

Two worlds? Higher education and post-school VET in Australia and the movement of learners between them

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SUMMARY

Keywords

Learning pathways,
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learning

Relationships between higher education and VET are significant and complex, and of increasing interest in many countries. Most analyses focus on systems, policies and structures. This paper takes a different perspective: what are the learners doing and thinking? It is based on data from research on students commencing study in one sector with experience of study in the other sector. It analyses their characteristics, motivations for study, how they experience study in both sectors and how they perceive their moves. The paper finds that, for these students, their learning trajectories are more circuitous than linear, which raises issues concerning seamlessness, equity and efficiency. Yet pathways are possible, are being used and allow for flexibility. The two educational sectors may be seen as parallel worlds. However, a more apt metaphor may be as tectonic plates creating convergent boundaries. The paper concludes that their relationships require serious rethinking.

Introduction

Educational policy reform in many countries is aimed at expanding provision of and widening participation in tertiary education. This reform is fuelled by such factors as the drive towards a knowledge economy and society, pressures to overcome skill shortages, desire to provide pathways for individuals to become more informed citizens, policy directions on social inclusion, and indeed, the competition generated through international benchmarking. Initiatives in these areas align with global trends emphasising change, flexibility, weakening of boundaries and the importance of lifelong learning (Young, 2006). While respective emphases may differ from nation to nation, depending on histories, cultures and economies, the effect is to highlight the nature and significance of, and relationships between, various sectors of tertiary education.

The growing complexity in relationships between tertiary education sectors is being progressively underlined in research. For example, Hall and Thomas (2005, p. 183) have explored a range of challenges relating to what they term trans-sector collaboration, and the characteristics of collaborative schemes and how they might be enhanced. Other studies have reported on institutions developing materials for assisting students in their transitions (Knox, 2005), and on strategies for creating a more integrated system of tertiary education (Gallacher, 2006). The ongoing challenges, however, have led Broughton (2005, p. 145) to conclude that, 'at the same time as cross-sectoral pathways are being advocated as a good thing, the "space" for initiatives that build on the concept is shrinking'.

A key characteristic of this complexity in sectoral relationships is the preoccupation with structural matters. Studies heavily focus on the importance of articulation and curriculum issues between post-compulsory institutions (Knox, 2005; Harreveld, 2005; Keating, 2006), attempts at blurring boundaries between sectors (Grubb, 2006; Gallacher, 2006) and differences in accreditation arrangements (West, 2006). Further studies interrogate the notion of seamlessness between educational sectors, and continue to acknowledge there are 'unresolved issues' (Hall and Thomas, 2005, p. 1) and 'unresolved tensions' (Keating, 2006, p. 59). In fact, Young (2006, p. 5) raises the question of whether 'seamlessness is at heart anti-educational because it fails to take account of the specificities of different types of learning and knowledge'. In Australia, the Department of Education, Science and Training (2002, p. 3) has proclaimed that the way forward

is to strengthen inter-sectoral links, promote 'clear and easy pathways between VET and higher education' and to develop 'a national system that underpins educational choice', yet acknowledges that 'significant barriers remain ... [including] fundamental differences in learning and assessment'. Similarly, the national strategy for vocational education and training 2004-10, *Shaping our future*, also recognises that, although pathways between educational sectors have improved, barriers still exist between vocational education and training and universities (ANTA, 2003). The three main barriers, according to the House of Representatives' Standing Committee on Education and Training (2004), are funding, inadequate credit recognition and transfer arrangements, and administrative issues.

This focus on structural considerations was also in evidence at Agora XXV, convened by Cedefop in Greece on higher education and VET, where discussion centred heavily on systemic issues, so significant in the European Union at this time – such as qualification frameworks, resources issues and priorities, accreditation, integration of VET and higher education, alternating training, the Bologna process, and roles of social partners. Little was heard about learners, a point highlighted by the European Students' Forum representative. Yet a quite different perspective on relationships between higher education and VET may be gained by focusing on learners and asking: what are the learners doing and what do they think?

This paper takes up this challenge. It attempts to illuminate the relationship between higher education and VET through examining the movement of learners in these 'two worlds' in Australia. The title ascribed to the author's presentation at Agora XXV was 'parallel worlds' – but are they? The two sectors have recently been depicted as institutionally separated (Keating, 2006, p.64) and bifurcated (Moodie, 2003, cited in Keating, 2006, p. 68) – but are they?

