Why Upskill?
Examining AQF 5, 6 and 7 level Qualifications in Construction*.

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The construction industry is extremely important to the Australian economy, as the fourth largest employer with nearly one million employees and contributing $61 billion or 12% of GDP per annum (ABS, 2011). Despite its economic significance, it has one of the least qualified workforces of all Australian industries. There are significant skill gaps at the higher levels of the AQF from Diploma level (AQF 5) upwards with less than 10% of the industry possessing a higher education qualification. This is in spite of the fact that over the last decade demand for higher skilled occupations, such as construction managers, has outstripped demand for construction trades (DEEWR, 2010). Movement between the VET and HE sectors is low. Of all construction students qualifying at AQF 4, less than 11% continue on to higher education and less than 1% of all VET qualified persons in the construction workforce seek re-entry to university to gain higher level qualifications. A key workforce supply issue is the number of students at these levels and why so few students move from Vocational Education (VET) studies on to Higher education (HE) studies in building and construction. This paper examines national data in construction education pathways and explores some of the “enablers” that facilitate pathways to mid-level and higher-level qualifications in construction. Through national research in seven Australian tertiary institutions offering construction programmes at AQF levels 5-7 and selected student interviews, a number of “enablers” of upskilling were identified. The results indicate that tertiary pathway programmes in construction can attract articulating cohorts, but there are critical elements such as learner engagement, confidence, people-rich resources and collaboration that must be present to facilitate successful pathways and on-going industry upskilling.

Keywords: pathways, skills, tertiary education, construction, AQF

*This paper has been prepared as part of an on-going study examining the enabling factors in student movement between VET and HE (AQF levels 5, 6& 7) funded by NCVER.
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INTRODUCTION

Like many developed nations, Australia has national skill shortages in selected industries. Robust economic growth has seen a tightening of the labour market with strong demand across a number of occupations. This demand has been spread unevenly but key industries such as engineering and construction have been at the forefront of prolonged skill shortages (DEEWR, 2008; CPSISC, 2010). More significantly, tertiary qualified professionals within these industries have been in continuing demand. Access Economics predicts that from 2010, demand for skilled professionals with bachelor qualifications across these industries will exceed supply levels.

To meet these demands, the Australian Government has a target of an additional 217,000 students at bachelor level or above by 2025, Delivering this target will require increased participation from groups not currently represented in higher education. Tertiary institutions will have a crucial role to play in expanding student options and providing clear, fluid pathways to higher level qualifications in key industry areas to meet Australia’s needs.

Increasing participation in higher education will rely upon a number of factors. One key factor will be the increased access to higher education from individuals with VET qualifications.

THE AUSTRALIAN CONSTRUCTION INDUSTRY

The construction industry is extremely important to the Australian economy. The industry employs one in nine people in Australia and is the fourth largest employer with over one million employees. The industry contributes $61 billion or 6.8% of GDP per annum (ABS, 2010)

Despite the economic and national significance of the industry, it has one of the least qualified workforces, (see Figure 1) with significant skill gaps at the higher levels of the AQF from Diploma level (AQF 5) upwards. There are a number of issues with the industry’s qualifications and skills performance:

- Very few individuals in the construction workforce have AQF 7 (degree) qualifications.
- The qualified workforce (paraprofessional and professional) in construction of Diploma/AQF 5 and above, is only 15%
A massive 45% of the workforce has no post school qualifications.

Figure 1: AQF Qualifications levels of Building and Construction industry workforce

(Source: ABS, 2010)

With nearly half the workforce in the Australian construction industry having no formal credentialed post-school qualifications and only a very small number of people in the industry having higher level qualifications, the industry skill levels are stubbornly skewed to the lower levels of the Australian Qualifications Framework. Significantly the building and construction industry is also well above the national labour force industry average for those 25-44 year olds who lack any formal qualification (31%) whatsoever (ABS, 2008). This qualification profile at the higher AQF levels is significantly below other key industries of similar size by employment and contribution to the economy (ABS 2011).

