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Why is it important for higher education to connect with the VET sector?

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This paper examines the value to students of connections between the Vocational Education and Training (VET) and Higher Education sectors. It presents findings from research at the University of Tasmania which shows that students admitted to higher education on the basis of previous VET perform as well if not better than all other student populations. The paper challenges some commonly held myths about VET students’ academic ability and about the perceived differential status of VET and higher education, and suggests that higher education can learn valuable lessons from VET regarding practice based learning. However, there is only limited uptake of direct pathways from VET to higher education in Tasmania, and the reasons for this are examined. The paper concludes that connections between VET and higher education need to be strengthened to deliver successful outcomes for students. Future directions are likely to include development and co-delivery of a bridging program from VET to higher education, better and more transparent credit transfer processes, and development of concurrent or embedded awards in skill priority areas, resulting in both a VET and a higher education qualification.

Keywords: VET pathways, social inclusion, participation

Background

Participation in higher education is important for individuals and communities for a range of social and economic outcomes. Education enables the social inclusion of those from disadvantaged groups, such as those from rural and remote areas and those from low socio-economic status (SES) backgrounds; facilitates regional development, and provides personal development opportunities that have the capacity to transform individual and community outcomes (Department of Education, Employment and Workplace Relations, 2008). Perspectives on what constitutes social inclusion range from access to participation to empowerment (Gidley, Hampson, Wheeler, & Bereded-Samuel, 2010), with the strong government focus in recent years on increasing participation. One of the national targets set by the Australian Government (Australian Government, 2009) and supported by the Council of Australian Governments (COAG), states that 20% of higher education enrolments at the undergraduate levels will be of people from low SES background by 2020. Many of these people will be the first in their family to participate in tertiary education. The Higher Education Participation and Partnerships Program (HEPPP) was established by the Australian Government in 2010 with the aim of achieving these targets by increasing participation and facilitating partnerships to assist in achieving participation targets.
Research indicates that vocational education and training (VET) pathways are successful in facilitating access to and participation in higher education, particularly for low SES students (Hoelscher, Hayward, Ertl, & Dunbar-Goddet, 2008; Moodie, 2010). While VET and higher education have a number of fundamental differences including philosophy, pedagogy and assessment measures, the practice based learning characteristic of VET programs may benefit students in the transition to more theoretical higher education studies. More recent research (Billett, 2009) in the higher education sector supports the value of practical learning in a workplace setting, combined with conceptual learning in an academic setting, to assist graduates in the transition to professional practice. Billett (2009) proposes that higher education institutions need to develop approaches to facilitate integration of practice-based learning with learning in an academic setting.

VET pathways have been found to facilitate access to higher education for particular areas such as nursing and education, which also accept higher proportions of low SES students (Moodie, 2010). Rates of articulation are influenced by the level of VET completed. VET pathways in management and commerce are the most frequently accessed in Australia, and this is partly explained by the higher proportion of management and commerce VET students enrolled in higher level VET study (Certificate IV and above) leading to articulation, compared with all other VET study areas (Moodie, 2010). At the same time, equity issues in relation to participation have been raised in relation to VET pathways, in that institutional barriers may limit the number of VET students admitted to particular higher education institutions and/or particular courses, thereby limiting employment outcomes and potential income earning capacity (Hoelscher et al., 2008).

The recent introduction of the revised Australian Qualifications Framework (AQF; 2001) and its Pathways Policy, provides the impetus for VET and higher education institutions to review their current processes and practices to “maximise the credit that students can gain for learning already undertaken” (p. 75). In addition, there is a growing body of literature on articulation arrangements between VET and higher education, ranging from guaranteed places and credit transfer (Guthrie, Stanwick, & Karmel, 2011), to jointly delivered associate degrees, to dual concurrent or embedded pathways resulting in both VET and higher education qualifications (Cram, 2011; McLaughlin & Mills, 2011; Noonan P and Allen Consulting Group, 2010).