The 'two worlds' in Australia

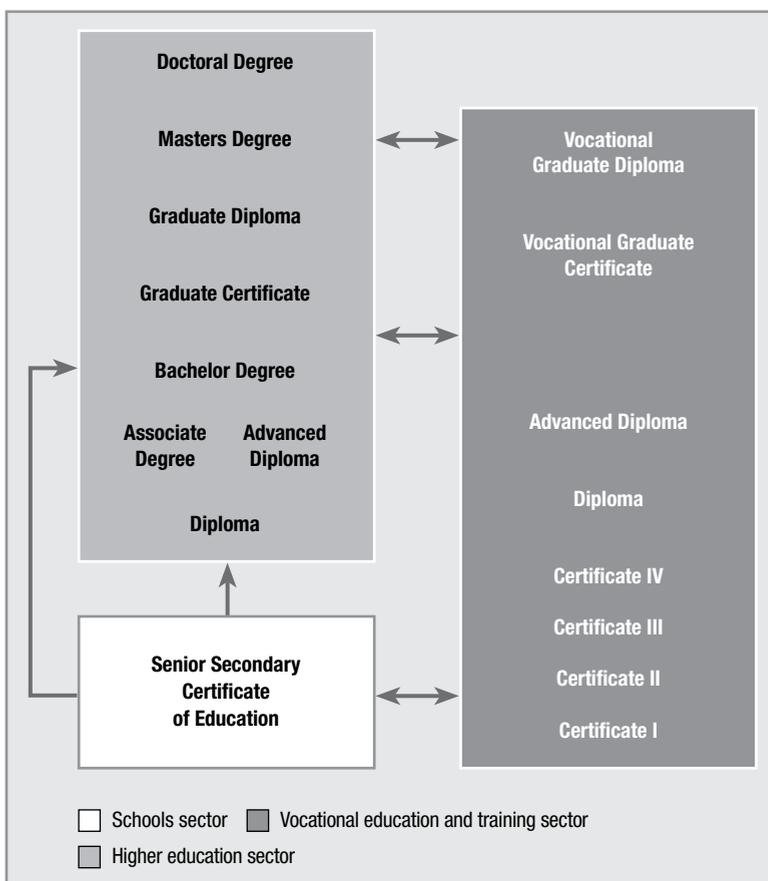
Higher education (HE) and vocational education and training (VET) are two significant sectors of tertiary education in Australia (the third is the adult and community education (ACE) sector which lies outside the scope of this article). The higher education sector is dominated by the 39 universities, though there are increasing numbers of private higher education providers. These institutions provide degree and higher level programmes in professional, para-professional and general education, such as the physical sciences, medicine, engineering, teaching, law, the health sciences, arts, social work and so on. Students most often

study full-time, and programmes are usually three to six years. The VET sector embraces the majority of institutions and programmes that lie between secondary school and higher education (though an increasing amount of VET does now occur at the secondary level). This sector is comprised of 57 public technical and further education institutes, together with a large number of private training organisations such as commercial training providers, industry organisations and enterprise-based providers. The sector provides programmes, predominantly certificates, diplomas and advanced diplomas, in a very wide range of studies, from trades to liberal arts. Students most often study part-time, in programmes usually from one to three years (for further information on the VET sector, see NCVET 2007). The sector's focus is skills and knowledge for work, and Moodie (2003, p. 2) claims that the Australian VET system's skills development role is 'like much of continental Europe'. In comparison, the specialty of the universities is general education and for high status occupations. Thus, the two sectors have tended to serve 'different sets of clients and occupations', largely because of the impact of economic policy and the structures and cultures of the secondary school sector (Keating, 2006 provides an excellent analysis of the 'radically different currency' of the two sectors, pp.62-72).

The programmes provided by each of the sectors are as shown in Figure 1, clustered according to the sector which is responsible for their accreditation. Higher education offers diplomas to doctorates, while VET offers certificates to advanced diplomas, as well as vocational graduate certificates and diplomas. There is therefore a degree of equivalence between some qualifications, though sector-differentiated. The Australian Qualifications Framework (AQF), introduced in 1995 and phased in over the next five years, links these qualifications with each other (as indicated by the arrows):

... in a range of learning pathways between schools, vocational education and training providers and universities as ... learning and career ambitions require. The AQF makes a specific commitment to flexible, transparent and systematic learning pathways and to the removal of boundaries between educational sectors. It therefore encourages cross-sectoral linkage programmes ... (http://www.aqf.edu.au/learn_employ.htm).