In addition, although there are State by State differences in enrolment figures, the number of Building and Construction Diploma and Advanced diploma students constituted only 6% of all
AQF enrolments in 2010. This figure is almost half that for AQF level 5 & 6 qualifications generally in other industry fields which comprise 15.8% of all AQF qualifications students.

Alarmingly, of the small number of diploma students in building and construction Australia wide, an even smaller number continue to upskill beyond AQF level 5. The movement to HE is low, with only 16% of this AQF level 5/6 cohort continuing with ongoing study at university. Table 2 sets out the rankings for ongoing study at university per industry.

**Table 2: VET Student Outcomes – Further Study at university, ranking by Industry Skills Council (ISC)**

<table>
<thead>
<tr>
<th>Rank</th>
<th>Industry Skills Council</th>
<th>% going on to university</th>
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<tbody>
<tr>
<td>1</td>
<td>Not assigned</td>
<td>9.6</td>
</tr>
<tr>
<td>2</td>
<td>Business Services</td>
<td>9.1</td>
</tr>
<tr>
<td>3</td>
<td>Services (Retail, Tourism &amp; Hospitality)</td>
<td>9.0</td>
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<tr>
<td>4</td>
<td>Community services &amp; health</td>
<td>8.1</td>
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<tr>
<td>5</td>
<td>Government</td>
<td>5.6</td>
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<tr>
<td>6</td>
<td>Agrifoods</td>
<td>2.9</td>
</tr>
<tr>
<td>7</td>
<td>Manufacturing</td>
<td>2.1</td>
</tr>
<tr>
<td>8</td>
<td>Transport</td>
<td>2.0</td>
</tr>
<tr>
<td>9</td>
<td>Construction</td>
<td>1.6</td>
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<tr>
<td>10</td>
<td>Electro/Electrical</td>
<td>1.1</td>
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<tr>
<td>11</td>
<td>Skills DMC</td>
<td>*</td>
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<tr>
<td>12</td>
<td>Forestry</td>
<td>*</td>
</tr>
<tr>
<td><strong>ALL</strong></td>
<td></td>
<td><strong>6.8</strong></td>
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</tbody>
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(Source: NCVER Student Outcomes Survey, 2010. NCVER, 2011)

Whilst this data (Table 1) only represents graduates of the 2010 year, and VET graduates from other years may go on to study at university at a later period of time, the key point is that in this industry the percentage of graduates moving on to further study is much lower than many other industries.

Of all disciplines, building and construction has been one of the weakest in promoting movement from both lower to higher VET qualifications and from VET to HE on a numerical basis. Out of
an estimated total pool of graduates in this Field in 2010/11 of 41,390 only 916 were estimated to have gone onto a degree, of which 364 were from diploma levels. The industry skill levels and the tertiary institutions providing VET and HE qualifications to the industry are significantly divided. There is very little upskilling or transition of students between vocational education (up to AQF level 5) and higher education (beyond AQF level 6) in the building and construction disciplines.

Whilst research indicates evidence of some existing excellent pathways initiatives between VET and HE, (Moodie, 2010) there is little evidence that the construction industry has benefitted from such upskilling pathways. Building and construction industry students and workers remain stubbornly under-represented in tertiary pathways. The qualification hump in this industry, which essentially stalls at Certificate, III/IV needs to be extended.

Whilst higher education is not necessarily better for all individuals in terms of life choices or economic prosperity, there is considerable evidence that access to upskilling is vital for construction industry development and employability of individuals over time. Access to formal upskilling is important for a number of reasons (Construction and Property Services Industry Skills Council (CPSISC), 2010). These include:

- The physical demands of construction occupations, particularly trades. The impact of an ageing workforce coupled with physical requirements of the work means older workers need new skills to work in less physically demanding jobs in the industry.

- The changing skill requirements of the industry mean that initial entry level skills training at AQF 3 & 4 can become outdated over an individual’s lifetime in construction, particularly in areas such as technology, materials and energy usage and application.

- Regulatory and compliance issues are increasingly becoming more complex in the industry. Initial training is quickly outdated resulting in compliance concerns with existing workers.

