Understanding the needs of VET students articulating to second-year university

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Generally negotiated by course, an increasing number of pathways are being opened to enable vocational education and training (VET) students to transition directly into second-year university with blanket credit for first-year content. Such arrangements exist for disciplines such as nursing, teaching, business, and applied science. It could be argued that these ‘advanced standing’ VET students, having completed a bachelor course at a VET institute, should have an advantage over their university peers: they have completed more post-secondary education, they will have amassed significant discipline-relevant practical experience from substantial field placements, and they are likely to be more committed to the course. Yet anecdotal reports from a number of university academics who deal with these students indicate that they often struggle. These sentiments are supported by an analysis of student performance data that indicates that the advanced standing students average lower marks. There is a lack of programs aimed at assisting and supporting second-year students, whether they have progressed from first year or entered second year directly. This paper foreshadows a larger project which aims to develop and trial a second-year transition course.

Introduction

According to data provided by Watson, Hagel and Chesters (2013), the number of students commencing in Australian university courses increased by 22% in the decade 2001–10. Around 45% of these students come from secondary school, a cohort that increased by 19% across the decade. In 2010 only 10% of commencing undergraduate students entered university on the basis of a VET qualification, but this group exhibited the greatest growth. The absolute number of VET students transitioning to university increased by 75%, from just under 13 000 to 22 676 in 2010. This group, which represents both a challenge and opportunity for universities, is likely to continue to grow. One of the areas of growth is entry with advanced standing — VET students completing courses that earn them credit for the entire first year of a university bachelor degree begin their university studies at second year.

In an increasingly competitive marketplace, university departments looking to create transition pipelines are mapping VET courses against university courses to maximise credit and create a marketing advantage. Courses related to nursing, business, applied science, and counselling/welfare have been early adopters, but others are following suit. In some cases, VET students completing
specific courses are guaranteed entry to particular university degrees at second year, particularly if that course was a bachelor degree completed in the higher education department of a TAFE (technical and further education) institute.

These advanced standing students should fare well, and indeed could enjoy an advantage compared with their peers who have come from secondary school into first-year university before going on to second-year studies. Their VET course will have already provided them with two to three years of rigorous discipline-specific knowledge, including upper-level content, versus only one year of content for those who have advanced from first-year university. The VET students are also likely to have the advantage of significant work experience and completed fieldwork placements across multiple years, providing them with a solid applied underpinning for the theories and concepts they have and will explore. By contrast, many university vocationally-oriented courses have no fieldwork in first year at all.

VET students going on to university tend to be older, on average, than the cohort transitioning from secondary school (Watson, Hagel & Chesters 2013), and are more likely to have existing family and employment obligations, often forcing them to study part-time. In order to cope with these commitments during their VET course, they will have already had multiple years to have honed their study skills and be optimally efficient in their study practices, and may be more mature in their approach and outlook. Furthermore, given the extra time they have put into pursuing their chosen career — completing one course and embarking on another — and the tendency for many VET students to have come from the industry in the first place and be seeking to upskill or improve their credentials, they are likely to be more committed and thus more highly motivated, both intrinsically and extrinsically.

Maturity, motivation, commitment, autonomy, knowledge, practice, and independence should provide advanced standing students with potential advantages compared with their colleagues who have progressed through first year after completing secondary school. At the very least, it should not put them at any particular disadvantage, especially given that completing a bachelor degree at a TAFE institute should provide an approximation of studying at university. However, the reality may not match the theory, regardless of the logic. Anecdotal reports from university staff, including academics, suggest that many advanced standing students do not perform at the level expected and that they often struggle compared to their colleagues who have progressed from first year.

In Australia an estimated 20% of all domestic students drop out of university before commencing second-year studies (Tinto 1999). Student attrition is costly (Penn-Edwards & Donnison 2011) in financial terms for institutions, students and the government, and lost opportunity costs the individual student (and family) and the broader economy. Unless the student has opted out for a ‘better’ path, they stand to potentially disadvantage themselves through lost career opportunities and reduced overall financial benefits, and possibly missed a potentially better quality of life (Harvey, Drew & Smith 2006) for themselves and any offspring. Thus, there is recognition in the sector that retention is important, especially as many institutions lower barriers to entry in a deregulated system.

