	0.3	2.9	0.04	3.1	0.2	1.3	0.2
Health	2.1	7.4	2.4	10	2.9	11.2	3.2	12.5
Law, Legal Studies	0.8	1.1	1.2	0.8	0.7	1	1.5	2
Science	8	3.6	7.9	3.5	7.9	4	8.7	4.2
Veterinary Science	0	0	0	0	0	0	0	0
Total	**44.1**	**56.1**	**42.8**	**57.24**	**41.8**	**58.2**	**39.5**	**60.7**
				Australia				
Animal, Animal Husbandry	1.9	1.2	1.9	1.3	1.7	1.1	1.8	1.2
Architecture, Building	1.3	0.5	1.5	0.7	1.4	0.6	1.3	0.6
Arts, Humanities and Social Sciences	8.3	18.2	8.1	17.9	8.1	18.4	7.8	17.9
Business, Administration, Economics	11.7	12	11.6	11.8	11.3	12	10.1	11.3
Education	3.7	11.3	3.3	10.6	3.2	10.5	3.1	11.2
Engineering, Surveying	4.6	0.3	4.1	0.3	3.9	0.4	3.2	0.3
Health	2.3	6.8	2.3	7.7	2.4	7.8	2.8	8.2
Law, Legal Studies	1.7	1.7	2.4	2	2.2	2.3	3.6	2.9
Science	8.2	4.3	8	4.3	8.3	4.5	8.1	4.5
Veterinary Science	0.01	0.02	0.01	0.03	0.01	0.03	0.01	0.04
Total	**43.71**	**56.32**	**43.21**	**56.63**	**42.51**	**57.63**	**41.81**	**58.14**

Table 13b: Higher education students with VET experience
Higher education commencing undergraduate students (excluding FPOS) with VET experience, by gender and field of education

	Field of education by gender as percentage of total for year			
	2001 Male %	2001 Female %	2002 Male %	2002 Female %
	South Australia			
Natural & Physical Science	2.5	2.1	2.3	2.1
Information technology	6.1	2.1	5.6	1.8
Engineering & Related Technologies	2.2	0.05	1.9	0.2
Architecture & Building	1	0.3	1.2	0.8
Agriculture, Environmental & Related Studies	2.7	2.5	2.5	1.9
Health	3.1	13.7	3.9	14.7
Education	3.7	10.7	4.4	11.2
Management & Commerce	7.7	9.3	6.8	7.7
Society & Culture	8.6	16.4	8	16.3
Creative Arts	1.7	3.3	2.8	4
Food, Hospitality, Personal	0	0	0	0
Mixed Field Programmes	0	0	0	0
Total	**39.3**	**60.45**	**39.4**	**60.7**
	Australia			
Natural & Physical Science	2.5	2.7	2.3	2.6
Information technology	5.4	1.8	5.6	1.7
Engineering & Related Technologies	3.3	0.3	3.6	0.3
Architecture & Building	1.3	0.5	1.2	0.6
Agriculture, Environmental & Related Studies	2.1	1.6	1.8	1.4
Health	2.9	8.2	3.1	8.9
Education	3.5	11	4.4	12.1
Management & Commerce	9	11.3	8.8	11.2
Society & Culture	8.4	17	6.8	15.5
Creative Arts	2.6	4.4	3	5
Food, Hospitality, Personal	0.01	0.02	0.03	0.03
Mixed Field Programmes	0.02	0.03	0	0
Total	**41.03**	**58.85**	**40.63**	**59.33**

Both in South Australia and nationally, females comprised a greater proportion of the cohort than males in Arts, Humanities & Social Sciences, Education and Health in each of the years 1997 to 2000 in contrast to Engineering & Surveying and Science where males made up a greater percentage of the cohort. In Business, Administration & 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. Enrolments for both males and females in the other fields were a small proportion of the total annual cohort. Males comprised a consistently higher percentage in Architecture & Building and in Animal & Animal Husbandry nationally and in South Australia while in Law & Legal Studies the proportions of males and females fluctuated annually. Veterinary Science attracted very small numbers of students.

For both 2001 and 2002 with the changes to field of education classifications, female enrollees as a proportion of the total annual cohorts were greater than males in Society & Culture, Health,

Education, Management & Commerce and Creative Arts in both South Australia and nationally. In contrast, males formed a greater percentage in Information Technology, Engineering & Related Technologies, Agriculture, Environmental & Related Studies and Architecture & Building in South Australia and nationally. Males comprised a higher percentage in Natural & Physical Science in South Australia in each year, while nationally, females were more dominant.

As a proportion of total annual cohorts, female enrolments in Arts related fields were consistently the most significant. Female numbers in Business related fields and Education were strong. Males in Business fields were also relatively high as were their enrolments in Arts 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 in VET female numbers 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 those for females in Arts areas, particularly nationally.

Tables 14a and 14b show a further distribution of field of education destinations for males as a proportion of annual male cohorts and similar data for females.

Among females in South Australia, almost a third of these students were in Arts, Humanities & Social Sciences in 1997. Although there was a decline each year to 2000, nevertheless in that year, more than a quarter of females were enrolled. The proportion of males in the field was also significant at around 23% in both 1997 and 2000. Nationally, the percentage of females in the field was high at over 30% annually, although like the case in South Australia, there was a small decline from 1997 to 2000. For males nationally, the field was also a popular destination, though not of the same magnitude as for females, with almost one fifth here each year.

Business, Administration & Economics was a more appealing destination for males than females, both in South Australia and nationally. And as with the pattern in Arts Humanities & Social Sciences, percentages in the field also fell over the period. In South Australia, the proportion of males dropped from over 27% in 1997 to just under 23% in 2000, while that for females declined less dramatically from over 19% to 18% in 2000. Nationally, the proportion of males was almost 27% in 1997 and just over 24% in 2000, while those for females were over 21% in 1997 and over 19% in 2000.