Figure 1. **Cross-sectoral qualification links**



Source: http://www.aqf.edu.au/learn_employ.htm

In one sense the two sectors may indeed be considered parallel worlds. They both provide opportunities for tertiary education. They are different in missions, structures and funding regimes, as well as in such characteristics as number of students, age profile of students, and coverage of fields of education and equity groups (Karmel and Nguyen, 2003, p. 12). Though different, they are not distinct. Higher education has, as its primary focus, the pursuit, preservation and transmission of knowledge, while VET predominantly focuses on education and training for work. However, higher education also has a concern with employment-related learning outcomes, while VET does provide more generic skills within its vocationally oriented programmes (DEST, 2002, para 6).

The interface between these educational sectors has been expanding. This is the result of a number of factors such as the changing nature of work, need for multi-skilling and growing acknowledgement of the importance of learning throughout life. In a society committed to lifelong learning, and an economy requiring a knowledgeable, skilled, flexible and adaptable labour force, it is argued there needs to be clear and easy pathways between these sectors (DEST, 2002, Executive summary, p. 3); that people need to have choices; and that ability to move between the VET and higher education sectors (inter-sectoral movement) as well as within them (intra-sectoral movement) is essential for reasons of equity and efficiency.

Thus, while higher education and VET may be considered as parallel worlds, there is another sense in which this is an erroneous picture if the assumption is that the two never meet. Rather than parallel worlds, the more appropriate metaphor may be tectonic plates whose interactions slowly form a convergent boundary, where the plates move towards one another, and either one moves beneath the other or a collision occurs. In the case of higher education and VET in Australia, there are many examples of such movement, such as the formation of five dual-sector institutions (offering both higher education and VET); institutions from different sectors sharing the same location and facilities while remaining organisationally discrete; some programmes comprising studies offered by both sectors; and individuals simultaneously enrolling in both sectors. Even at national level, there is enshrined in policy a credential convergence, where some qualifications at the same level on the Australian Qualifications Framework can be offered by institutions in either sector (as indicated in Figure 1 in the case of diplomas and advanced diplomas).

In recent years, student movement between the sectors has increased within a framework of lifelong education. This movement involves not only students with VET studies going to higher education, but also students with higher education studies enrolling in the VET sector (Golding, 1995; Harris et al., 2005; Keating, 2006; Harris et al. 2006). The National Centre for Research in Vocational Education has highlighted the growing proportion of persons with a qualification from both sectors, particularly the increase in the proportion of VET qualified persons who also have a degree (Karmel and Nguyen, 2003, p. 11). Keating (2006, p. 68), too, has stated that one-quarter of undergraduate and one-fifth of postgraduate enrolments in 2003 were students with prior VET studies, and numerous press articles of late continue to furnish anecdotal evidence of growing student traffic between the two sectors.

What is of particular interest, and yet has little research undertaken on it, is the nature of this student movement which may shed some light on the relationship between the ‘two worlds’ of higher education and VET. Accordingly, this paper asks four main questions: who moves, why do they move, how do they experience moving, and what do they think of their moves?

Methodology

The study is based on both quantitative data and qualitative text obtained through different methods, and informed by an extensive literature review. First, existing national data were mined from the National Centre for Vocational Education Research and the Australian Department of Education, Science and Training as background information.

Second, a survey was undertaken of students commencing study at all eight VET institutes and the three universities in South Australia. An online questionnaire was developed, compared with others used in similar studies, independently reviewed and piloted. Questions focused on such areas as: previous studies, current studies, reasons for undertaking further study in the other sector, ease/difficulty in undertaking this study, similarities/differences in studying in the two sectors, and level of comfort in moving from one sector to the other. After obtaining permission from all institutions to access students, questionnaires were dispatched in late 2003. Due to privacy legislation, it was not possible to isolate only those eligible for inclusion – that is, experience of study in both sectors. The questionnaire therefore had to begin with a question which filtered out those who were eligible. Follow-up was undertaken, and data entered into the Statistical Package for the Social Sciences (SPSS) for analysis. Valid responses were obtained from 556 students (190 VET students with higher education achievement, 366 higher education students with VET experience). There was no way of knowing how many were in the eligible population, or where any bias may have resided.