Accordingly, most (or all) universities offer transition programs for first-year students with both social and academic components (McKavanagh & Purnell 2007). In the ordinary scheme of things advanced standing students will not participate in these first-year programs, despite the fact that beginning at second year is their first year of university. Advanced standing students could participate in first-year orientation, but this is an unlikely scenario. The mere fact that they have been accepted at an advanced level, with credit for first year, is likely to instil in them a high level of confidence — they
do not need to bother with orientation. By the time they discover that this level of self-confidence might be misplaced or over-inflated, they may already have suffered psychologically and academically (and missed the schedule of first-year orientation anyway). Thus, a specific transition program for advanced standing students may be warranted.

This paper seeks to make a contribution via two avenues in order to set the groundwork for the development of a new support mechanism for advanced standing VET students entering university at second year. The first element is an analysis of data from a large non-dual sector university already accepting students directly into second year from TAFE, and the second element surveys the transition programs on offer nationally in order to investigate common content and methods.

**A statistical comparison in second-year outcomes**

The fully de-identified data analysed for this study were extracted from a larger database of student records held by a large Group of Eight university. Human ethics approval was granted for the analysis and reporting. The focus was the student’s semester score, which was the average mark across all of the subjects each student had undertaken in each of the two semesters of the second year of their course. Two years of data (2013 and 2014) were analysed. The larger database from which these data are drawn is used to track students and manage (re)enrolment and was not immediately ready for analysis. Several rounds of ‘cleaning’ were applied to weed out anomalies and the students who did not fit the definitions of interest.

The data comprised 30,024 records, representing 13,361 students enrolled in second-year courses throughout 2013 and 2014 on a full-time and part-time basis. The overall sample was 58% female and 42% male. Student age was denoted in the database by ranges rather than actual age so it was not possible to determine means and standard deviations. Those ranges were 19 years and under (71% of the sample), 20–24 years (20%), 25–29 years (3%), 30–39 years (3%), 40–49 years (1%), 50–59 years and 60 years and over (fewer than 1% of the student sample each).

The student records data were broadly categorised into three groups:

- ‘Transition: standard’ students who had completed first-year at this university before undertaking second year
- ‘Transition: HE’ (higher education) students who had completed first year at another university and entered the current university as a second-year student with credit
- ‘Transition: VET’ students who had completed a TAFE qualification and entered the current university as a second year student with credit.

A relatively small number of students received credit into second-year on the basis of industry experience or other mechanisms. There were too few of these students for a useful analysis, and so they were removed from the dataset before further analysis.

The means and standard deviations for each of the three groups of students are contained in table 1. The semester score data violated the assumptions for normality, and so non-parametric analyses were conducted. The data were split by year level and the average grades were ordered by rank before conducting a Mann-Whitney U test to explore the difference between each pair of student types.

Transition: VET students achieved significantly lower grades than Transition: standard for both 2013 ($U = 168,924, Z = -5.13, p = .001, r = .05$) and 2014 ($U = 578,757, Z = -3.74, p = .001, r = 0.5$). A second set of Mann-Whitney analyses was conducted for students admitted into second year with credit for
prior learning from another university (Transition: HE). The results indicate that Transition: HE students also scored significantly lower grades when compared with the Transition: standard group in both 2013 ($U = 11651945, Z = -6.25 p = .001, r = .06$) and 2014 ($U = 3283503, Z = -5.50 p = .001, r = 0.07$). Thus, the students who progressed to second year after completing first year at the same university outperformed other students directly entering second year to a statistically significant level.

Table 1 Descriptive statistics for the average semester scores for the three student transition groups, including the mean, SD and range (0–100).