Table 14a: Higher education students with VET experience
Higher education commencing undergraduate students (excluding FPOS) with VET experience, by gender and field of education

	Field of education by gender as percentage of total for gender for year							
	1997 Male %	1997 Female %	1998 Male %	1998 Female %	1999 Male %	1999 Female %	2000 Male %	2000 Female %
				South Australia				
Animal & Animal Husbandry	4.7	2.4	4.1	2.7	4.8	2.9	6	2.8
Architecture & Building	2.9	0.8	4.4	1.6	3.6	0.9	3.3	0.9
Arts Humanities & Social Sciences	23.6	32.6	23.2	28.2	21.8	27.7	22.8	26.9
Business Administration & Economics	27.4	19.4	24.9	18	25.2	18.9	22.8	18
Education	8.9	22.4	9.9	24.6	9.7	21.5	7.8	20.2
Engineering & surveying	7.9	0.6	6.8	0.07	7.5	0.4	3.4	0.4
Health	4.7	13.4	5.6	17.4	6.9	19.3	8	20.6
Law & legal studies	1.7	2	2.7	1.5	1.6	1.7	3.8	3.3
Science	18.2	6.4	18.4	6	18.9	6.8	22.2	7
Veterinary Science	0	0	0	0	0	0	0	0
Non Award	0	0	0	0	0	0	0	0
Total	100	100	100	100.07	100	100.1	100.1	100.1
				Australia				
Animal & Animal Husbandry	4.4	2.1	4.4	2.2	4	1.9	4.2	2.1
Architecture & Building	3	0.9	3.5	1.2	3.3	1	3.1	1
Arts Humanities & Social Sciences	19	32.4	18.8	31.6	19.2	31.9	18.7	30.8
Business Administration & Economics	26.8	21.3	26.8	20.9	26.5	20.9	24.1	19.4
Education	8.5	20	7.6	18.7	7.6	18.3	7.5	19.2
Engineering & Surveying	10.4	0.6	9.5	0.5	9.3	0.6	7.7	0.5
Health	5.2	12.1	5.3	13.6	5.4	13.5	6.7	14.1
Law & Legal Studies	3.9	3	5.6	3.6	5.1	4.1	8.5	5
Science	18.8	7.6	18.5	7.6	19.5	7.8	19.5	7.8
Veterinary Science	0.02	0.03	0.02	0.05	0.02	0.06	0.03	0.08
Non Award	0	0	0	0	0	0	0	0

Total	100.02	100.03	100.02	99.95	99.92	100.06	100.03	99.98

Table 14b: Higher education students with VET experience
Higher education commencing undergraduate students (excluding FPOS) with VET experience, by gender and field of education

	Field of education by gender as percentage of total for gender for year			
	2001 Male %	2001 Female %	2002 Male %	2002 Female %
	South Australia			
Natural & Physical Science	6.3	3.5	5.9	3.4
Information technology	15.5	3.5	14.2	2.9
Engineering & Related Technologies	5.7	0.08	4.9	0.3
Architecture & Building	2.6	0.5	3.1	1.3
Agriculture, Environmental & Related Studies	6.9	4.2	6.4	3.1
Health	7.8	22.7	9.9	24.3
Education	9.5	17.7	11.1	18.5
Management & Commerce	19.5	15.4	17.1	12.7
Society & Culture	21.9	27.1	20.3	27
Creative Arts	4.3	5.4	7.1	6.6
Food, Hospitality, Personal	0	0	0	0
Mixed Field Programmes	0	0	0	0
Total	100	100.08	100	100.1
	Australia			
Natural & Physical Science	6	4.5	5.7	4.4
Information technology	13.2	3.1	13.7	2.9
Engineering & Related Technologies	8.1	0.5	8.9	0.5
Architecture & Building	3.3	0.8	3.1	1
Agriculture, Environmental & Related Studies	5.1	2.7	4.4	2.3
Health	7.1	13.9	7.6	15.1
Education	8.4	18.7	10.7	20.4
Management & Commerce	21.9	19.2	21.6	18.9
Society & Culture	20.5	29	16.7	26.1
Creative Arts	6.4	7.5	7.5	8.4
Food, Hospitality, Personal	0.02	0.04	0.01	0
Mixed Field Programmes	0.05	0.06	0	0
Total	100.07	100	99.91	100

Education and Health were attractive fields of education for females. In South Australia, over one fifth of female enrollees were in Education, although the proportion declined over the period, while in Health these increased significantly from around 13% to beyond 20%. Nationally, the percentages of females in these fields were reasonably stable over the period with those in Education being around one fifth, although declining slightly from 20% in 1997 to around 19% in 2000, while in Health around 14% were enrolled in 2000, up from just over 12% in 1997. Neither of these fields was as attractive to males. Less than 10% were in Education in South Australia and nationally in each of the four years and small declines were registered between 1997 and 2000. In Health, both nationally and in South Australia, the percentage of males in 1997 was around 5%. A sustained increase in popularity followed, such that in 2000 nationally the percentage was almost 7% while in South Australia it was 8%.

The fields of Science, Animal & Animal Husbandry, Architecture & Building and Engineering & Surveying were more popular destinations among the male cohort than among females. Science had increases in the proportion of males both nationally and in South Australia over the period

moving from about 19% and 18% respectively in 1997 to over 19% and just over 22% in 2000 respectively. For females the period also saw small increases, with the proportion moving marginally to nearly 8% nationally and to 7% in 2000 in South Australia. In Animal & Animal Husbandry in South Australia, the proportion of males among the male cohort rose from almost 5% in 1997 to 6% in 2000, while that for females also increased slightly to almost 3%. Nationally, the proportion of males declined marginally to around 4% in 2000 while for females this was reasonably stable at around 2% in each of the four years. Male enrolments in Architecture & Building in South Australia increased a small amount to over 3% in 2000, while among females the proportion was around 1% in each year, except 1998 when it was higher. Nationally the percentage of males in the field grew slightly to be just over 3% in 2000. For females, the proportion was similar to that in South Australia. Both nationally and in South Australia, the proportion of females in Engineering & Surveying was well under 1% in each of the four years. However, this field attracted over 10% of males in 1997, before declining annually to less than 8% in 2000. Male enrolments in South Australia followed a similar but more dramatic fall from around 8% in 1997 to over 3% in 2000.

The percentages of male and female students in Law & Legal Studies also increased over the period, both nationally and in South Australia. Nationally this field was consistently more popular among males than females, the proportion more than doubling to over 8% in 2000 from the 1997 base. For females the proportion increased from 3% to 5% over the same period. In South Australia, the percentage among males also doubled to almost 4% in 2000 while for the period female students in the field grew to over 3%.