Third, in-depth interviews were held with 49 students who had returned questionnaires in the survey and expressed willingness to be followed up. These structured interviews investigated their histories of learning transitions, which career service(s) they used and their goals for each move. The interviews were transcribed and the text entered into software for analysis.

Key differences between the higher education and VET participants are summarised in Table 1. Among the survey respondents, the higher education group contained more females, was younger and there were twice as many recent school leavers. Far fewer higher education students were fulltime employed, with twice the proportion not employed at all. Of those interviewed, the higher education group was again younger than the VET group (though evenly divided by gender).

Table 1. Key differences between the higher education and VET students

Characteristics	HE commencing students with VET experience (%)	VET commencing students with HE experience (%)
Survey respondents (N=556)	66	34
Gender: females	71	65
males	29	35
Age: under 25 years	35	21
45 years and over	9	25
Left school: in last five years	27	13
Employment: fulltime	16	55
not employed	35	18
Interviewees (N=49)	78	22
Gender: females	63	64
males	37	36
Age: under 25 years	29	36
25-29 years	34	27
30-34 years	37	36

In interpreting the findings, a limitation was the focus on one Australian state and the relatively low numbers of students, arising from difficulties encountered in undertaking the survey and in using incomplete databases, particularly on VET enrolments. A second constraint was the inadequate quality of extant national data (Ramsay et al., 1997; Teese and Polesel, 1999; Pitt, 2001; Karmel and Nguyen, 2003), in particular the absence of statistics on VET commences with 'incomplete' university studies and the inability to track individuals.

Thus, representativeness of these samples could not be ascertained. The findings from the different sources, however, were relatively consistent and served to increase confidence in the robustness of the information and reinforce the key messages.

The findings

Who moves?

From the South Australian survey, it was estimated that there are approximately two and a half times more students with higher education experience enrolling in VET than students with VET experience enrolling in higher education (Harris et al., 2005, p. 27). This is acknowledged as an estimate only (and has been questioned by Moodie, 2004). Certainly the dimensions of this phenomenon are 'complex' (Keating, 2006, p. 68), given inadequacies in extant national data and especially the large 'black hole' of VET commencers with incomplete university studies (found to be 40 % in this study) that can be gauged only from undertaking a survey such as the one on which this research is based. However, whatever the precise magnitude, the pertinent point is that it is the opposite to what is most commonly understood in public perception, and occurs despite the perceived lower status of VET qualifications and hence the tremendous pressure from parents and schools for students to go to university.

Extensive inter-sectoral (enrolments between higher education and VET) and intra-sectoral movement (enrolments within higher education or VET) was identified among the survey respondents. In the case of VET commencers, 25 % had two inter-sectoral moves, while 51 % had between three and eight inter- and intra-sectoral moves. With higher education commencers, 17 % had two or more inter-sectoral moves (including 4 % who had between three and four moves), while 49 % had between three and eight inter- and intra-sectoral moves. Thus with about half of all students experiencing between three and eight moves, these findings underscore both the significance of and complexity in movement between and within these educational sectors.

Apart from the magnitude of movement, what is also of keen interest, given sparse research in this area, is the nature of this movement: what are the characteristics of these learners? For those moving in either direction, females comprised the greater proportion. For almost all fields of education, the majority of the VET cohort was in the 30+ year age group, while the majority in the higher education

cohort was students aged less than 30 years (with 37 % under 25 years). This tends to indicate that, for some students, VET is providing an alternative route to university rather than directly from school.

There were similarities in the destinations of the cohorts moving to higher education and those moving to VET. For both groups, business-related studies and to some extent arts-related studies, were popular. Health and education were more popular destinations for those moving to higher education than for those moving to VET. For females in both VET and higher education, arts and business-related studies and education were fields that consistently attracted large proportions of enrolments, while for males, business, science and engineering studies were popular for both sectoral groups. The dominance of business-related fields as destinations for those moving in either direction supports findings cited in earlier literature (Golding, 1995; Millican, 1995; Golding et al., 1996).

The survey indicated that those students going from VET to higher education generally appeared not to have lengthy delays before movement compared with those going in the reverse direction. This is also consistent with other findings (Golding, 1995; Pitt, 2001). The data suggest that, among those with completed courses, students moving from VET to higher education tend to do this in a more planned way without a substantial time delay compared with those moving the other way.