- The organisation of work is changing. Pre-fabrication and PM techniques mean new work organisation which requires new skills for workers to remain employable.
Environmental and OHS considerations are constantly reviewed, requiring re-skilling and upskilling for existing workers to remain safe and aware of changing work requirements and opportunities.

The industry workforce of Certificate III and below is at high risk during periods of economic downturn. Current data from DEEWR and from industry bodies has indicated a softening of the labour market at these levels, with trades based employment down 10% between February 2011 and May 2012 (DEEWR:2012). For employees already in the industry, strategies are needed to upgrade qualifications, through pathways, particularly amongst older workers who are at the greatest risk of redundancy or reduced physical capacity but who have the skills and experience to support entry into higher-level qualifications and higher level construction occupations.

Persistent skill shortages and skill gaps in this industry reflect inflexibility and lack of pathways. Entry-level training has focussed predominantly on AQF level 3 or 4, with little emphasis on AQF 5 & 6 qualifications, and a split with higher education qualifications focussing on the professions. In the building and construction industry the divide between vocational qualifications (AQF levels 1-5) and higher education qualifications is stark.

This has been to the long-term detriment of the students and the industry. In effect the industry is not capitalising on the total potential of its workforce with most qualified students exiting at AQF 3.

In essence, the building and construction industry is perfectly placed to address increased participation both from lower to higher VET qualifications and improved access from VET to HE. It has one of the most diverse labour forces in Australia, but with very few building and construction students or workers seeking HE qualifications (AQF 6 and above).

The key aim of our research was to analyze successful student pathways that maximised outcomes in the building and construction industry and to determine the enabling factors that operate for students within these pathways. The research outcomes give insight into the enabling factors that create upskilling between VET and HE in the building and construction industry and provide informed avenues to increase the number of qualified individuals in the industry,
AIM OF THE STUDY

The key focus of this research was to investigate the factors that may improve tertiary student pathways from Vocational Education and Training (VET) into Higher Education (HE) in the building and construction industry (from diploma to degree). For the purposes of this research these factors were called ‘enablers’. The specific nexus between AQF 5 or AQF 6 and AQF 7 was integral to this objective. The research objectives were to:

- Examine the enablers that support pathways between VET and HE in the discipline of construction from a student perspective.
- Evaluate these using Gale’s (2010) Invention (DEMO) model
- Identify the critical enabling elements and strategies that maximise student/worker transition
- Promote and disseminate the outcomes to the discipline and the wider sector

The key research question was thus framed:

What are the critical enabling factors in student/worker transition from VET to HE across AQF levels 5, 6, & 7 in the construction discipline that facilitate upskilling and credentialling?

RESEARCH METHODS

To ascertain examples of successful enablers, three main methods were used for gathering data. These were:

- a review of the published data pertaining to movement from VET to HE (upskilling and credentialing) in this field
- semi-structured interviews with students who had transitioned from VET to HE in this field.
- industry roundtable discussions of issues to emerge from the reviewed data and interviews.

The research was conducted over a 12 month period. The research commencement date was August 2011. A total of 36 students were interviewed in the second phase including 14 final year
students and 22 third year students. Approximately 5 of the students were considered mature-aged entry students under their particular institution guidelines. All were male. These students came from eight institutions nationally. (see appendix) The selection of the institutions for the case studies was based upon a number of factors. These were institutions with:

- a significant concentration of construction students moving between VET and HE
- the broadest possible national coverage
- ability to mobilise and identify existing students as ex-VET students within the research timeframe and
- sustained student movement from VET to HE in construction over a significant period of time.

The interview responses were examined against a Matrix developed by Gale., Hattam, Comber., Tranter, Bills, Sellar., & Parker. (2010), at the National Centre for Student Equity in Higher Education. The matrix provides a conceptualization of the relationship between particular features of effective programs that are designed to improve equity and access of under-represented students in higher education. Drawing on the international research literature and on these exemplars, Gale et al. (2010) found that programs which feature a combination of enabling factors or characteristics are likely to increase the number of under-represented students going on to higher education than otherwise would have been the case. Gale et al. categorised these characteristics into 10, grouped within four strategies:

- Assembling Resources—such as appropriate people, finances, early provision of resources
- Engagement of Learners—such as enhanced curricula, recognition of differences, research
- Working Together—such as collaboration and cohort-based focus and
- Building Confidence—such as communication, information and familiarisation

(Gale et al. 2010: 12)

These four strategies with their identified characteristics form the basis of a meta-analysis, named the Design and Evaluation Matrix for Outreach (DEMO). Although the original DEMO matrix was specifically developed to evaluate the likelihood of success of particular programmes in under-represented and disadvantaged individuals accessing higher education, it also has
traction in our research. By applying it, we were able to categorise the student responses to determine the key enablers of access and transition to higher education from this cohort.