In 2001 and 2002 in South Australia, among females in Society & Culture enrolments were around 27% while the proportion of males was closer to 20%, in fact declining from around 22% in 2001 to just over 20% in 2002. Nationally the proportions in this field were also high but with a fall in popularity over the two years. Female numbers reduced to around 26% from 29% and males declined to almost 17% from 20.5%. Management & Commerce was popular for both males and females, but more attractive among males. In South Australia the proportion of males was 20% in 2001, but declined to around 17% in 2002, while nationally there was a marginal reduction to just under 22%. Female enrolments also declined from just over 19% to just below that figure nationally and over 15% to almost 13% in South Australia.

Health and Education were attractive to females. For Health, enrolments increased from about 23% to around 24% in South Australia and from almost 14% to around 15% nationally. The proportion of males in this field also increased over the two years both nationally and in South Australia to almost 8% and 10% respectively. In South Australia, the number of females in Education also grew slightly to 18.5% in 2002 while nationally the increase was of similar magnitude to just beyond 20%. Among males, enrolments moved from 9.5% to marginally over 11% in South Australia and from over 8% to almost 11% nationally, just a little below the South Australian proportion.. Creative Arts has been generally more popular among females than males. Nationally, female enrolments grew slightly to over 8%, while the proportion of males increased by a similar amount to over 7%. In South Australia, the pattern was much the same, with females moving to over 6%, while males reached around 7% in 2002 from 4.3% in 2001.

Natural & Physical Science, Information Technology, Engineering & Related Technologies, Architecture & Building and Agriculture Environmental & Related Studies were more popular destinations among males. In Natural & Physical Science, the proportion of males declined slightly to just under 6% both in South Australia and nationally in 2002, while for females these were small and reasonably stable. Male students in Information Technology in 2002 were around 14% in South Australia, down from 15.5% in 2001, while nationally, almost 14% were in the field in 2002, up slightly from the proportion in 2001. The percentages of females were again much smaller and showed marginal declines in South Australia and nationally. The numbers of females selecting Architecture & Building or Engineering & Related Technologies were also very small. Among males in Architecture & Building in South Australia there was a marginal increase to just over 3%, while nationally there was a small reduction to around the same level. For Engineering & Related

Technologies, in South Australia, the percentage of males showed a small decline to around 5% in 2002. Nationally, however, the field was more attractive and there was a small increase to almost double the South Australian level in 2002. Male and female percentages in Agriculture Environmental & Related Studies declined marginally over the two years in South Australia to over 6% and to around 3% respectively. Nationally among males, the proportion declined slightly to above 4%, while among females around 2.5% were in the field in each year.

The five most popular destinations in 1997 among females in South Australia were Arts, Humanities & Social Sciences, Education, Business Administration & Economics, Health and Science, while for males these were Business Administration & Economics, Arts Humanities & Social Sciences, Science, Education and Engineering & Surveying. Nationally in that year, the most popular destinations for females were as for South Australia, but with some change in order - Arts Humanities & Social Sciences, Business Administration & Economics, Education, Health and Science, while for males these were also as for South Australia, but with Engineering & Surveying ranked fourth and Education, fifth. Among females in South Australia in 2000, the most popular destinations were Arts Humanities & Social Sciences, Health, Education, Business Administration & Economics and Science while for males these were Arts Humanities & Social Sciences and Business Administration & Economics (equal), Science, Health and Education. For 2000, nationally for females the most frequently chosen fields were the same as they were nationally for 1997, while for males these were Business Administration & Economics, Science, Arts Humanities & Social sciences, Law & Legal Studies and Engineering & Surveying.

In 2002, the five most popular destinations for females in South Australia were Society & Culture, Health, Education, Management & Commerce and Creative Arts while nationally these were Society & Culture, Education, Management & Commerce, Health and Creative Arts. For males in South Australia, the most popular were Society & Culture, Management & Commerce, Information Technology, Education and Health while nationally these were Management & Commerce, Society & Culture, Information Technology, Education and Engineering & Related Technologies.

Over the years 1997 to 2000, Arts, Humanities & Social Sciences, Business Administration & Economics, Education and Health were particularly attractive to females. In South Australia, in excess of 85% each year, and nationally, more than 80% each year, were enrolled in these fields. Science was also a popular destination. For males in the cohort, the most attractive destinations were Business, Administration & Economics, Arts, Humanities & Social Sciences and Science with over 60% enrolling in these fields each year at both a national and state level. Education was also an attractive destination. While not attracting large proportions of enrollees, Architecture & Building and Engineering & Surveying were much more appealing destinations for males than females both nationally and in South Australia.

In the years 2001 and 2002, Health, Education, Management & Commerce and Society & 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 and 2000 prior to the change in field of education classifications. Meanwhile, the fields of Management & Commerce, Society & Culture, Education and Information Technology attracted over 60% of male enrollees each year in both South Australia and nationally.

Among females from the VET and higher education cohorts, Arts and Business related fields were popular with Education and Health fields less so but nevertheless of strong appeal. For males, Business and Science related fields were consistently popular, with Education and Engineering and related studies also attractive.

Higher education field of education destinations of commencing undergraduate students with VET experience by age group

Tables 15a and 125b show the field of education distribution of the annual cohorts by broad age group.

Nationally, in all fields of education, the younger students, that is, those less than 30 years of age, formed a majority of the enrollees from the cohort for each year except for one in Veterinary Science which had small enrolments. The same was the case for South Australia except in Education, Health in each year, and Law & Legal Studies in most years. Nationally, over two thirds of students in Architecture & Building, Business Administration & Economics, Engineering and Science were in this younger group in each year. Meanwhile, in South Australia, similar proportions of those in Architecture & Building, Animal & Animal Husbandry and Engineering & Surveying were in the younger age group in each year.

In 2001 and 2002, those less than 30 years of age were more highly represented in all fields nationally and in all except Health and Education in both years in South Australia. In no field in South Australia did those less than 30 years comprise over two thirds of enrollees in both years, but nationally this was the case in seven of the fields.

The profile of the higher education cohort contrasts with that of the VET cohort. 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 held.