Effective pathways are characterised by close connections between the VET and higher education sectors, where staff from each sector work collaboratively to create a closer fit between courses (Milne, Keating, & Holden, 2006), jointly contributing towards the transition process (PhillipsKPA, 2006). Utilisation and effectiveness of pathways is influenced by a high level of student awareness of pathways (Byrnes et al., 2010), and by personal factors such as motivation and self esteem. Barriers to effective pathways include lack of awareness of available pathways due to factors such as lack of adequate promotion and explanation by VET teachers, and poorly developed relationships and communication between VET and higher education staff (Milne et al., 2006). At a broader level, effectiveness of pathways may be limited by sectoral differences between the VET and higher education sectors in terms of philosophy, pedagogy and assessment, and administration systems (Milne et al., 2006; Walls & Pardy, 2010). Long term pathway effectiveness is compromised when pathways are not embedded at a systemic level, and are dependent on the co-operation of individuals or groups who may change.
The research focus and/or issue under consideration

The purpose of the research was to examine articulation and performance of VET articulants to the University of Tasmania (UTAS), with a view to determining the effectiveness of VET pathways within Tasmania.

Given its classification as largely outer regional and remote (Australian Bureau of Statistics, 2011) and its relatively high proportion of low SES residents (Australian Bureau of Statistics, 2006), many within Tasmania experience double disadvantage (Cram, 2010) in terms of higher education access and participation. Within Tasmania there are relatively low participation rates in post compulsory education, and those who continue are less likely to move directly to higher education straight from school, consistent with rural and regional students elsewhere (PhillipsKPA, 2006). However, Tasmania led all other States/Territories in 2010 in the greatest increase in the number of students (in percentage terms) undertaking vocational education and training (NCVER, 2010). These Tasmanian statistics support research that indicates VET is particularly attractive to those in regional and remote areas of Australia (Byrnes et al., 2010; NCVER, 2010). The study was premised on the belief that closer connections between VET and higher education would seem to have particular importance in Tasmania because of its regional nature (Cram, 2011).

The University of Tasmania, with over 20 000 students, is the only University in the state, delivering programs face to face and on line from three campuses located in Hobart, Launceston and the Cradle Coast (Burnie). Within the state there are two public VET providers (Tasmanian Polytechnic and Tasmanian Skills Institute) and a number of smaller private providers. The University has a formal partnership with the VET and school sectors to facilitate pathways to higher education, through the Tasmanian Articulation and Credit Transfer (TASACT) committee which “provide [s] high level institutional and sectoral leadership in seeking to maximise credit transfer and articulation arrangements” between the participating institutions. The study reported in this paper was commissioned by the TASACT committee.

Methodology and methods

The study had five objectives, of which four are relevant to this paper:

- Guided by the articulation framework principles, to map pathways from Certificate 11 to PhD for Agriculture, Business, Community Services/Social Work, Education, Engineering, Environmental Studies/Built Environment/Sustainability, Health Science/Health and Wellbeing, and Information Technology.
- To analyse the articulation and performance of VET articulants over the past 5 years based on UTAS admissions and enrolment data.
- To undertake an initial investigation of enabling and inhibiting factors associated with VET pathways to University based on student experience.
- To investigate the need for possible content of a VET bridging unit/program.

The methodology was informed by social inclusion theory in relation to access, participation and empowerment (Gidley et al., 2010), and by literature on the nature and effectiveness of VET pathways (PhillipsKPA, 2006, 2010).

An examination of the articulation process between VET and higher education required collection of longitudinal statistical data to determine patterns and trends, but also needed to
give a voice to those students who were travelling on the pathway or who were considering doing so. The study used a mixed methods approach. Statistics were collected from admission and enrolment data for 19,584 students from UTAS for the period 2004 to semester one 2011. The sample comprised 1902 students who were admitted to UTAS on the basis of previous VET at Diploma or Advanced Diploma level, and a random sample of students from other groups (mature age/other, previous higher education, Tasmanian year 12, Interstate year 12). Completion data were also collected from the two public VET providers for the period 2003 to 2010. UTAS statistical data were analysed with the aid of SPSS software, to provide descriptive and relational analysis. Completion data from VET providers were provided in Excel format by the VET institutions.

