Adult worker-learners moving between academic and vocational education sectors: A comparative analysis of Australia and Singapore

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Introduction

‘Two roads diverged in a wood, and I –

I took the one less traveled by,

And that has made all the difference’ (Robert Frost, 1920)

This SCUTREA conference has as one of its themes the purposes of adult continuing education and the relationships between post-secondary sectors. This paper attempts to illuminate aspects of the relationship between the academic and vocational education sectors, drawing on empirical data from two different international contexts – Australia and Singapore. These two studies focused on adult ‘worker-learners’ (Fannon, 2004, p.1) who had moved between these two sectors. The paper offers its contribution to knowledge as: (a) a focus on learner experiences, (b) data from two countries, (c) international collaboration and, most importantly, (d) a study of learner movement between tertiary education sectors, and in particular, of the lesser-known pathway from the academic to the vocational.

The focus of learner movement in education is so often on transition from school to work or school to university. However, in a knowledge society, and where jobs are being redefined or becoming obsolete and job boundaries are blurring, there is need to consider many other types and directions of movement within and between educational sectors throughout lifetimes. Recognition of this places learning in a new perspective, with ‘individuals actively interpreting their contexts, managing their work pathway, and their learning needs to equip them with self-management and work-future planning skills’ (Fannon, 2004, p.7). Opportunities for adults to engage in learning throughout their lifetimes are essential for both economic efficiency and social equity reasons, and access to different forms of post-school education is critical.

Where research does concentrate on movement between tertiary sectors, the focus is almost always on Vocational Education and Training (VET) to Higher Education
(HE), the ‘expected’ pathway. Many studies record the experiences of learners undergoing this transition, fostered by governmental moves to widen participation in HE (e.g. Pike & Harrison 2011, Barron & D'Annunzio 2009, Scott 2010, Hatt & Baxter 2003). However, the ‘road less travelled’ is that from HE to VET: far less is known about this pathway. Prima facie, it appears counter-intuitive: why would one cross the boundary in that direction? There are connotations of ‘going backwards’, fuelled by such concepts as ‘reverse articulation’ and ‘reverse transfer’ with their assumptions about the ‘normal’ direction. There are assumed to be barriers of various types relating to the practicalities of treading this path, parental pressures, and marked status differences between the sectors. Yet such movement does occur. Pike and Harrison (2011) call it ‘crossing the divide’, Hatt and Baxter (2003) ‘transition from vocational to academic’ and Solomon (2005) ‘boundary crossing’, warning that it is ‘neither uncomplicated nor unproblematic’ and that ‘we can’t ignore the complexities’ (p. 105). Exploration of this somewhat invisible and under-researched phenomenon, therefore, has considerable value, in that it could throw the spotlight on this pathway as a road that could be more travelled, especially as the demand for more educated personnel increases in knowledge economies. This was the foundational issue underlying this paper.

Background
This paper focuses on two concepts that can help us to understand this movement of learners from the academic to the vocational sectors: ‘boundary crossing’ and ‘career capital’.

Boundary-crossing
We can think of crossing boundaries applying to almost all walks of life, whether national, organisational or disciplinary boundaries. In the case of learners, boundary-crossing may occur in many ways – here, the focus is limited to movement from the academic to the vocational.

Boundaries are multi-dimensional. Koegleiter, Trolina and Smith (2008, pp. 170-1) have identified four types of boundaries with regard to organisations: social, information, structural and communication. It is the structural category – the physical and geographic aspects, organisational design, and procedures – that is perhaps the most applicable to this analysis. These authors refer to ‘boundary spanning activities’ (p. 172) that can help to minimise problems of information flow and decision-making. Thinking of such activities as occurring at both formal and informal levels, it is likely that lecturers and career advisors could be of assistance in the former and fellow learners and social networking in the latter.

Boundaries can be problematic, with connotations of marginality and peripherality. Wenger (1998, p. 254) warns that they are places where ‘one can anticipate problems of coordination, understand issues of miscommunication, and come to expect transformations as people and objects travel across the social landscape’.
However, for that very reason they are worthy of attention as places of learning where meaning can be negotiated anew:

Boundaries are like fault lines: they are the locus of volcanic activity. They allow movement, they release tension; they create new mountains; they shake existing structures … they are the likely locus of the production of radically new knowledge (Wenger, 1998, p. 254).

In analyses of sectoral boundary-crossing of learners, the literature reflects a preoccupation with structural factors. Commonly, such interest is related to responses to government agendas on widening participation in tertiary education and promoting lifelong learning. Studies frequently focus on the importance of articulation and curriculum issues between post-compulsory institutions (Knox 2005, Keating 2006), attempts at blurring boundaries between sectors (Grubb 2006, Gallacher 2006) and differences in accreditation arrangements (West 2006). Other literature focuses on barriers to student movement. For example, the Australian government (DEST 2002, p. 3) has acknowledged that ‘significant barriers remain … [including] fundamental differences in learning and assessment’ between the sectors.