Table 15a: Higher education students with VET experience
Higher education commencing undergraduate students (excluding FPOS) with VET experience, by age group and field of education

	Field of education by age group							
	1997 <30 yrs %	1997 30+ yrs %	1998 <30 yrs %	1998 30+ yrs %	1999 <30 yrs %	1999 30+ yrs %	2000 <30 yrs %	2000 30+ yrs %
				South Australia				
Animal, Animal Husbandry	75.5	24.5	70.7	29.3	68.5	31.5	77	23
Architecture, Building	82	18	77.1	22.9	76.5	23.5	67.5	32.5
Arts, Humanities and Social Sciences	53.2	46.8	51.6	48.4	53.5	46.5	54.4	45.6
Business, Administration, Economics	71.8	28.2	68.2	31.8	69.3	30.7	66.1	33.9
Education	41.3	58.7	34.9	65.1	36.1	63.9	41.2	58.9
Engineering, Surveying	75.5	24.5	67.1	32.9	67.9	32.1	79.4	20.6
Health	49.6	50.4	45.8	54.2	46.7	53.3	46.6	53.4
Law, Legal Studies	44.4	55.6	50	50	41.5	58.5	38.7	61.3
Science	69.9	30.1	73	27	63.6	36.4	66.3	33.7
Veterinary Science	0	0	0	0	0	0	0	0
				Australia				
Animal, Animal Husbandry	64.2	35.8	65.6	34.4	64.7	35.3	66	34
Architecture, Building	80.6	19.4	81.2	18.8	78.4	21.6	76.6	23.4
Arts, Humanities and Social Sciences	56.9	43.1	57.1	42.9	57.9	42.1	58.9	41.1
Business, Administration, Economics	70.6	29.4	71.1	28.9	73.1	26.9	73.3	26.7
Education	50.3	49.7	51.6	48.4	54.2	45.8	54.7	45.3
Engineering, Surveying	72.7	27.3	73.1	26.9	70.4	29.6	72.2	27.8
Health	54.4	45.6	53.6	46.4	53.3	46.7	53.7	46.3
Law, Legal Studies	55.4	44.6	56.1	43.9	61	39	66.3	33.7
Science	70.8	29.2	69.5	30.5	71.9	28.1	70.1	29.9
Veterinary Science	72.7	27.3	56.3	43.7	50	50	75	25

Table 15b: Higher education students with VET experience
Higher education commencing undergraduate students (excluding FPOS) with VET experience, by age group and field of education

	Field of education by age group			
	2001 <30 yrs %	2001 30+ yrs %	2002 <30 yrs %	2002 30+ yrs %
	South Australia			
Natural & Physical Science	65.3	34.7	57.7	42.3
Information technology	68.9	31.1	62.6	37.4
Engineering & Related Technologies	61.2	38.8	58.5	41.5
Architecture & Building	60.7	39.3	86.3	13.7
Agriculture, Environmental & Related Studies	61.6	38.4	60.4	39.6
Health	46.7	53.3	46.6	53.4
Education	39.2	60.8	41.9	58.1
Management & Commerce	70.4	29.6	66.3	33.7
Society & Culture	51.5	48.5	54.4	45.6
Creative Arts	53.8	46.2	68	32
Food, Hospitality, Personal	0	0	0	0
Mixed Field Programmes	0	0	0	0
	Australia			
Natural & Physical Science	71.2	28.8	70.6	29.4
Information technology	67.4	32.6	72.8	27.2
Engineering & Related Technologies	70.4	29.6	73.6	26.4
Architecture & Building	77.1	22.9	80.3	19.7
Agriculture, Environmental & Related Studies	64.9	35.1	65.3	34.7
Health	52.8	47.2	51.5	48.5
Education	53.2	46.8	56.2	43.8
Management & Commerce	73	27	74.7	25.3
Society & Culture	56.1	43.9	55.3	44.7
Creative Arts	71.5	28.5	71.4	28.6
Food, Hospitality, Personal	83.3	16.7	100	0
Mixed Field Programmes	75	25	0	0

Summary

Both in South Australia and nationally, over the period 1997 to 2002, for those commencing VET vocational students (excluding full fee paying overseas students) with higher education achievement and for those commencing undergraduate students (excluding full fee paying overseas students) with VET experience, females comprised the greater proportion. The VET students tended to have been from an older age group than those commencing higher education undergraduate programs. For the former cohort, close to 30% were less than 30 years of age, while for the latter group, more than 50% were less than 30 years of age, and of these, a greater proportion was less than 25 years of age. Nationally and in South Australia, for almost all fields of study in each year, the majority of the VET cohort was 30 years of age or over. Meanwhile for the higher education cohort, students aged less than 30 years comprised the majority in almost all fields of education. The profile of the higher education cohort contrasted with that of the VET cohort.

There were some similarities between the destinations of the cohort moving to higher education and the cohort moving to VET. For both groups nationally and in South Australia, Business

related studies and nationally Arts related were popular. Science studies have also been relatively appealing to both groups. Health and Education tended to have been more popular destinations for those moving to higher education, both nationally and in South Australia, than for those moving to VET.

Of the overall VET cohorts, females in Business related fields and males in the same fields were consistently significant both in South Australia and nationally. Female enrolments in VET Multi-field/Mixed Field Programmes were also high. For those in higher education, female enrolments in Business and Arts areas and Education, and male enrolments in Business related areas were strong. Male enrolments in Arts related studies in South Australia were proportionately high, while those of females in Health were growing strongly both in South Australia and also growing nationally.

Among females in both in VET and higher education in South Australia and nationally, Arts and Business related studies and Education were fields that consistently attracted large enrolments. Again Health has also been of significance. For males, Business and Science related fields were popular among both groups of commencing students. Education also ranked highly among males, particularly for those in higher education, while Engineering related studies generally had strong enrolments among VET and higher education male cohorts in South Australia and nationally.

Hence, females dominated among those moving in either direction. Further and while there are differences in the age profiles of those moving to VET and to higher education, there are similarities in the most popular study destinations. These findings are consistent with research reported in the review of literature in Appendix A.