The study's sources, therefore, reveal that the higher education to VET movement is typified by mature-aged female students in part-time study in the VET sector, where the move is often to a different field of education. In contrast, the VET to higher education movement is typified by younger female students studying full-time, where the move is frequently to the same or a similar field of education.

Why do they move?

Students' reasons for choosing to undertake further study in the other sector are summarised in Table 2. They were asked to indicate their level of agreement/disagreement on 19 given reasons using a five-point scale.

One key difference is the strength of motivations. The higher education and VET commencers responded significantly differently on 13 of the 19 reasons. On all but one of these 13 items, significantly more higher education than VET commencers agreed with these as reasons for undertaking study in the other sector. The one exception was that more VET (25 %) than higher education commencers (2 %) were studying because it was required by their employer.

Table 2. Respondents' reasons for choosing to undertake further study in the other sector

Questionnaire item <i>I enrolled in my current programme / course ...</i>	HE commencing students with VET experience (N=366) % agree	VET commencing students with HE experience (N=190) % agree	Level of significance: ** = <.01 * = <.05
• to improve my employment prospects	93.8	80.7	**
• for personal interest, development or recreation	82.9	70.1	**
• to gain or improve my practical skills	76.9	78.9	
• to get a vocationally specialised education	76.3	65.1	*
• to get a broad education	69.0	37.9	**
• to get a prestigious qualification	65.1	28.2	**
• to retrain for a different career	63.2	41.4	**
• to improve my career prospects in my current field	58.3	65.2	
• to update my previous qualification	50.5	29.6	**
• to refresh my study skills after a period out of education	30.5	32.2	
• because I was advised to by someone I respected	25.9	17.7	**
• to qualify for workforce re-entry after a period out of the workforce	24.6	17.2	
• to improve my English language skills	21.7	7.8	**
• because I could get status for my previous qualification	21.4	6.0	**
• to fulfil a requirement for another course	11.1	18.6	
• to please my family	11.1	2.7	**
• to fill time, meet people or be with friends	9.2	7.4	*
• to be eligible for financial assistance	5.4	8.3	
• because it was required by my employer	2.4	25.0	**

Note: In this table, only combined figures for 'agree' and 'strongly agree' are shown; the remaining percentages are either 'neutral', 'agree' or 'disagree'.

A second feature is the differences in the nature of motivations. One important area is related to their occupational motivations: retraining for a different career (HE 63 %; VET 41 %) and improving their employment prospects (HE 94 %; VET 81 %). While the majority of the higher education commencers were studying to retrain for a different career (63 %), the majority of the VET commencers were studying to improve their career prospects in their current field (65 %). Another area relates to perceptions of the educational experience they would be receiving: getting a 'broad education' (HE 69 %; VET 38 %), a 'prestigious qualification' (HE 65 %; VET 28 %) and an update of their previous qualification (HE 51 %; VET 30 %). These last two motivations were the major areas of disagreement between the cohorts. The higher education commencers have a wider range of motivations for undertaking study, reflected in over half of them agreeing with nine of the given reasons compared with over half of the VET commencers agreeing with only five of these reasons. Higher education commencers were seemingly more strongly motivated by educational drivers, vis-à-vis VET commencers being more strongly motivated by employment-oriented reasons.

However, what is also noteworthy is that the top three choices for both cohorts were the same. The main reason for all students was improving employment prospects, followed by personal interest, development or recreation and gaining or improving practical skills. Divergence came in the fourth choice – 'to get a vocationally specialised education' for higher education commencers, and 'to improve my career prospects in my current field' for VET commencers. There is an indication that VET commencers were not seeking to change direction so much as to get further training in an existing career area, often at the instigation of employers. In contrast, higher education commencers were clearly seeking to change direction and to get a vocationally specialised education.

Notable among the reasons is that more higher education commencers (83 %) considered they were studying for personal interest, development or recreation reasons than did VET commencers (70 %) – nevertheless, for both groups, this reason figured highly alongside their occupational motivations. The finding is consistent with those of other studies (Werner, 1998; Millican, 1995). The data clearly reinforce that students perceive their moving to another sector for further study is stimulated by a combination of occupational and personal interests.