Other research, with a focus more on individual agency than institutional factors, suggests that it is not simply a matter of smoothing credit transfer and administrative processes. McMillan, Rothman and Wernert (2005) concluded that ‘interests play a major role’ (p. 32). Their data emphasised the importance of preferences and interests, such as wanting to get a job, the course not turning out as they wanted or losing interest as common factors for withdrawal, and that the high proportions indicating these reasons ‘suggest a need for students to have better access to course and career guidance prior to entry to tertiary study’ (p.36). Other research has highlighted concerns over maintaining satisfactory work/life/study balances (Christie et al. 2006; Harris et al. 2005, Lowe & Gayle 2007). And Saunders (2006, pp. 17-18) has referred to the ‘complex social and cognitive processes’ that take place in crossing boundaries, with individuals ‘struggling to make sense of their circumstances as they move from one set of practices to another’. This paper contributes to the unveiling of this ‘complex’ process.

**Career capital**

Adults’ careers are no longer bounded within a single employment situation (Lamb & Sutherland 2010) and are increasingly the responsibility of individuals rather than employers. Thus, individuals need to keep on learning and reinventing themselves, engaging in what Greller (2006) labels ‘career investment behavior’ and King ‘career self-management’ (2004), so they do not reduce their effectiveness in current work or jeopardise chances of gaining or changing work. Thus the notion of ‘career capital’ (Parker et al. 2009, Suutari & Makela 2007), and how adults leverage it, is of relevance in this paper.
As global forces make for ‘boundaryless careers’ (Arthur & Rousseau 1996) characterised by uncertainty and flexibility, individuals search for meaning in their continuously changing career trajectories. In relatively small economies like those in Singapore and Australia, acutely subject to global forces, workers are likely to seek ways forward that will help shield them from the vagaries of economic forces. The notion of career capital is an individualistic perspective that can contribute to our understanding of how individuals achieve this. Career capital is concerned with three key dimensions of knowing (Cappellen & Janssens 2005): knowing-why (motivation and personal meaning), knowing-how (occupational skills, knowledge and understanding) and knowing-whom (career-relevant networks and contacts). The paper illustrates how worker-learners in two countries endeavour to build their career capital through crossing sectoral boundaries.

Research methods
The studies used blended methods: both groups participated first in an online survey and then in an individual interview. The Singapore respondents (N=101) had moved from formal tertiary education (in universities and polytechnics) into the Workforce Skills Qualifications (WSQ) sector; Australian respondents (N=190) had moved from university into the VET sector. For the survey, the Singaporean sample was drawn from training providers within six of 25 industry Frameworks selected for their diversity, and respondents were those willing to participate who were graduates within a specified six-month period. The Australian sample was drawn from public VET institutes in South Australia, with respondents those willing to participate who had university experience. The Mann-Whitney Test was used to determine significant difference. The interviewees were drawn from those who responded to the surveys and who agreed to be followed up. The sample interviewees numbered 30 in Singapore and 22 in Australia.

There were more males in the Singaporean sample (79%) than in the Australian sample (44%). The Australian sample was younger, with 23% less than 25 years of age and 36% in the 35-54 age bracket, compared with 61% of the Singaporeans over 40 years of age. The two groups were similar in employment experience, with 59% of the Singaporeans employed fulltime compared with 55% of the Australians, and 12% of the Singaporeans not employed compared with 18% of the Australians.

The data are to be considered indicative – the main limitation was the relatively low numbers, largely resulting from difficulties encountered in identifying learners who had studied in both sectors. The surveys were restricted also by the necessity (time and cost) to one State in the Australian study and six frameworks in the Singaporean study. Moreover, a general qualification on self-report studies is the dependence on participants’ memories.
Crossing the boundary between sectors

1. *Why did they choose to transition from academic to vocational programs?*

The reasons why these graduates of the academy enrolled in vocational programs varied considerably (Table 1). The data reveal interesting differences and similarities. In every case, more Singaporeans agreed with the reasons than Australians, probably a reflection of cultural acceptance. Intriguingly, ‘personal interest and development’ was top on the Singaporean list (91%) and third on the Australian list (70%) – even though learners were moving to vocational qualifications. This reason is evidently a strong motivator for those deciding to undertake continuing education.