Qualitative data were collected from a sample of 24 current UTAS students who were admitted on the basis of previous VET, to gain an insight into their personal experiences of VET pathways. Qualitative data were also collected from 70 current VET students in the two public VET institutions, to gain an insight into their future intentions regarding higher education and factors that would make this pathway work successfully. Current UTAS students participated in either a focus group or individual interview. There was a balance of males and females, the average age was 38 years, and all discipline areas except for Information Technology and Architecture and Building were represented. Current VET students were approached by their institutions to participate in a short written questionnaire which was distributed and collected by staff from those institutions. Participants represented six different VET areas and most were female. Their ages were not sought. All qualitative data were analysed manually into themes. The research received ethical approval from the Human Research Ethics Committee (Tasmania) Network (approval H11280).

The study was limited by the need to use available statistical information and enrolment data, rather than data collected specifically for the purposes of the research. Data on students’ socioeconomic status were not available. It was not possible to identify whether students admitted on the basis of previous VET were following a direct pathway (formal articulation) or an indirect pathway (in a field unrelated to their university study). Although qualitative data were collected to flesh out statistical data, they were collected from only a small number of participants, so the findings are indicative rather than generalisable.

Findings and Discussion

Student background, participation and performance
Since 2004 there has been a gradual increase in the number of students admitted to UTAS on the basis of previous VET, from within and outside Tasmania. Currently these students represent around 11% of total undergraduate student enrolments at UTAS. They were:

- not an homogenous group (some had completed their study many years ago whilst others had more recent experience; some were following a direct pathway from VET to higher education while others were pursuing a career change through higher education);
- older than all other student population groups (mean age 34);
- more likely to be female;
- more likely to enrol in Education, Management and Commerce, Society and Culture, and Health (see Table 1); and
- more likely to be granted credit in Management and Commerce, Information Technology and Education (see Table 1).
Table 1: Number of VET student enrolments at UTAS by study area and credit granted

<table>
<thead>
<tr>
<th>Enrolment study area</th>
<th>No (%)</th>
<th>Yes (%)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education</td>
<td>237 (59%)</td>
<td>168 (41%)</td>
<td>405 (100%)</td>
</tr>
<tr>
<td>Management and Commerce</td>
<td>126 (34%)</td>
<td>240 (66%)</td>
<td>366 (100%)</td>
</tr>
<tr>
<td>Society and Culture</td>
<td>266 (79%)</td>
<td>71 (21%)</td>
<td>337 (100%)</td>
</tr>
<tr>
<td>Health</td>
<td>257 (99%)</td>
<td>3 (1%)</td>
<td>260 (100%)</td>
</tr>
<tr>
<td>Creative Arts</td>
<td>110 (71%)</td>
<td>45 (29%)</td>
<td>155 (100%)</td>
</tr>
<tr>
<td>Engineering and Related Technologies</td>
<td>106 (76%)</td>
<td>33 (24%)</td>
<td>139 (100%)</td>
</tr>
<tr>
<td>Natural and Physical Sciences</td>
<td>90 (98%)</td>
<td>2 (2%)</td>
<td>92 (100%)</td>
</tr>
<tr>
<td>Information Technology</td>
<td>42 (48%)</td>
<td>46 (52%)</td>
<td>88 (100%)</td>
</tr>
<tr>
<td>Agriculture, Environmental and Related Studies</td>
<td>28 (88%)</td>
<td>4 (12%)</td>
<td>32 (100%)</td>
</tr>
<tr>
<td>Architecture and Building</td>
<td>25 (89%)</td>
<td>3 (11%)</td>
<td>28 (100%)</td>
</tr>
<tr>
<td>Total</td>
<td>1287</td>
<td>615</td>
<td>1902</td>
</tr>
</tbody>
</table>

One third of all students admitted to UTAS on the basis of previous VET were granted credit upon commencement of their degree. Whilst no data were available regarding students who may have applied for credit but were refused, qualitative data suggested there were a number of reasons why credit had not been sought, including failure to claim due to lack of awareness or the complexity of the credit transfer process, completion of VET in an unrelated area (wool classing to nursing, for example); and the time spent away from study since completing VET. Other research also links low rates of credit transfer to lack of formal articulation arrangements (Cram, 2011). Some students said they decided not to apply for credit even when they were advised they were entitled, for fear of missing foundational information and concepts if they did not complete the whole course. This suggests that confidence in credit transfer needs to be increased, requiring greater collaboration between VET and higher education to map curriculum and identify equivalence (Cram, 2011).