Despite these differences, it was significant that the top 10 reasons for both sectors were the same (though with variations in ranking). Overall, this may well reflect a converging of perception in regard to what can be gained from the sectors both in terms of personal development and career outcomes.

How do they experience moving between sectors?

The research investigated issues which may have influenced the students when making their decision to take up study in the other sector. The percentages of respondents indicating difficulty on 15 given issues are presented in Table 3.

The one common area of difficulty for both cohorts was making changes in their lives so that they had enough time to study (HE 62 %, VET 53 %). There were significant differences in their responses on nine of the other areas. Two areas of significant disagreement were in difficulties with financial issues – ‘having sufficient income to study’ (HE 66 %, VET 37 %) and ‘paying the fees’ (HE 57 %, VET 30 %) – which those starting higher education found substantially more difficult than their VET counterparts.

The students found it relatively easy to obtain careers guidance to help them in their decision-making about study in the other sector, though significantly more difficult for higher education commencers. ‘Getting your employer’s support to study’ was another aspect which these students found relatively easy to handle. Employer support would be advantageous when the goal in undertaking further study is relevant to one’s current employment and the response to this issue corresponds with students’ agreement cited earlier that improving career prospects in their current field was a driving force behind their career decision to undertake further study.

VET commencers found, on average of all the factors, the moving process easier than did the higher education commencers (HE 51 %; VET 62 %). Very few VET commencers found ‘meeting the entry requirements for the course’ or ‘going through the application process’ difficult. Not surprisingly, considering the ease with which the VET students dealt with these issues, ‘having the confidence to undertake further study’ was significantly less of an issue for them than for higher education students, as were ‘getting advice from staff at the current institution’ and ‘doing something different from [their] friends’.

The data reveal a picture of a group of personally more tentative individuals commencing in the higher education sector for whom

Table 3. Respondents' views on issues influencing them when choosing to undertake further study in the other sector

Questionnaire item <i>When making your decision to undertake your current programme, how easy / difficult did you find ...</i>	HE commencing students with VET experience (N=366) % difficult	VET commencing students with HE experience (N=190) % difficult	Level of significance: ** = <.01 * = <.05
• having sufficient income to study?	65.8	36.5	**
• making changes in your life so that you had enough time to study?	61.5	52.7	
• paying HECS [Higher Education Contribution Scheme] and other fees?	56.8	30.1	**
• having the confidence to undertake further study?	33.5	10.3	**
• getting careers guidance to help you make a decision?	29.6	18.8	*
• finding an award programme/course you wanted to do close to home	28.6	34.3	
• going through the application process?	28.1	9.9	**
• getting advice from staff at the current institution	23.0	10.2	**
• getting adequate information about the employment prospects of this award programme/course?	21.7	20.0	
• getting your prior qualifications recognised?	21.3	17.9	
• getting your employer's support to study?	18.1	15.3	*
• meeting the entry requirements for the award programme/course?	16.2	2.9	**
• getting adequate information about this award programme/course?	16.2	14.4	
• doing something different to your friends?	16.2	5.4	*
• getting your family's agreement to you undertaking this award programme/course?	9.9	10.6	

Note: In this table, only combined figures for 'fairly difficult' and 'very difficult' are shown; the remaining percentages are either 'neutral', 'fairly easy' or 'very easy'.

financial issues are a major concern, with students commencing VET appearing more confident, not so challenged financially and finding it easier to deal with their transition. Movement into VET appears a smoother transition, in terms of support and process, for students with prior experience in higher education than the movement into higher education is for those with prior experience in VET.

The literature regarding transition issues focuses mainly on VET students moving into university and finding difficulties in accessing information and admission policies and in adjusting to the higher education environment. There has been little corresponding research into transition issues for university students moving into VET. This study covers a range of issues relevant to two-way student movement between the sectors and finds that, although the transition was relatively easy for many students, there was genuine difficulty in making the necessary life changes in order to study.

Students also judged how differently they found various teaching, learning and assessment aspects of their experience in their current sector compared with those in their previous sector. The striking feature in their responses is the very high proportions of students who found their transition a different experience. On 10 of 11 given aspects, between 68 % and 92 % of the higher education commencers, and between 62 % and 82 % of the VET commencers, reported that they experienced difference rather than similarity in moving between sectors. The other feature is the consistency in the figures between higher education and VET students. Not only were the various factors in a similar sequence (for example, study cost, teaching style and assessment processes are in the top four in both lists), but the proportions of students from each sector tend to be similar on each aspect. The three statistically significant exceptions were cost of studying, level of work and class size, on each of which more higher education than VET commencers claimed differences.