Appendix E: Survey methodology

Overview

Following a preliminary reading of the relevant literature and further analysis of the goals of this project, a questionnaire was developed and was approved by the university's Human Research Ethics Committee. The survey instrument was compared with that used in similar studies to check content, scope and distinctive features of this project and was independently reviewed before being piloted. Adjustments were made to the instrument as requested by the NCVER reviewer of the Interim Report.

The survey instrument was sent to all 2003 commencing TAFE and HE students and a sample of VET students at private organizations in South Australia. 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, that is, VET students with prior HE experience and HE students with prior VET experience.

Required permissions were obtained from all participating institutions for their students to be included in the survey. A variety of survey mediums were used, to comply with the policies and practices of the participating organisations. The format of the questionnaire was adjusted to ensure consistency in data gathering between the various mediums. The closing dates were staggered over a four week period.

Data from both the UniSA and TAFE on line survey instruments were downloaded into Excel and were transported into SPSS for analysis. Data from the paper questionnaires were entered manually. A summary of the distribution and response is presented in Table 16.

Survey of vocational education and training students

TAFE on-line survey

The TAFE Information Services (IS) unit put the project survey instrument on line, using their own survey tool. Pilot studies of the on-line VET survey were also undertaken by the TAFE IS unit. The process for the TAFE survey tool involves sending 3 emails to students: a preliminary notification, an email with a link to the survey and a 'reminder' e-mail. The sample for the main survey was all 2003 commencing TAFE students with email addresses, or 4733 students. Unfortunately 1224 of these were invalid addresses, so the notification reached only 3409 students. Also, the main survey email was sent out without the link to the survey and had to be re-sent. In response to the main survey email, there were 221 enquiries from TAFE students, mostly relating to the absence of the survey link and other IT issues. There were a further 231 enquiries from students following the 'reminder' survey. All enquiries from students were responded to individually, with copies to the TAFE IS unit. In total, 266 students responded to the survey, of whom 153 were valid.

Table 16: Summary of survey instrument distribution and response

Organisation	Students	Letter dated	Date posted	Closing date	Total Responses	Invalid	'No'	Valid
TAFE pilot online	unknown		1 - 25 Aug	29 Aug	unknown			
			2 - 26 Aug					
TAFE online *	4733		1 -3/4 Sept	21 Sept	266	113 (TT)	Un-known	153
	1224 failed		2 - 5 Sept					
			3 - 17 Sept					
TAFE paper	1214	17 Sept	17 Sept	6 Oct	78	27 (TT)	18	33
Private Providers:		18 Aug	21 Aug	8 Sept	10		6	4
A	160							
B	90							
C	245							
D	250							
E	220							
	965							
Total VET responses	**6,912**				**354**	**140**	**24**	**190**

Organisation	Students	Letter dated	Date posted	Closing date	Total Responses	Invalid	'No'	Valid
UniSA pilot	75		7 Aug	17 Aug	14	1	5	8
UniSA online	7262		26 Aug	14 Sept				
Flinders online	3687		28 Aug	14 Sept				
Total UniSA/Flinders					272	2	114	156
UniSA follow up	7262		18 Sept	6 Oct				
Flinders follow up	3687		19 Sept	6 Oct				
UniSA/Flinders follow up					184	1	67	116
Adelaide Uni paper	4715	18 August		19 Sept	163	2 (HH)	75	86
Adelaide Uni follow up	All students		Newsletter	Not stated				
			22 Sept					
Total HE responses					**633**	**6**	**261**	**366**

Issues encountered with the TAFE on-line survey

The email to students appeared to come directly from the researchers so matters were addressed to the researchers which would have been better directed to the TAFE IS unit; for example,

- there were several enquiries and complaints about the researchers having access to the students' contact details. These were responded to by the researchers who referred these matters to the TAFE IS unit, who also advised the students that when they enrolled they had agreed to their enrolment information being used for the purpose of conducting surveys or for statistical purposes and that the researchers did not have access to that information.
- students asked to be removed from the distribution list, which was not possible as it was an automatic process
- students asking for their contact details to be updated, or saying that they were not students at TAFE
- there were technical issues associated with the program eg inability to progress in the survey; JavaScript errors; the link not working; the site not being available; inability to find the server; the server crashing when they were half way through the survey and their responses being lost etc

- there were issues associated with students' access to the survey eg despite having an email address, they had no internet access; their computers at home had insufficient download time/memory to download the survey etc.
- the automatic reminder was sometimes inappropriate ie it was sent to all who had not replied, whether eligible or not; to those who had chosen not to reply; to students who had already responded.

Where issues could be addressed by sending a paper version of the questionnaire, this was done.

Additional enquiries which were relevant to the survey itself and were addressed by the researcher mainly regarded eligibility to complete the survey in regards to HE/VET history and current enrolment status. In fact, of the 266 responses received to the on-line survey, 113 were deleted because they were not eligible. Although agreeing that they had previous HE experience and were therefore eligible to complete the survey, these students then went on to describe their previous VET experience. There appeared to be a very real problem recognising the different streams of education as VET and HE, despite this being explained on the information sheet and examples of each sector being listed against the relevant question.

General issues which are relevant to both researchers and on-line developers are the survey population:

- being unwilling to open what appears to be an attachment, fearing a virus
- being unwilling to open email from somebody they don't know, fearing a virus
- thinking the email was junk mail
- requiring a facility to prevent them advancing further in the survey if not eligible

TAFE paper survey

As it would have been too costly to mail a survey instrument to all remaining TAFE students (12,140 students) for whom there was no email address, a random sample of 10% of these students, or 1,214 students, were sent paper based survey materials. This was followed up with a 'reminder' letter posted the week preceding the closing date. In total 78 paper responses were received, of whom 33 were valid.

- 27 were invalid because they had wrongly believed that their prior VET experience was, in fact, HE; and
- 18 blank responses were received from students who self identified as not eligible, but returned the survey anyway.

Private provider VET survey

Sixteen private providers of VET, who had been invited initially by letter to participate in the survey, were contacted by phone. After extensive negotiations, eight of these agreed to participate in the survey. However, in effect, only five eventually participated. Unfortunately, the TAFE on-line survey could not be used for external respondents. However, as these organisations generally did not have email addresses for their students, paper questionnaires were used. These five organisations were sent sealed survey packages which they then addressed to all their 2003 commencing VET students, totaling 965 students. The packages were delivered and collected by courier and then delivered to the Adelaide Postal Centre, to retain confidentiality regarding students' contact details. In total 10 responses were received from these students, of whom 4 were valid.