RESULTS AND DISCUSSION
The student responses to the interviews indicated a number of common enablers of pathways from VET to HE in construction students; in particular, evidence of three strategies of the four strategies within the DEMO matrix and eight of the ten characteristics.

Three enablers or characteristics from the DEMO matrix were most evident. These were the:

- assembling of resources that were “people-rich” and sustained over time
- engagement of learners that recognized difference and led to enhanced learning experiences
- building of confidence in learners through collaborative working and communication.

The following section reports in depth on the enablers against the DEMO matrix.

(i) Assembling Resources

All of the students interviewed in this research held Diploma level qualifications or equivalent before moving into HE. In the sample population in this research, the completion of the Diploma was clearly an enabler into HE study. Students indicated that there were a number of reasons they had undertake the Diploma of Building (AQF 5) in the first place. These reasons included:

- Work in the industry or to gain work in the industry
- Did not satisfy entrance requirements to the HE construction degree
- Unsure of ability and saw the diploma as an easier option
- Personal time commitment and flexible offering made the diploma attractive
- Relevance of the diploma to current work/workplace
- Cheaper fees in diploma (excluding Victoria)
- Perceived shorter course/study period
- Pathway to further study

In a number of states, most noticeably Victoria, the lack of HE places in tertiary institutions meant there were a number of school leavers who deliberately undertook the diploma to get into the degree. This was also evident in the UWS interviews, where students were not able to satisfy
the entrance requirements for a place in a central Sydney university and were using the College model as leverage to gain a place in the degree

“I wanted to get into construction degree, so going to Granville TAFE was the way to get there. I didn’t get the entry to UWS” (UWS NSW)
“I would have gone to RMIT, but they quotas on number of places, so I went to Deakin for HE” (Deakin Vic)
“I didn’t have the right score to get into UWS even, so went to UWS College first…then came here” (UWS, NSW)

A number of students identified a strong “people-rich” component to their transition. “People – rich” is applied by Gale et al (2010) as a characteristic of the ‘Assembling resources’ strategy of the DEMO matrix. People-rich refers to resources and activities that include people who are both knowledgeable, helpful and facilitate transition and pathways to higher education.

Some examples cited were orientation and information nights conducted in a number of university and College settings before the students commenced and relevant teachers were briefed about the VET to HE pathways. In one university, a coordinator was available full-time for consultation. All students in these VET to HE interviews felt they had access to sufficient, informed resources to continue their studies. The students commented upon the knowledge and willingness of staff to answer their questions, undertake enquiries for them and provide them with support as they progressed through the VET to HE pathway. Gale (2010) stresses the importance of “extended conversations” to provide resources for the learners.

“When I started the diploma I wasn’t really thinking about the degree you know…it was just as I was finishing I talked to (name)...who told me about the degree.” (UTS NSW)
“I didn’t think I could do it actually, then Mr.(name)...said it wasn’t that much more involved really.” (RMIT, Vic)

It is important that the university provide and train staff and others in pathways transitions to provide a people –rich experience.

“Well this uni had a relationship with the Leederville TAFE and that meant you could find out about the degree.” (Curtin, WA)
Another key characteristic of assembling and providing resources was the importance of geographical and facility orientation. Visiting the university for classes or visits was vital in establishing confidence, access and familiarity amongst the students. In the case of RMIT and UTS, this proximity was achievable due to geography. Other universities had to work harder at creating this experience, and the importance of “link” people was noted. This was undertaken at UWS by staff familiar with students and the model, who conducted special orientation nights. Students were exposed to staff who had all been employed at the university for some time and were able to give informed advice about university pathways and credit transfer.