Where there were formal articulation arrangements (for example, Community Services/Social Work, Management and Commerce, Education) current UTAS and current VET students indicated a fairly high level of awareness of credit transfer. Students in areas where there were no formal articulation arrangements or less well established pathways (for example, VET courses in Commercial Cookery, and Electrotechnology) had little awareness of further education and training options.

Figure 1 shows that completion rates for students admitted to UTAS of the basis of previous VET are similar to those across all other student populations.
Figure 1: Overall completion rates for VET versus all other student populations

Figure 2 shows that students admitted to UTAS on the basis of previous VET performed as well if not better than the student population on average. On completion of their degree, there was little to no difference in Grade Point Average (GPA) between these students, Tasmanian Year 12 and mature age/other students, and they received a GPA that was between 0.3 and 0.5 higher than previous higher education students and between 0.2 and 0.6 higher than interstate Year 12 students. This supports findings from earlier UTAS research (Abbott-Chapman, 2006) and other research (PhillipsKPA, 2006) on the academic performance of VET students.

Most of the students interviewed who had been admitted to UTAS on the basis of previous VET, were satisfied with their University experience, had high expectations of themselves, and had the capacity and desire to do well:
I think because of what I’ve done in the past I should be doing well (female Bachelor of Nursing student).

Several students who did not have a family background of further education were keenly aware that they were role models for future generations:

…so I would be the first one … hey that’s another reason to graduate isn’t it? (female Bachelor of Business student).

They reported that satisfaction with their study motivated them to do well. Satisfaction was linked to different factors for different students, including effective transition strategies and supports; the ability to maintain work/life/study balance; having a supportive family or workplace; the culture and practices of the particular School in which they were enrolled; adequacy and timeliness of information, instruction and feedback received, and length of time they had been at University. Most acknowledged that things become easier the longer they spent at University:

I enrolled in UPP [University Preparation Program – an enabling program] and did six months. It was excellent, particularly the maths course, and I got distinctions, and it prepared me well for University study … I am nearly finished my Nursing degree now, and have been getting good marks. University was not as hard as I thought (male Bachelor of Nursing student).

Surviving the first few months and getting over the “fear factor” was the most important thing:

…they probably mentioned UniStart [orientation program] and UPP [enabling program] but I didn’t take it in [at the time] because I was full of anxiety and fear (male Bachelor of Social Work student).

A common theme that emerged from current UTAS and current VET students was the need for earlier provision of a bridging program to assist in the transition from VET to higher education. The program would need to start before entry to higher education, while students were still at their VET institutions. Several students suggested that the program should be co-delivered by VET and UTAS staff utilising the facilities of both institutions. This would help students to cross the boundary from VET to higher education.

**VET as a pathway to higher education: a road less travelled in Tasmania**

An important finding from the study is that previous VET study offered a range of benefits in the transition to University, even if it was in an unrelated area or if it was undertaken some years ago. VET provided an indirect pathway to higher education, facilitating social inclusion for a number of students who might not otherwise have aspired to higher education. Benefits were identified as increased confidence in their ability to undertake post compulsory study, skills to cope with and adapt to University study, specific study skills (for example, public speaking, advanced writing skills), and a more general sense of giving students a head start at University. These benefits were particularly important for more than half the students interviewed, who had no family history of higher education:

I wouldn’t have gone to University without it … because I’d been out of schooling for a long time … … I didn’t have anybody as a mentor … which was what I was provided with through TAFE … [TAFE] gave me confidence, and also learning time management and what was going to be required (female Bachelor of Arts student).
Several students commented that practical knowledge gained from VET assisted them to make sense of the theoretical approach characteristic of university study:

I think that practical side helps you to adapt to university … you have an idea what to expect: you do a little bit of theory, you know a bit about theory, so you’re not confronted (female Bachelor of Contemporary Arts student).

I think my vocational education and training made a difference, just making sense of things and questions (male Bachelor of Maritime Technology management student).

Most current VET students agreed that participation in VET had changed their attitudes to further study in a positive way: “[study is] not as scary as I first thought” (female Certificate III Education Support student) and “[VET] made it clearer how the pathway to University studies was laid out” (male Diploma of Enrolled Nursing student). Around one third thought they would continue with higher level VET and one third with University study, although these categories were not mutually exclusive.