- 6 blank responses were received from students who self identified as not eligible, but returned the survey anyway.

Issues encountered with the VET survey of private providers

A few private providers were very keen to be associated with the survey, and some only became enthusiastic after discussing the issue with the researcher. Issues encountered when working with the private providers were:

- organisations not responding to phone/letter contacts; dependence on internal communication systems with a request which was unusual and for which there consequently did not seem to be clear lines of responsibility
- being too busy to take part; reluctance for staff to complete survey during work time; insufficient staff; a need to justify the activity in terms of benefit to the organisation
- insufficient records of student contact details; no email addresses for students
- concerns about confidentiality, privacy of information legislation
- some considered their student population not suitable because: the courses were part of an industrial agreement (& students, therefore, had no choice); the students were all on traineeships; a belief that students were 'debarred' from VET study if had HE qualification; deeming that the students probably didn't have HE experience; deeming that the students would not be able/willing to cope with a questionnaire, due to students' level of literacy or having previous experience of students being unwilling to complete surveys; considering the courses were not suitable (ie the students were unlikely to have HE experience).
- having a high turnover of students on very short courses, therefore the organisations responded better to selecting students from a window of time (3 months seemed acceptable).
- one was willing to help verbally, through interview, drawing on their own experience but not to participate in the survey for many of the reasons above.

Survey of higher education students

HE online survey

The University of South Australia (UniSA) electronic survey tool was used for the HE survey and was put on line by the researcher. A pilot survey was sent to all students on one course and there was no revision of the survey required following this pilot. The sample for the full survey was all 2003 commencing HE students. Emails with a link to this on line survey were sent to the relevant students at UniSA and Flinders University, totalling 10,949 students. These emails were sent by the appropriate administrative units at the two universities so the problems encountered with the VET on line survey appearing to be sent by the researchers, did not occur. Total responses were 272 responses to the main survey, of whom 156 were valid. To enhance this return, a follow up survey was put on line immediately the first survey had closed. 184 responses were received from this second survey, of which 116 were valid. Of the 456 total responses

- three were invalid because they described their prior HE experience instead of their prior VET experience
- 181 responded 'no' to the survey, that is, they self-identified as not being eligible for the survey because they did not have prior VET experience (the number for the corresponding cohort in the TAFE survey was not provided).

Issues encountered with using the HE on-line survey tool were as follows:

- Restricted formatting facilities impacted on the clarity of the questions and the 'readability' of the text responses, which were sometimes the only option for responses to questions
- The number of questions was substantially expanded because of the lack of flexibility of the tool; for example, all the options on Likert scales had to be presented as different questions (e.g. questions 27-46); 'other ... please state' questions had to be presented as separate questions rather than as part of the original question (e.g. questions 14/15); there was no facility for 'grid responses' where respondents completed two parts of a question on the same line (e.g. question 17), so text boxes with complicated instructions had to be provided
- The survey tool used provided no text box for introductory explanations to questions, so explanations had to be combined with the first question in a series or every question (e.g. questions 27-46)

Some of these issues were valid for both on-line survey tools used.

HE paper survey

Adelaide University email policy prevented an email with a link to the on-line survey being sent to their students. Therefore, to retain equity with the other universities, where all commencing students had been sent a link to the survey, all 4715 commencing Adelaide university students were sent a paper questionnaire. The research team had no access to students' addresses and labels provided by Adelaide University were handled by an independent contractor. To save costs, a 'reminder' about the survey was included in the Adelaide University electronic student newsletter 'Cloisterphobia'. 163 responses were received from this cohort, of which 86 were valid.

- two were invalid because they described their prior HE experience instead of their prior VET experience
- 75 blank responses were received from students who self identified as not eligible, but returned the survey anyway
- 153 'return to sender' envelopes were received

Other limitations regarding data collection

Collection of data relating to students' educational history was compromised by the limitations of the on-line survey tool, which provided only a text box facility for the complex data being sought, making the data difficult to interpret. One problem was in respect to classification. For example, although the aim was to track inter-sectoral moves, it was evident that there were some ambiguities in the definition of 'sector' since some respondents had studied VET courses in a HE institution; in this study, this was identified as a VET sector attendance. Also, in some cases, undefined study had taken place in an institute which, possibly in the past, may have offered VET courses; when the qualification was not identified, this institution was given its modern classification of HE sector. Concurrency also posed a problem: where students indicated concurrent attendance in more than one institution, this was recorded as a sectoral move (either inter or intra), in the order listed by the respondent.

Recommendations regarding data collection

With regard to the issues and limitations detailed above, the following recommendations are made concerning collection of data, which may be of benefit to researchers conducting similar studies.

- Consideration should be given to the benefits/disadvantages of on-line versus paper survey instruments. It was found that, when using a variety of mediums for

communicating a survey instrument, in order to ensure parity of data, the format of the instrument is dependent on the least flexible medium. That is, in the case of this survey, despite cost savings and apparent ease of use, the on-line survey was less flexible in representing the questions and this impacted on the format of the paper survey. This may or may not have been a deterrent in respect to the response rate, but was certainly sometimes a significant factor in being able to clearly identify the data.

- A single on line survey tool should be used when surveying diverse populations, to facilitate access to and consistency of data.
- Issues concerning the technology might seriously impact on the delivery of the survey instrument, and thus on the reception by the target population of the survey. There might be advantages in retaining control of the process so that such issues can be dealt with swiftly.
- There are advantages in sending the on-line survey directly from the agency responsible for the survey instrument, in this case DFEEST and the UniSA: to enhance the 'opening' rate, to reassure the target population regarding the validity of the survey and to channel technological enquiries to the correct sector.
- Validity of email addresses is an issue. Where these are not supported by the institution, they should be checked systematically.
- In regard to the design of the on-line survey tool: automatic reminders should be carefully worded and, if possible, targeted; there should be a facility to terminate participation if the target population is not eligible; the tool should be checked for effectiveness of communication and should include some features which are normally available (and therefore considered necessary for effective communication, presumably) in a Word document.
- Considerable time should be allowed when involving private providers in such surveys.