“The best part was the orientation and information night, because only us TAFE kids went....”
(UTS, NSW)

“Well I knew where to go, so that was fine...” (Curtin WA)

Another important part of people-rich resources is the ratio of staff to students. Where students were engaged in pathways from VET to HE that had staff/student ratios deliberately capped, greater people-rich experiences were created. Some institutions had 15 students per class, and created a people-rich resource of interested staff. If a student was absent or performing poorly, the co-ordinators or model leaders acted as a mentor to the student and, if necessary, the student’s parents. The use of mentors, tutors and peers as support resources is also seen as a valuable aspect of ‘enabling resources’ in the context of outreach (Gale et al, 2010).

“I knew students who had gone to HE last year and they gave me advice about the electives etc.”
(RMIT, Vic)

“It was really smooth...the staff all knew what credit you got and what subjects you would have to do again to get into 3rd year courses...” (UTS, NSW)

Another characteristic of the DEMO matric, under the heading of Assembling Resources, is entitled Financial support/incentives. Although identified by (Gale et al, 2010), as important, the students in our interviews did not flag this as a key enabler. Many were still living at home and did not have have mortgages or other major financial commitments; most were working part time in the industry. None of the students in any of the interviews had access to additional financial incentives such as scholarships or bursaries. All relied upon a fee structure set by the government and access to fee-help as per the government structures. One student reflected on the
fees he paid for the diploma… “because I knew it was my pathway into uni I was happy to pay, but if your diploma isn’t going to get you anywhere then it’s a bit of a worry paying that much” (UTS, NSW)

Another characteristic of the strategy of Assembling Resources in the matrix is early, long-term and sustained intervention by the university in the transition of the students. Where the pathway is transparent and students can move fluidly with guaranteed entry and one year’s credit from the college model into the degree, this becomes an important enabler. For others it is the ease of entry and the credit …

“It was really smooth… the staff all knew what credit you got and what subjects you would have to do…. ” (UTS).

Students commented upon the need for access to sufficient, informed resources to continue into HE. The students commented upon the knowledge and willingness of staff to answer their questions, undertake enquiries for them and provide them with support as they progressed through the programmes. All felt they had been well-resourced in their movement from TAFE to higher education. Resources such as articulation research officers, “go to people,” and knowledgeable academic staff were assembled for these students in spite of the fact many of the interviewed students using VET to HE pathways were the first in their family to go to higher education.

“Like I was well prepared. The TAFE people at Nirimba gave me forms and stuff. The work is about the same, some subjects are different, but it has been mostly the same type of work. The difference is the smaller classes You could ask a question of one of the teachers at TAFE and they would straight away be there to answer you” (UWS articulant)

“No, none of my family have come here( to uni), but they wanted me to get qualified in building”

The interviews indicate that students in VET to HE, who had access to people-rich resources, were more inclined to continue to higher education than students who did not have such access.

Other factors included:
• the lower staff/student ratios in VET which helped develop study skills and success in learning
• the access into the degree provided by the diploma
• learning experiences that support the students in transition
• Geographical access
• Agreed and published credit

(ii) Engaging Learners

The interviews revealed issues with learning experiences that encompassed prior learning, gaps in learning/knowledge and issues with the nature of the learning process in HE. The interviews also revealed a far greater emphasis on independent learning requirements in HE and issues with the size and transitory nature of the student cohort. This was sometimes compounded by the size of the HE campus and staff component.

“It was hard because of the numbers, but then there were a few of us, so that didn’t matter so much” (UTS, NSW)

“I knew students who had gone to HE last year and they gave me advice about the electives etc.” (RMIT, Vic)

Engagement was seen as something that arose from a common understanding that transition students did not have the same prior learning experiences as other students and that time and effort was involved on the part of HE staff to adjust, even minutely, learning experiences or learning activities to recognize prior learning or address knowledge gaps.

Gale et al (2010) talk of the importance of engaging students through the recognition of difference and the valuing of knowledge brought. Where a provider has the opportunity/capacity to modify and enhance learning experiences to meet student needs and then align the outcomes with the university curriculum, the advantages to students were obvious.