<table>
<thead>
<tr>
<th>Transition type</th>
<th>Standard</th>
<th>HE</th>
<th>VET</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2013</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean average score</td>
<td>66.47</td>
<td>64.11</td>
<td>62.49</td>
</tr>
<tr>
<td>Standard deviation</td>
<td>13.28</td>
<td>15.86</td>
<td>16.04</td>
</tr>
<tr>
<td>Range</td>
<td>0-97</td>
<td>0-95</td>
<td>0-89</td>
</tr>
<tr>
<td>Average grade below 50%</td>
<td>845</td>
<td>328</td>
<td>66</td>
</tr>
<tr>
<td>$N$</td>
<td>10,032</td>
<td>2,526</td>
<td>397</td>
</tr>
<tr>
<td><strong>2014</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean average score</td>
<td>65.84</td>
<td>62.79</td>
<td>62.44</td>
</tr>
<tr>
<td>Standard deviation</td>
<td>13.45</td>
<td>17.04</td>
<td>15.45</td>
</tr>
<tr>
<td>Range</td>
<td>0-96</td>
<td>0-93</td>
<td>0-87</td>
</tr>
<tr>
<td>Average grade below 50%</td>
<td>512</td>
<td>203</td>
<td>35</td>
</tr>
<tr>
<td>$N$</td>
<td>5,452</td>
<td>1,333</td>
<td>247</td>
</tr>
</tbody>
</table>

Due to the manner by which the data were analysed, a third set of Mann-Whitney U tests was not undertaken for the less pertinent comparison between the Transition: VET group (2013, $n = 397$; 2014, $n = 247$) and the Transition: HE group (2013, $n = 2526$; 2014, $n = 1333$). In this case a two-tail z-score hypothesis test was conducted using Howell’s (1987) formula, the result being that there was no statistically significant difference in grades for 2013 ($z = 0.46, p > .05$) or 2014 ($z = 1.02, p > .05$).

**Survey of transition courses**

Most (if not all) Australian universities have first-year transition programs of some description. A Google search was conducted using a range of appropriate search terms to identify local initiatives. This method is severely limited in scope because in many cases university orientation programs are a mix of central, faculty, and school/department activities, which have evolved over time (or in some cases, perhaps not evolved further for some time). They are documented locally or held as institutional knowledge by the person upon whom the task falls year after year to form a committee, apply for internal funding and make the arrangements. As such, they are not likely to be detailed on the institution’s website. Other institutions however have made particular efforts to develop specific offerings; it is these initiatives that are more likely to be advertised as part of the marketing efforts to draw students to specific courses and institutions. It is mostly these offerings that were identified in the search (summarised in table 2).

An analysis of the publicly accessible details for the transition programs indicates that they focus on one or more of the following broad domains: student experience, student socialisation, study preparedness, and student support. These findings align with the recommendations made by Nelson et al. (2011), that to successfully retain students, universities need to engage them through embedded institutional programs that focus on: student engagement in the learning environment; timely
accessibility to support services; and fostering a sense of ‘belonging’ to peer groups, to various roles within the institution, and toward the professional environment.

<table>
<thead>
<tr>
<th>Institution</th>
<th>Primary program type</th>
<th>Specific focus</th>
<th>Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Macquarie University</td>
<td>Mentor (ambassadors)</td>
<td>International students</td>
<td>Opt-in program with a code of ethics; based on core values of the university</td>
</tr>
<tr>
<td>University of Western Australia</td>
<td>Multifaceted</td>
<td></td>
<td>Conversation groups, social events, study groups. Meet other first-year students, visit study areas, get to know the campus, study skills advice, learn about life as a university student from senior students, participate in fun social activities</td>
</tr>
<tr>
<td>Central Queensland University</td>
<td>Multifaceted</td>
<td>International students</td>
<td>Student readiness questionnaire (compulsory), mentor program, online orientation, community network (student support)</td>
</tr>
<tr>
<td>Charles Sturt University</td>
<td>Multifaceted</td>
<td></td>
<td>STAR program: academic leads and lecturers assist with identification of course-based triggers that indicate when students are at risk of disengagement</td>
</tr>
<tr>
<td>Deakin University</td>
<td>Mentor (ambassadors)</td>
<td></td>
<td>Meet new people and establish connections, awareness of support services, understand expectations and requirements of life as a university student</td>
</tr>
<tr>
<td>University of Queensland</td>
<td>Academic program</td>
<td></td>
<td>Jumpstart Academic Preparation Program (JSAPP)</td>
</tr>
<tr>
<td>University of Tasmania</td>
<td>Online orientation</td>
<td>Separate orientation for on-campus vs off-campus</td>
<td>Online learning program with modules for practical issues, such as ‘Getting organised’; ‘Building connections at UTAS’ provides details of forums, Facebook, information about advisors and a community and friends network program</td>
</tr>
<tr>
<td>Sydney University</td>
<td>Multifaceted</td>
<td>Science Faculty</td>
<td>Transition workshop before semester begins, ongoing SLAM lunches (Science Link-up and Mentoring) to meet senior students, tutors, demonstrators, research staff, other science students</td>
</tr>
<tr>
<td>Flinders University</td>
<td>Multifaceted</td>
<td></td>
<td>Help students to understand what is required of them at university; expectations; work-integrated learning (WIL) in first year for better appreciation of discipline; integrated into curriculum</td>
</tr>
<tr>
<td>University of Western Sydney</td>
<td>Online chat, Q&amp;A</td>
<td></td>
<td>Support services such as time management, exam stress, financial issues, accommodation quandaries, personal counselling, disability support</td>
</tr>
<tr>
<td>Australian Catholic University</td>
<td>Advice</td>
<td></td>
<td>Advice rather than specific intervention.</td>
</tr>
</tbody>
</table>