Appendix F: Further survey results: Tables 17 to 29

Table 17: Calendar year that respondents completed their most recent studies in a HE or VET institution (Q3)

	Before 1985	1985-1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	Total
HE commencers												
Number	7	27	2	11	16	17	22	34	51	119	19	325
Percent	2.2	8.3	0.6	3.4	4.9	5.2	6.8	10.5	15.7	36.6	5.8	
VET commencers												
Number	24	30	4	9	10	12	10	18	25	21	27	190
Percent	12.6	15.8	2.1	4.7	5.3	6.3	5.3	9.5	13.2	11.1	14.2	

Note: 325 of 366 higher education respondents gave valid answers to this question

Table18: Year of completing award in HE or whole course in VET (Q6)

	Before 1985	1985-1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	Total
HE commencers												
Number	3	19	2	6	9	9	10	20	41	89	16	224
Percent	1.3	8.5	0.9	2.7	4.0	4.0	4.5	8.9	18.3	39.7	7.1	
VET commencers												
Number	15	20	5	7	5	9	5	11	19	10	6	112
Percent	13.4	17.9	4.5	6.3	4.5	8.0	4.5	9.8	17.0	8.9	5.4	

Note: 224 of 244 higher education and 112 0f 113 VET students provided details on the year of completing award/whole course

Table 19: Status in most recent award program/course in prior sector if HE award or VET whole course incomplete (Q7)

	Still Enrolled	Failed/ Unsuccessful	Withdrew	Just Incomplete	No Detail	Total
HE commencers						
Number	6	2	28	23	1	60
Percent	10.0	3.3	46.7	38.3	1.7	
VET commencers						
Number	17	5	45	9	1	77
Percent	22.1	6.5	58.4	11.7	1.3	

Table 20: Reasons for withdrawing from prior course in the VET or award in the HE sectors (Q8 - Q9)

	Start job/ work longer	Go to Univ / VET	Course Unsuit Career	Not enjoy Course	Personal / family difficulty	Other	Total
HE commencers							
Number	6	4	4	5	3	6	28
Percent	21.4	14.3	14.3	17.9	10.7	21.4	
VET commencers							
Number	7	1	6	8	11	12	45
Percentage	15.6	2.2	13.3	17.8	24.4	26.7	

Table 21: Level of most recent course/modules in the other sector prior to commencing current studies (Q10 - Q11)

	Bach	Adv Dip	Dip	Assoc Dip	Adv Cert	Cert	Other	Total
HE commencers								
Number	-	45	66	21	12	192	26	362
Percent	-	12.4	18.2	5.8	3.3	53.0	7.2	
VET commencers								
Number	117	8	11	8	-	-	44	188
Percent	62.2	4.3	5.9	4.3	-	-	23.8	

Table 22a: Broad field of study of most recent VET studies for commencing HE undergraduate students (Q12 - Q13)

	Land Anim	Arch Bdlg	Arts HSS	Bus Ec	Edn	Eng Sur	Hlth Com St	Law	Sc	Vet	Serv Hosp	VET multi-field	Total
Number	10	5	43	95	13	24	58	6	33	3	50	25	365
Percent	2.7	1.4	11.8	26.0	3.6	6.6	15.9	1.6	9.0	0.8	13.7	6.8	

Table 22b: Broad field of education of most recent HE studies for commencing VET vocational students (Q12 - Q13)

	Nat Pc Sc	IT	Eng	Arch Bld	Agric Env	Hlth	Edn	Mgt Com	Soc Cul	Creat Arts	Food Hosp	Xed Fld	Non award	Total
Number	13	15	18	3	7	27	20	30	32	10	3	11	1	188
Percent	6.8	7.9	9.5	1.6	3.7	14.2	10.5	15.8	16.8	5.3	1.6	5.8	0.5	

Table 23: Patterns of sectoral movement of commencing 2003 HE and VET survey respondents (Q17)

HE students

One move (VET to HE), but multiple intra-sectoral (n=119)		Two moves (HE to VET to HE) (n=48)		Three moves (VET to HE to VET to HE) (n=10)		Four moves (HE to VET to HE to VET to HE (n=4)	
V^2H	72	HVH	32	VHVH	4	$HVHV^2H$	1
V^3H	13	HV^2H	4	VHV^3H	2	HVHVH	1
V^4H	10	HV^3H	2	VHV^2H	1	H^2VHVH	1
V^5H	3	HV^4H	1	$VHVH^2$	1	$H^2V^2HV^3H$	1
VH^2	9	H^2VH	7	V^2HVH	1		
V^2H^3	1	H^3VH	1				
V^2H^2	5	HVH^2	2				
VH^3	4						
VH^4	1						
V^5H^2	1						

VET students

One move but multi-intra-sectoral (n=63)		Two moves (VET-HE-VET) (n=48)		Four moves (VET-HE-VET-HE-VET) (n=1)	
H^2V	31	VHV	13	VH^2VHV	1
H^3V	11	VHV^2	1		
H^4V	7	VH^2V	5		
H^5V	6	VH^3V	1		
HV^2	6	V^2H^6V	1		
H^2V^4	1	V^2H^4V	1		
HV^5	1	V^2H^2V	1		
		V^2H^2V	21		
		V^2HV	2		
		VH^2V^2	1		
		$V^2H^3V^2$	1		

* V = VET attendance
H = HE attendance

Table 24: Level of current HE award / VET course (Q18 - Q19)

HE commencers								
	Bach	Adv Dip	Dip	Ass Dip	Adv Cert	Cert	Other	Total
Number	339	2	11	-	-	-	11	363
Percent	93.4	0.6	3.0	-	-	-	3.0	
VET commencers								
Number	-	11	25	1	3	126	22	188
Percent	-	5.9	13.3	0.5	1.6	67.0	11.7	

Table 25a: Broad field of study of current VET studies for commencing VET vocational students (Q20 - Q21)

	Land Anim	Arch Bdlg	Arts HSS	Bus Ec	Edn	Eng Sur	Hlth Com St	Law	Sc	Vet	Serv Hosp	VET multi-field	No details	Total
Number	4	3	24	79	15	12	14	4	15	1	5	5	4	185
Percent	2.2	1.6	13.0	42.7	8.1	6.5	7.6	2.2	8.1	0.5	2.7	2.7	2.2	