“Well at UWS College, they would recognise that the students are different and treat them like that....you know different teaching ways and different resources......”
The engagement of learners from all backgrounds and at all levels of study is crucial to a satisfying and productive experience in higher education. But in this research it was evident that there were some particular engagement activities that promoted the aspiration to continue to HE. The need for recognition of difference was evident from the interviews. Interviewees regularly spoke of the understanding of the HE institution or the acceptance of them as transition students who had ‘different’ entry needs and requirements to the mainstream student.

“The staff at UWS made the transition really easy, plus I had been to UWS College, so it was natural really” (UWS, NSW)

“I wanted to study online because of my work- mostly I would find it hard to get here of a weekend anyway” (Holmesglen, Vic)

The importance of engagement at TAFE was also consistently emphasized by the interviewees:

“Obviously I used TAFE as a stepping stone to here, but I learnt a lot along the way. I’m much better off, I’ve got much more than a stepping stone......I had one-on-one learning, I learnt the environment (of tertiary education), it was an adult environment. I’m more reliable on myself now thanks to TAFE.” (Newcastle Uni, NSW)

The effectiveness of the transition was also improved if staff, students and administrators also undertook steps, however minor, to manage the curriculum transition (block credit, formally identified RPL etc) for these students.

(iii) Working Together/Collaboration

A key measure of working together is collaboration between stakeholders across different sectors and agencies at all stages of transition and enactment from VET to HE. Student interviews identified both confidence and capacity as fluctuating over both VET and HE studies. The importance of building confidence in learners about their ability to continue in education to achieve greater skills and knowledge beyond the existing was continually noted in the interviews.

“It was hard because of the numbers of other students at first, but then there were a few of us TAFE kids, so that didn’t matter so much” (UTS, NSW)
Continually the researchers were confronted with comments such as “I didn’t think I could go to uni, then I went through TAFE and changed my mind.” It was the intervention of institutional staff and institutional systems that affected the individual’s aspiration and motivation to undertake HE. The provision of informed ‘link’ people both within the HE institution and the VET institution was seen as a critical enabler.

Gale et al (2010) indicate that key elements of building confidence in students to proceed to higher education is related to the familiarisation and experiences the students have of higher education and the capacity to access information about the university. Geographic location appears important to the students interviewed in this research. A number commented, that coming to the TAFE part of the university or to a co-located campus, was the first time they had been exposed to university culture and experiences. The students indicated the need for a familiarity with the university setting and staff. Although they had been quite anxious at the outset and commencement of their first year, all were at ease and felt confident in the environment; all were keen to return to the university at some stage.

“The best part was the orientation and information night, because only us TAFE kids went....”
(UTS, NSW)

“Well I knew where to go, so that was fine...” (Curtin WA)

Activities like visits to the university campus, examples of university work and assessment, meeting university staff, orientation and information sessions etc that built confidence and resilience into the learner and thus enabled upskilling were critical in resolving problems related to upskilling confidence and capacity. Specific activities like VET students working with first year degree students on projects was not noted, nor were activities to visit the TAFE departments to engage students in any aspect of curriculum. This was acknowledged by students as a lost opportunity to build confidence.

“I don’t know why they do not do it, too many applicants I suspect” (UTS)

“Well it is too hard to co-ordinate the two timetables I guess” (RMIT Vic)
At a number of the universities, interviews were conducted with potential applicants and staff did make attempts to work individually with the articulants. All of the interviewees attributed their confidence to their TAFE experiences:

“I definitely think TAFE helped build my confidence to cope here...the ones straight from school are not as motivated”

A key feature of the ‘working together’ characteristic is the involvement of a wide variety of stakeholders in the pathway to higher education. Family is a key group in this context. The students commonly commented on the support given by their parents or families to continue with their studies and to assist them in the transfer process. Some also commented on the knowledge by their families of VET to HE pathways and their implementation.