General discussion

The statistical analysis of student performance corresponds with the anecdotal data and indicates that advanced standing students entering university courses at second year do not perform as well as those transitioning to second year from first year. Interestingly, students directly entering second
year after completing first year at another institution also performed statistically less well than those who completed first year at the ‘home’ institution, but are statistically equivalent to those transitioning from vocational education and training.

This finding may emphasise that the fundamental issue is not that the advanced standing students are somehow deficient due to their VET background; rather, it is the disruptive impact of the transition itself that causes the deficit. Further, this impact may be compounded by these students having bypassed the orientation and other introductory activities offered to new students at the particular institution during first year. That the students transitioning from another university are likely to have participated in first-year orientation at their original university but still suffered a deficit suggests that it may be critical that the orientation relates to the specific institution (for example, an introduction to specific support resources and services), or that there is an important social element, such that students become part of a social network with other students also going through the transition experience.

While the data were sourced from a large database, they relate to a single institution. Analyses of data from other institutions are needed to determine whether this result is unique to this particular university. Anecdotal reporting from other institutions suggests that it is not. Elsewhere Heirdsfield, Walker and Walsh (2005) found that advanced standing students in early childhood education performed less well academically and had higher attrition rates than their colleagues who had progressed through the first year of university.

According to Wheelahan (2008), little published research exists for transition programs aimed at assisting advanced standing students. While Wheelahan’s claim is somewhat dated, a more recent survey of the literature for the current project indicates that the situation is little changed. No specific transition courses for students entering second year from outside the university were unearthed with the, admittedly high-level, simplistic search conducted for this paper. That does not mean that efforts are not being made — as part of a larger project the authors are assembling a database of programs and initiatives aimed at identifying best practice — but little of it has been published thus far. Programs exist, but they are often ad hoc, and run in isolation at course or school/departmental level. The current environment in this regard is probably akin to that observed by Kift (2009) in her overview of first-year transition programs. She describes the situation as ‘pockets of excellence in individual institutions, and in discrete programs … piecemeal approach … rarely, if ever, linked across the institution’ (p.1), let alone the sector.

The question arises, should such a program be any different in content and aims from those that exist to ease the transition of first-year students? Heirdsfield, Walker and Walsh’s (2005) advanced standing students reported challenges dealing with workload, technology, academic orientation and application, and feelings of isolation and uncertainty; such issues would also apply to students starting first year (and skills that first-year students would be expected to hone across the first semester of their first year). Ambrose et al. (2013) argue that the VET learning environment differs from that of university, in that it is highly structured, closely scaffolded, vocationally orientated, and competency-based, whereas university is a less directive learning environment, is theoretically orientated and involves considerable amounts of reading, critique and assessment writing. Arguably, the differences are fewer for VET students completing a bachelor degree, and fewer still when the students are transitioning into vocationally oriented university courses, which have an application focus and include placement or fieldwork experiences. However, ensuring that students properly understand the university environment, regardless of where they have come from, is likely to be important.
McKavanagh and Purnell (2007) interviewed 1100 students from an Australian university who were not making satisfactory academic progress and found three recurring themes: lack of motivation; having unrealistic expectations about the work required; and a reluctance to seek assistance or support when in need. Clearly it is not enough to make resources and assistance available; the bigger challenge may be to get students to use them. Even though McKavanagh and Purnell’s respondents were aware that they were not performing at expected levels, the majority of them believed they had the aptitude to succeed, expressed a desire to complete their degree, and felt that the content was not difficult. These views would likely dissuade students experiencing difficulties from seeking assistance, and this effect might be heightened for advanced standing students because they have been denoted as ‘advanced’.