A key finding is that direct pathways from VET to higher education are not well utilised in Tasmania, resulting in lost opportunities. The situation is not unique to Tasmania (see Noonan P and Allen Consulting Group, 2010 for a discussion of pathways in Queensland). UTAS is able to demonstrate some measure of compliance with AQF pathways policy in terms of availability, promotion and accessibility of pathways into and between qualifications, but processes and practices differ amongst Schools/Faculties. For example, Management and Commerce, and Information Technology pathways could be seen as effective because more than 50% of VET students were granted credit (Table 1). These pathways have been identified as effective elsewhere in the research (see, for example, Moodie, 2010). In addition to high rates of credit, effective pathways are characterised by high recruitment numbers (Management and Commerce) and relatively high rates of completion (Management and Commerce, Information Technology) (see Table 2). Less effective pathways, characterised by lower rates of credit, and/or lower recruitment numbers or rates of completion, included Health, Architecture and Building, and Engineering (see Table 1 and Table 2).

VET articulants were conscious that they were following a different pathway from those who had entered directly from year 12, and some questioned whether the university was equipped to cope with this:

[the University] had advertised you can come from TAFE and get all this credit … and I turned up and … it’s as though they hadn’t dealt with it before … I didn’t really push the point or ask enough questions … which in hindsight was probably a bit silly … I just seemed like this boy in the side that didn’t quite fit into … what every other [Year 12 school leaver] student was doing… (male Bachelor of Engineering student).
Table 2: Completion rates for VET students by study area

<table>
<thead>
<tr>
<th>Study area</th>
<th>No longer enrolled</th>
<th>Still enrolled</th>
<th>Education completed</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No (%)</td>
<td>No (%)</td>
<td>No (%)</td>
</tr>
<tr>
<td>Society and Culture</td>
<td>160 (47%)</td>
<td>134 (40%)</td>
<td>43 (13%)</td>
</tr>
<tr>
<td>Natural and Physical Sciences</td>
<td>37 (40%)</td>
<td>46 (50%)</td>
<td>9 (10%)</td>
</tr>
<tr>
<td>Engineering and Related Technologies</td>
<td>51 (36%)</td>
<td>44 (32%)</td>
<td>44 (32%)</td>
</tr>
<tr>
<td>Education</td>
<td>148 (36%)</td>
<td>177 (44%)</td>
<td>80 (20%)</td>
</tr>
<tr>
<td>Information Technology</td>
<td>31 (35%)</td>
<td>27 (31%)</td>
<td>30 (34%)</td>
</tr>
<tr>
<td>Agriculture, Environmental and Related Studies</td>
<td>11 (34%)</td>
<td>11 (35%)</td>
<td>10 (31%)</td>
</tr>
<tr>
<td>Management and Commerce</td>
<td>113 (31%)</td>
<td>81 (22%)</td>
<td>172 (47%)</td>
</tr>
<tr>
<td>Creative Arts</td>
<td>46 (30%)</td>
<td>50 (32%)</td>
<td>59 (38%)</td>
</tr>
<tr>
<td>Architecture and Building</td>
<td>8 (29%)</td>
<td>14 (50%)</td>
<td>6 (21%)</td>
</tr>
<tr>
<td>Health</td>
<td>49 (19%)</td>
<td>122 (47%)</td>
<td>89 (34%)</td>
</tr>
<tr>
<td>Total</td>
<td>654 (34%)</td>
<td>706 (37%)</td>
<td>542 (29%)</td>
</tr>
</tbody>
</table>

Use of direct pathways is limited at present by the relatively small numbers of students in Tasmania completing higher level VET awards (Diploma, Advanced Diploma) that would articulate to higher education (see Table 3). Consistent with other research findings (Moodie, 2010), most of the higher qualification VET graduates were enrolled at UTAS in either Management and Commerce, or Information Technology, which helps to explain why articulation rates are relatively high for these courses.