*What made you go on to university.... “Well my father, he expects us to achieve and people told him at work you get paid more highly” (with a degree) (UniSA)*

There was also evidence that the whole of their community were both aware of their studies and actively providing motivation, support and interest in what they were learning and the outcomes of this learning.

This characteristic of effective pathways having many stakeholders all working together was also evident in employers’ recognition of pathway achievers. Interviewed students felt their employers were more likely to employ them if they had completed a TAFE qualification as well as commencing a degree. One student commented:

“Oh definitely I got the job because I had a TAFE qualification. I was surprised, but the employer said he would take me ahead of just uni students you know” (UTS articulant)

For the students interviewed, the advantages of being an articulant or pathways student with a TAFE background far outweighed the transition problems they may have encountered. There was a sense from the interviews that the students saw the pathway as having an employment “bonus”

“Yeah, like, I can get jobs that the other students can’t” (UWS NSW)
One element of working together is developing an approach that engages with the whole cohort to change peer cultures and still supports individuals. A clear influence is the size of the cohort – how many students are involved. But the actual number is not as important as the contribution this number makes to changing peer group attitudes towards university pathways or VET to HE transition.

Gale et al (2010) make the point that the operational footprint could be statewide, even by the measure of one student. Essentially it is the capacity of that one student to influence the attitudes and behaviour of peers. This aspect was not clearly addressed within the interviews. Students were very individually motivated and the sense of cohort was not experienced as either an articulant or a pathways student. One student commented about peers and the idea of being a “TAFE Cohort”

“they had a special meeting of all the TAFE kids to explain the procedures, but that was it really. (UWS)

CONCLUSIONS

This research has indicated a number of common enablers that assist in the transition of students from VET to HE in construction. The recognition of these enablers can create impact in delivering greater numbers of construction students to higher education and the industry.

The enablers evident in the student interviews and evaluated against the DEMO matrix were:

- The assembling of resources that were people-rich and sustained over time
- The engagement of learners that recognized difference and led to enhanced learning experiences
- The building of confidence in learners through collaborative VET to HE working and communication.

The assembling of resources (Gale et al, 2010) consisted of the provision and interaction of knowledgeable staff and motivating educators at the VET/TAFE level, who were able to give consistent, long-term advice to students about future study and upskilling options. The staff were fluent in articulation arrangements and credit transfer opportunities and kept regular professional contact with other staff in higher education. They were in fact extremely knowledgeable about
the built environment, career opportunities and university credit transfer arrangements and passed that knowledge onto students. The frequency of “expert, knowledgeable” staff in interviews as an “enabler” of pathways was significant. To a lesser extent this was also noted as important in the higher education institution, especially by the interview respondents but it was not seen as an essential enabler of access.

The second enabler to arise from the interviews was the engagement of students in transition situations. The ability to engage students at both VET and HE was vital in creating student retention and ongoing transition. The engagement of students is, of course, not specific to pathways from VET to HE in construction, but the frequency of its mention throughout the interviews underscored its importance in this project.

Evidence exists that the engagement of students from all backgrounds and at all levels of study is crucial to a satisfying and productive experience in higher education. But in this research it was evident that there were some particular enablers of engagement that promoted effectiveness and the aspiration to continue. Most important was a recognition of difference. Interviewees regularly spoke of the understanding of the institution or the acceptance of them as “different “students who had ‘different” needs to the mainstream. The effectiveness of the transition was improved if staff, students and administrators undertook steps, however minor, to enhance the learning experiences for these students.

Finally the third enabler identified was the building of confidence in the students through the collaboration and communication between the VET institution and the HE institution.

In all three enablers, where efforts had been made to actually incorporate and evaluate the use and impact of these enablers in the VET to HE transition, rather than leaving it to chance, the students had a greater chance of success and the higher education institution benefitted from greater student cohort diversity.

The results indicate that tertiary pathway programmes from AQF 5 to 7 in construction can attract articulating cohorts, but there are critical enablers that must be present to facilitate successful pathways and on-going industry upskilling. It is hoped that by isolating key characteristics or enablers of successful pathways VET to HE transition that the information will
be utilised by the sector and a greater impact effect will occur for the benefit of the industry and the nation.
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APPENDIX 1

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