The profile of McKavanagh and Purnell’s (2007) interviewees does resemble the typically older and more highly loaded student transitioning from the VET sector (Watson, Hagel and Chesters 2013). More than 50% of them worked at least 30 hours per week while taking at least three subjects per semester, in addition to studying in off-campus mode (in many cases, presumably because work commitments did not allow attendance at classes). Hobsons (2014) also noted that work pressures, driven by a need to finance studies, a social life and family underscored the hallmark characteristics of students who discontinue their course. That is not to say that paid work is not compatible with study, or that studying off campus is problematic in and of itself. McKavanagh and Purnell only interviewed at-risk students. A case-control type study would be needed to better understand whether the additional commitments themselves are a risk factor or whether students matching a particular profile are ill advised to load themselves in this way, especially in the formative first year at university (regardless of whether a student’s first year is the first year of the course or second year, if that is the point of entry).

McKavanagh and Purnell’s finding of a reluctance to seek help amongst at-risk students was pervasive, with only ten per cent of respondents reporting that they had sought assistance or support once they had become aware of a problem with their studies, even after they had received notification of a failed grade. Thus, setting expectations and dispelling a reluctance to seek help must be an explicit component of any transition program; informing students of what services are available and how to access them is clearly insufficient on its own.

Scott (2005) also emphasised the importance of managing student expectations, as did Tinto (2003), who suggested that (first-year) transition programs should be aimed at promoting and developing ‘student persistence’, which could be achieved by setting realistic expectations, providing support when needed, and ensuring adequate and appropriate feedback aimed at ensuring student engagement and thus learning. It also seems important to ensure that the operationalisation of such engagement does not rely on the initiative of students themselves, unless that initiative can be instilled early on.

An alternative approach might be to provide continuous support. Stuart (2007) argues that the focus on orientation and transition in first year serves to ‘front-load’ students who are then left feeling lost and unsupported as they move on to second year and beyond. Richardson (2004) interviewed second-year students to find they thought that first year had been too easy and had not prepared them for the challenges of second year. In this sense, first year created a false sense of security and students were surprised by the increased workload of second year. Overall, many students suggested that the experience of transitioning to second year was as challenging as beginning university. The advanced standing students of concern to the current project might have a similar experience — expecting second-year university to be consistent with the second and third years of their VET course.
MacDonald and Gibson (2011) suggest that efforts should focus on the second-year experience. They claim that longitudinal and coordinated approaches that centre on the identified gaps (academic, personal and institutional) are required to support second-year students.

The development of a multifaceted program tailored for students entering the second year of bachelor courses is required, a program that should perhaps be available for all second-year students, or mandated for those who have scraped through first year or are on academic probation. While academic and social elements probably should be included, the focus should be on encouraging the student to recognise when existing university services and support are needed; a self-understanding and willingness to overcome whatever barriers currently stop students of availing themselves of what is on offer.

The analysis presented here indicates that students who undertake second-year university without first completing first year at that university (having either progressed direct from a VET institution or transferred from another university) perform less well in terms of grades than those who did first complete first year at the same university. A large slice of data across a wide field of disciplines was analysed; however, the lack of additional variables made a more sensitive and sophisticated analysis impossible. For instance, it is not known whether students transferring from another university were doing so for academic reasons. Also, it is quite possible that the VET cohort differs from the university cohort in terms of factors such as age and economic background; it is also possible that the VET cohort is more likely to be studying part-time and off campus due to employment and family commitments. The data do not provide the opportunity to explore these issues. Other work is being pursued by the authors to explore social considerations: students who have progressed from first year did so with a large cohort in the same boat, whereas those transitioning from outside the university may find it harder to break into established social networks. A comprehensive examination of the issues that make transition to university difficult would also be well served with the inclusion of exit data, with the aim of exploring the reasons for students dropping out.

References


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