Table 3: VET students enrolled in Tasmania and type of award

<table>
<thead>
<tr>
<th></th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced Diploma</td>
<td>651</td>
<td>594</td>
<td>429</td>
<td>483</td>
</tr>
<tr>
<td>Diploma</td>
<td>3588</td>
<td>3913</td>
<td>3134</td>
<td>3660</td>
</tr>
<tr>
<td>Certificate IV</td>
<td>6378</td>
<td>5808</td>
<td>4594</td>
<td>6366</td>
</tr>
<tr>
<td>Certificate III</td>
<td>15 587</td>
<td>17 226</td>
<td>18 571</td>
<td>19 519</td>
</tr>
<tr>
<td>Certificate II</td>
<td>10 679</td>
<td>11 901</td>
<td>11 249</td>
<td>14 215</td>
</tr>
<tr>
<td>Certificate I</td>
<td>3066</td>
<td>3146</td>
<td>2758</td>
<td>2585</td>
</tr>
<tr>
<td>Other non-award courses</td>
<td>2915</td>
<td>3035</td>
<td>2083</td>
<td>2253</td>
</tr>
<tr>
<td>Statement of Attainment not identifiable by level</td>
<td>876</td>
<td>608</td>
<td>400</td>
<td>291</td>
</tr>
<tr>
<td>Bridging and Enabling courses not identifiable by level</td>
<td>137</td>
<td>9</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Education not elsewhere classified</td>
<td>21</td>
<td>8</td>
<td>20</td>
<td>187</td>
</tr>
<tr>
<td>Total</td>
<td>43 898</td>
<td>46 248</td>
<td>43 240</td>
<td>49 559</td>
</tr>
</tbody>
</table>

Source: Prepared by Skills Tasmania 2011

Successful student outcomes in terms of employment and income earning capacity need to be linked to pathways in national and state skill priority areas including engineering, construction, health and skilled trades (Skills Australia, 2011), and agriculture, forestry and fishing; manufacturing; electricity, gas, water and waste services; information media and telecommunications, arts and recreation services, and tourism (Department of Education, Employment and Workplace Relations, 2011). The findings show that while pathways to identified priority areas exist, they are more effective for some priority areas than others.
For example, the need for upskilling of managers in general is being addressed by effective pathways in the Management and Commerce area, although pathways for higher levels skills for managers in specific fields such as Agriculture are less effective. The need for skills training for technicians and trade workers is being addressed better in Information Technology pathways, than in other areas such as Engineering and Related Technologies, Natural and Physical Sciences and Agriculture. While Health is a key priority area both nationally and at a State level, articulation pathways for this field of study are not being utilised for various reasons, including the quotas placed on enrolments in the Bachelor of Nursing program.

There is some evidence from students who had completed a Community Services VET course that they were encouraged to follow a pathway to higher education by their VET teacher. Even where well defined pathways from VET to University existed students needed to be encouraged and supported to follow these pathways, indicating the need for an enhanced a role for VET and University staff, along with family and friends.

**Why do we need to strengthen connections between VET and higher education?**

Qualitative findings indicate that in addition to providing better pathways for students, and particularly for students who are the first in their family to undertake higher education, there are other reasons to strengthen connections between the VET and higher education sectors. Higher education can learn valuable lessons from VET in terms of course design and delivery in order to attract and retain students. For example, the following student had qualified for university entry to study Engineering, but chose to study at TAFE instead, only articulating to university some years later. He explains why he took this pathway:

> I wasn’t impressed with anybody I met [from university]. I mean I know that sounds pretty harsh but they were all the standard stereotypes that I had had conditioned into me. ... at that stage there was quite a motivated engineer heading the Engineering section [at TAFE] and he had quite a few interesting projects on the go. ... the TAFE side of it at that moment inspired me a lot more because it seemed like something tangible that was happening, it was an application of knowledge and it just clicked a lot more with my mindset.

**Conclusion**

The indicators of student success as a result of connections between the VET and higher education sectors are promising, such as academic performance, student retention and student satisfaction, although further research will be needed to identify longer term outcomes in terms of employment and further education and training. The findings suggest that VET pathways as a social inclusion strategy are working in Tasmania, but delivering the desired outcomes of increased participation in higher education in Tasmania will require concerted effort, and a strengthening of connections between the higher education and VET sectors. For Tasmanian students, the potential of VET pathways to higher education is yet to be fully realised and there is much work to be done. This is likely to include addressing barriers to articulation and introducing better articulation arrangements that are AQF compliant, implementation of a bridging program that can be delivered by distance or collaboratively with VET teachers prior to university entry, and development of dual or embedded awards in skill priority areas.
References