**Table 1: Respondents’ reasons for choosing to enrol in their vocational program (in percentages)**

<table>
<thead>
<tr>
<th>Question: We are interested in your reasons for enroling in this course. Please indicate your level of agreement with each of the following reasons.</th>
<th>Singapore study University/Polytechnic graduates enrolling in WSQ (N=101)</th>
<th>Australian study Learners with University experience enrolling in VET (N=190)</th>
<th>Level of significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree</td>
<td>Neutral</td>
<td>Disagree</td>
<td>Total</td>
</tr>
<tr>
<td>for personal interest, development or recreation</td>
<td>91</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>to gain or improve my practical skills</td>
<td>84</td>
<td>14</td>
<td>2</td>
</tr>
<tr>
<td>to improve my employment prospects</td>
<td>83</td>
<td>3</td>
<td>14</td>
</tr>
<tr>
<td>to get a vocationally specialised education</td>
<td>82</td>
<td>14</td>
<td>4</td>
</tr>
<tr>
<td>to improve my career prospects in my current field</td>
<td>80</td>
<td>15</td>
<td>4</td>
</tr>
<tr>
<td>to retrain for a different career</td>
<td>71</td>
<td>18</td>
<td>11</td>
</tr>
<tr>
<td>to get a broad education</td>
<td>67</td>
<td>24</td>
<td>9</td>
</tr>
<tr>
<td>to update my previous qualification</td>
<td>67</td>
<td>9</td>
<td>24</td>
</tr>
<tr>
<td>to refresh my study skills after a period out of education</td>
<td>58</td>
<td>25</td>
<td>17</td>
</tr>
<tr>
<td>to get a prestigious qualification</td>
<td>51</td>
<td>40</td>
<td>9</td>
</tr>
<tr>
<td>to fill time, meet people or be with friends</td>
<td>51</td>
<td>31</td>
<td>34</td>
</tr>
<tr>
<td>to improve my English language skills</td>
<td>31</td>
<td>35</td>
<td>34</td>
</tr>
<tr>
<td>because I was advised to by someone I respected</td>
<td>27</td>
<td>28</td>
<td>45</td>
</tr>
<tr>
<td>to qualify for workforce re-entry after a period out of the workforce</td>
<td>26</td>
<td>36</td>
<td>39</td>
</tr>
<tr>
<td>because it was required by my employer</td>
<td>24</td>
<td>33</td>
<td>43</td>
</tr>
<tr>
<td>to be eligible for financial assistance</td>
<td>11</td>
<td>0</td>
<td>89</td>
</tr>
<tr>
<td>to please my family</td>
<td>3</td>
<td>28</td>
<td>09</td>
</tr>
</tbody>
</table>

It is fascinating that personal development was reported so highly by the respondents, particularly in Singapore given that avowedly the continuing education system’s key focus is providing relevant training that meets industry needs rather than personal development. Even allowing for the possibility that respondents may feel tempted to report that they are their own career managers, it may well be an instance where there is a disjuncture between political intention and individual motivation.
The reasons that both Singaporeans and Australians agree on in their transition from academic to vocational are to gain or improve their practical skills (Singaporeans 84%, Australians 79%), and to improve employment prospects (Singaporeans 81%, Australians 83%). The predominance in both samples of vocationally oriented reasons rating highly is clear. The next three reasons were concerned with skills and career moves, anticipated in a small, economically ‘driven’ society such as Singapore. The Australians reported significantly less agreement on all three vocational reasons, which may have been because the sample was younger and predominantly female.

An interesting observation from the data is that, while the Singaporeans enrolled for clear vocational reasons, they also reported, albeit to a lesser degree, that they enrolled for educational and status reasons, such as to get a broad education (67%), update their previous qualification (67%) or refresh their study skills after a period out of education (58%). This highlights the multi-purpose role being played by the WSQ system – to equip people with specialised knowledge and skills, but also to promote the workforce development and status of workers. In comparison, the lower figures on agreement reported by the Australians perhaps reflects the more instrumental positioning and lower status of the VET sector.

2. How easy or difficult did they find this transition?
Table 2 indicates areas in their transition where respondents reported difficulty. Considerably higher proportions of Australians than Singaporeans reported difficulty – probably a combination of less experience (they were younger) and cultural difference. What is important to note is that neither group found the transition particularly difficult. The area where both groups found the most difficulty was making necessary changes in their lives to be able to study (Australians 53%, Singaporeans 22%). Difficult also for the Australians were the financial aspects of having sufficient income to study (37%) and paying fees (30%).
The two groups differed significantly on six areas, where Australian learners reported more difficulty with making changes, finance, obtaining careers guidance, confidence to study, and meeting entry requirements. Finance and course entry are not such important issues in Singapore for WSQ learners where subsidy can be up to 90% of their fees and an open access is a key principle underpinning the WSQ system. On the other hand, meeting entry requirements, going through application processes, getting adequate information about the program, family’s agreement on taking the course are the main aspects that both groups find easy.