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

Overall, however, despite the marked sense of difference between the sectors, the students did not appear overly concerned about their transitions. Almost three-quarters in both sectors reported feeling 'fairly'

or 'very comfortable' moving from one sector to the other. It is rather in the response on discomfort that the significant difference shows: twice as many of those commencing higher education (14 %) than VET (7 %) felt uncomfortable in the transfer. This figure reinforces the earlier finding on ease of dealing with issues (in Table 3) that it is in the transition from VET to higher education that the greatest degree of discomfort occurs. This is undoubtedly a reflection of the older, more financially secure, more occupationally experienced and more confident individuals who (often some time later in a process of indirect transfer) enrol in the VET sector.

What do they think of their moves?

Students reflected on their journey of learning most often in terms of improving or expanding themselves over a series of steps taken for vocational or interest reasons. They rarely thought of their journey as linear. Indeed, it was articulated in many different travel terms as 'a zigzag', 'a curve', 'a lot of roundabouts', 'a few turns in the middle', 'forks' and 'an avenue of your life where you are learning something totally outside the normal'. Some depicted theirs as spasmodic, including 'jagged', 'erratic hops', 'messy and disjointed', 'intermittent', 'a bit of a mish-mash in the beginning', 'strange', 'very stop-start', 'an adventure', 'a learning curve', 'a hop, skip and a jump', 'quite unstructured', 'initially hit and miss', 'not smooth' and 'interesting and strange'. Others used a variety of colourful, topographical descriptors such as 'very bumpy', 'very meandering', 'very winding', 'very hilly', 'meandering and scenic', 'cobblestoned', 'challenging, stressful, fulfilling' and 'very long'. Collectively these rich descriptions illustrate a circuitous learning journey for these transitory students, giving voice to the frequency of student movement illustrated earlier.

It was clear students did not believe that the learning journey needed to be straight. One interviewee believed that it was:

'... like starting at one end and then maybe make a few turns in the middle and you don't actually have to go from one end to the other in a straight line. You can do a few different things along the way and gain experience in different areas'

Nor did they view their journey as continuous. Rather, the common image was one of fragmented or discontinuous stages, explained as 'footsteps', 'the steps you take', 'the branches' and 'the stepping stones'. Certainly for most, they believed that they had agency over their journey, as it was seen as a series of personal choices:

'I make my own pathways and my own decisions ... You find what you are good at, you stick to it, and if a fork comes up in the road, you make your decision for better or for worse'.

'... you have choices about which way you go so the learning pathway is the study options you take up and even learning in your own workplace and where you are heading – leading you to a goal – the walk of life'.

A characteristic feature of their learning, however, was that it did have direction – even though where was often not known. The direction was variously described as 'the end of your career/learning pathway', 'always going one step ahead', 'what you want to do which leads you to a final goal', 'starting off at the start and continuing on to the final product' and 'certain points on a pathway to get somewhere'. Moreover, they clearly recognised that the direction changes. One claimed that it can change 'from time to time', while another that 'it always changes' because 'the path is never straight... and has different hooks in the road'. Yet another talked about their up and down trek:

'... it's a road trip; pathway seems to be very suburban. Yes, I'm going to go for a lovely walk, isn't this pretty and aren't the trees nice. For me, it has been an up and down journey – trying to make the right decisions, and am I making the right decisions? A learning journey or trek'.

And for some of these transitory students, their views embodied a commitment to lifelong learning. It was expressed as 'learning your life', 'a continuum of learning', 'the walk of life' and 'the different avenues available to you at different stages of life... Throughout your life, you have to keep learning and throughout your career'.

The reasons for their frequent moving were varied. A common response was the lack of guidance they received, or used. One said, 'I was very naïve with a lot of stuff and didn't really get much information on where I was going' and another, 'I suppose there may have been an easier way for me to do it. When I left school, I didn't seek any career advice and at school I don't know that I got career advice either.'