Table 25b: Broad field of education of current HE award for commencing HE undergraduate students (Q20 - Q21)

	Nat Pc Sc	IT	Eng/ Rel Tech	Arch Bld	Agric Env	Hlth	Edn	Mgt Com	Soc Cul	Creat Arts	Food Hosp	Xed Fld	No details	Total
Number	17	21	8	8	14	76	23	68	75	13	9	19	2	353
Percent	4.8	5.9	2.3	2.3	4.0	21.5	6.5	19.3	21.2	3.7	2.5	5.4	0.6	

Table 26: Admitted to current university award program/VET course on basis of studies in prior sector (Q23)

	Yes	No	Unsure	Total
HE commencers				
Number	138	177	49	364
Percent	37.9	48.6	13.5	
VET commencers				
Number	34	128	28	190
Percent	17.9	67.4	14.7	

Table 27: Credit granted for prior studies in other sector (Q25)

	None	1-9%	10.24%	25.49%	50+%	Unknown	No Details	Total
HE commencers								
Number	6	31	30	28	25	16	4	140
Percent	4.3	22.1	21.4	20.0	17.9	11.4	2.9	
VET commencers								
Number	2	8	8	9	2	7	4	40
Percent	5.0	20.0	20.0	22.5	5.0	17.5	10.0	

Table 28: Ranking of respondents' reasons for choosing to undertake further study (Q27 – Q46)

Ranking of reasons for choosing to undertake further study, in terms of 'agreement', for each group of students in respect to the question:

There are many reasons for choosing to undertake further study. In questions 27-46 we list some of those reasons. Please indicate your level of agreement with each of these. I enrolled in my current award program / course ...

HE commencers with VET experience			VET commencers with HE experience		
Rank	Agree (%)	Questionnaire number and item	Rank	Agree (%)	Questionnaire number and item
1	93.8	38. to improve my employment prospects	1	80.7	38. to improve my employment prospects
2	82.9	27. for personal interest, development or recreation	2	78.9	35. to gain or improve my practical skills
3	76.9	35. to gain or improve my practical skills	3	70.1	27. for personal interest, development or recreation
4	76.3	33. to get a vocationally specialised education	4	65.2	39. to improve my career prospects in my current field
5	69.0	34. to get a broad education	5	65.1	33. to get a vocationally specialised education
6	65.1	36. to get a prestigious qualification	6	41.4	40. to retrain for a different career
7	63.2	40. to retrain for a different career	7	37.9	34. to get a broad education
8	58.3	39. to improve my career prospects in my current field	8	32.2	32. to refresh my study skills after a period out of education
9	50.5	37. to update my previous qualification	9	29.6	37. to update my previous qualification
10	30.5	32. to refresh my study skills after a period out of education	10	28.2	36. to get a prestigious qualification
11	25.9	44. because I was advised to by someone I respected	11	25.0	45. because it was required by my employer
12	24.6	41. to qualify for workforce re-entry after a period out of the workforce	12	18.6	42. to fulfil a requirement for another course/award
13	21.7	28. to improve my English language skills	13	17.7	44. because I was advised to by someone I respected
14	21.4	46. because I could get status for my previous qualification	14	17.2	41. to qualify for workforce re-entry after a period out of the workforce
15	11.1	42. to fulfil a requirement for another course/award	15	8.3	29.To be eligible for financial assistance (e.g. Austudy, Abstudy)
15	11.1	43. to please my family	16	7.8	28. to improve my English language skills
17	9.2	30. to fill time, meet people or be with friends	17	7.4	30. to fill time, meet people or be with friends
18	5.4	29.to be eligible for financial assistance (e. g. Austudy, Abstudy)	18	6.0	46. because I could get status for my previous qualification
19	2.4	45. because it was required by my employer	19	2.7	43. to please my family

Majority of students indicated disagreement to questions in shaded area

Table 29: Ranking of issues influencing respondents when choosing to undertake further study (Q48 – Q62)

Ranking of issues in terms of 'ease' for each group of students, in respect to the question:

A number of issues influence people when choosing to undertake further study. We have listed some of these issues in questions 48-63 and ask you to indicate how easy or difficult you found each of these.

When making your decision to undertake your current award program / course, how easy/difficult did you find …

HE commencers with VET experience			VET commencers with HE experience		
Rank	Easy (%)	Questionnaire number and item	Rank	Easy (%)	Questionnaire number and item
1	79.6	58. getting your family's agreement to you undertaking this award program?	1	91.8	49. meeting the entry requirements for the course?
2	69.6	49. meeting the entry requirements for the award program?	2	78.9	61. going through the application process?
3	68.1	55. getting adequate information about this award program?	3	77.7	60. having the confidence to undertake further study?
4	62.8	59. doing something different to your friends?	4	72.5	62. getting advice from staff at the current institution?
5	54.8	61. going through the application process?	5	72.4	58. getting your family's agreement to you undertaking this course?
6	54.7	54. fining an award program you wanted to do close to home?	6	72.2	55. getting adequate information about this course?
7	53.9	57. getting your employer's support to study?	7	69.4	59. doing something different to your friends?
8	53.6	50. getting your prior qualification recognised?	8	67.7	57. getting your employer's support to study?
9	52.7	60. having the confidence to undertake further study?	9	53.4	50. getting your prior qualifications recognise?
10	51.1	62. getting advice from staff at the current institution?	10	50.3	52. paying the fees?
11	48.6	56. getting adequate information about the employment prospects of this award program?	11	48.1	48. getting careers guidance to help you make a decision?
12	44.4	48. getting careers guidance to help you make a decision?	12	47.6	54. fining a course you wanted to do close to home?
13	24.4	53. making changes in your life so that you had enough time to study?	13	45.9	56. getting adequate information about the employment prospects of this course?
14	21.3	51. having sufficient income to study?	14	45.3	51. having sufficient income to study?
15	21.2	52. paying HECS and other fees?	15	32.6	53. making changes in your life so that you had enough time to study?

Majority of students indicated they experienced difficulty in respect to questions in shaded area