Collectively, these results point to areas where some individuals find difficulties or barriers to undertaking further study. They centre on issues relating to obtaining careers guidance to help in decision-making, having sufficient financial support to study, having the confidence to attempt further study, and the more general aspect that affects all students of making changes in their lives to have enough time to devote to study. Thus, we can see that deciding to undertake further study requires not only exploration of personal issues connected with such a move but, importantly, access to careers advice and having sufficient income.

3. How different or similar did they find the two sectors?
Respondents’ judgements on the similarity or difference of various institutional and programmatic aspects are outlined in Figure 1.
Figure 1: Respondents’ perceptions of differences between their vocational and academic programs (in percentages)

The striking feature is the high proportion in both samples reporting difference—between six and eight of every ten respondents. As in the case of difficulties (Table 2), these data on differences (Figure 1) highlight particular areas that are most likely to be stumbling blocks for individuals who have not—unlike these select learners—taken up a vocational qualification. The second key feature to note is the similarity in the figures for the two groups (there were no significant differences). Not only are the various items in a similar sequence (assessment processes, study cost and teaching style are at the top and support services and class size are at the bottom), but the proportions of students from each sector tend also to be similar on each item. That the top area in each case is assessment is hardly surprising, given that both vocational systems are competency-based, in contrast to their traditionally norm-referenced academic study.

Conclusions

Boundary crossing

In crossing the boundary between academic and vocational sectors, taking the road less travelled, the learners in these two studies have had relatively similar experiences. While the contextual environments of their two countries are quite different, they reported their transitions as relatively easy. Learners moving in this direction are generally older, and therefore more experienced and settled, than their counterparts transitioning in the other direction.

While most respondents did not necessarily find moving between sectors difficult, however, they reported that it was different in many respects. Transition between
sectors necessarily involves adjustments to different systems of education. Learners reported very similar responses. In both countries, the crossing of the sectoral boundary involved substantial change from content-based, norm-referenced programs to competency-based, criterion-referenced programs, a transition bound to provoke a reaction of difference with respect to such matters as assessment, course structure and teaching style. The two approaches exhibit marked differences in educational philosophy.

In the process of boundary crossing, therefore, it is likely that program and career guidance could have been of assistance. In these studies, however, some (albeit a minority) reported that getting such guidance was difficult, with three times more Australians saying this than Singaporeans. It is also clear that learners had difficulties in getting several other types of help – about their programs, advice from staff, employer support and adequate information about employment prospects. While these proportions were not in the majority, they do indicate areas where boundary-crossing could have been made even easier, supporting McMillan et al. (2005) and Koeglreiter et al. (2008) on the need for ‘boundary-crossing activities’.

**Career capital building**
The learners in these two studies were building their career capital by undertaking further study in the vocational sector after graduating from academic studies. They were investing in their careers through the three ways of knowing – knowing-why, knowing-how and knowing-whom. Their reported reasons for enrolling reflect various combinations of personal interest/development and vocational purposes. The two groups differed somewhat on these reasons, but it is evident that as individuals they were clear about their motivations in undertaking their vocational studies, that they were studying to expand their educational knowledge and skill (e.g. ‘to get a broad education’, ‘to get a vocationally specialised education’) and that they were developing friends and contacts in classes and building relationships with teachers. In studying to improve career prospects or retrain for a different career, a significant proportion of the learners in both countries were signalling that they were investing in career behaviour to create for themselves more of a ‘self-directed career’ or ‘self-designed career’ (Sullivan et al. 1998) than a traditional career.

Individuals need to assume responsibility for their own career management (King 2004) in order to remain employable. In the contemporary environment, particularly post global financial crisis, psychological contracts centred on job security and loyalty are being replaced by contracts founded on learning and performance. It is therefore critical that individuals continue to reflect on their careers and engage in continuing learning. The evidence in these two studies indicates that these learners were indeed doing that. The numbers graduating from both academic and vocational sectors may not yet be great (especially via the road less travelled). However, as these sectors become more interconnected over time, oiled by governmental policies striving to promote seamlessness and educational systems
characterised by educational choice, we can anticipate more such learners crossing sectoral boundaries and building their career capital in the process.

While there are important differences between Singapore and Australia in terms of the tightness of the relationship between education and the labour market, such movement is indeed vital, and both countries are exhibiting considerable policy interest in pathways between their academic and vocational sectors. Within this context, then, opportunities for crossing boundaries between sectors and accumulating career capital act as essential escalators in the pathways of adult learners. As Tessaring and Wannan (2004, p. 40) at Cedefop have concluded, ‘Flexibility in learning pathways contributes to raising the attractiveness, effectiveness and efficiency of VET, and to making lifelong learning a reality’.

References


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