Another reason was the lack of fit between the courses attempted. One acknowledged the journey as 'strange, because I have done different courses that don't really relate', while another admitted:

'I guess because my degree has nothing to do with vocational education. You get basic, broad analytical skills from the BA [Bachelor of Arts], but you don't get any practical knowledge that I had gone on to apply, so it doesn't feel like it followed on logically ...'

Inexperience was also hinted at as a reason for so many moves. Some recognised that at the beginning of their learning journey they did not know what they were doing or where they were going. One referred specifically to their young age when making early decisions about learning options:

'I guess I started at the start and took a bit of a turn and ended up on the learning pathway I wanted to take. After that initial decision, I have realised what I wanted to do. It was difficult when you first start, when you leave school and go to [VET] or uni. It was always tough at that age to know where you want to go – it takes a couple of years to decide'.

Yet another reflected on the learning that derives from sources other than formal study, claiming that 'learning ... is not just what you study for – it's where you learn from other people and experiences. I ... had no idea of what was available or what was out there or what you could choose'. For others, it was a case of not having the appropriate prerequisites, with one admitting that 'I have used three different institutions to get to where I want to be, but I don't think I could have done it any other way, due to my high school level'.

As a consequence of these multiple moves, many recognised their learning journey as circuitous. Some acknowledged that their journey could have been quicker and easier, and expressed mixed emotions about their moves. One said 'it hasn't been too good – very stop and start, and change and switch over to this path and then switch over to that path', while another confessed 'all those mistakes, and I would change that if I went back'.

Conclusions and implications

The findings reflect a diversity of learning trajectories which are not as easy, seamless and linear as policy desires (summarised earlier, and illustrated in Figure 1). They have shown that the reality of experience for a proportion of tertiary students is quite different from the rhetoric of policy. One may well ask to what extent linear or 'traditional' pathways survive? The findings here clearly support those of other research that learning careers of young people tend to be more erratic than linear and are rarely the products of rationally determined choice (Bloomer and Hodkinson, 2000; Unwin, 2003), and that their decision-making is pragmatically rational depending on opportunity and subjective perceptions (Hodkinson et al., 1996).

While not seamless, these educational transitions and pathways nevertheless appear from this research to be functional, and utilised by many people. From the experiences of these learners, it seems that the process could be enhanced by targeted, accessible and accurate information and by provision of more career advice. Notwithstanding systemic factors, however, the wherewithal of the individual is also critical as to whether these opportunities are taken up and effectively utilised.

The circuitous learning journeys taken by these students raise for administrators and policy-makers the issue of efficiency. Yet learners saw great value in whatever studies they had done, and there were few regrets about the terrain they had traversed. While there were acknowledged to be losses, such as time, money and career delay, they also were able to discern gains such as completion of qualifications, skill refreshment, acquiring information, better interpersonal skills, understanding self, growth in self-belief, and reaffirmation of what they did not want to do. Such circuitous pathways are a reflection of the rather loose fit of education with the labour market in Australia. Learning pathways have to be more individually constructed than where there might be a tighter coupling of education with the labour market (as in many European countries). The trade-off in accommodating choice and options is having to live with some inefficiencies. An understanding of these issues may assist policy-makers and institutional leaders with insights into how best to position relationships between the sectors, and to implement policies and services that help learners to navigate through education systems that are quite different in philosophy and pedagogy.

There are four main implications of this research. First, there is a need for interrogation of the meaning and consequences of the notion of 'seamlessness' in educational policy and what it implies for learners, particularly those without the personal wherewithal and resources successfully to navigate transfer between different sectors. Second, there is a need for more complete and comprehensive statistics on student pathways, especially data on the private VET sector and on learners who enter the VET sector with incomplete higher education qualifications. Third, there is a need for two-way models of student movement when examining articulation and credit transfer within a lifelong learning framework. The findings here reinforce the claim by Golding and Valence (2000) that one-way models are simplistic, illusionary and inaccurate, and are misleading, patronising and destabilising on VET from a learner perspective.

The fourth and arguably most profound implication is that greater recognition could be afforded to the different but increasingly complementary roles of higher education and VET. With evidence of the converging of both perception and practice of these sectors, and questions continuing to be raised about the senior school years and their capacity to prepare young people for the world of work, the VET sector needs to be more clearly and strongly positioned as a viable gateway to, or alternative of, the higher education sector. Moving together like tectonic plates and creating convergent boundaries, these two worlds of higher education and VET, and the relationships between them, require clarification and re-conceptualisation.

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