Why Upskill?

Examining AQF 5, 6 and 7 level Qualifications in Construction.

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- NCVER study
  - Investigating the enabling factors for improving student pathways from VET to HE in Building and Construction

- OLT/DIISRTE study
  - Clearing the Pathways between AQF 5,6,7

Australian Construction Industry.....

- The construction industry is extremely important to the Australian economy
- the fourth largest employer with nearly one million employees
- contributing $61 billion or 11% of GDP per annum (ABS, 2011).
- Despite its economic significance, it has one of the least qualified workforces of all Australian industries.
• 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 14% approx
• A massive 45% (approx) of the workforce has no post school qualifications.
• There are significant skill gaps in the industry 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).

CONSTRUCTION MANAGEMENT is the Number 1 occupational skills shortage in the industry/the nation:

• Skills Australia, 2010
• DEEWR 2011
• CPISC 2011
Additional shortages……

At professional and paraprofessional levels:

- Civil engineers
- Quantity surveyors
- Construction estimators

There is no skills shortage in such occupations as:

- Architecture
- Urban and regional planning
- Building associates

Being a construction (project) manager…..

In Construction Management – several routes

- through experience
- through a higher education qualification – relevant Bachelor degree
- through a VET qualification and then into a degree
- or a mix of these
Why upskill?...

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**changing skill requirements** of the industry mean that initial entry level skills training at AQF 3 & 4 can become outdated over an individual’s lifetime in construction, particularly in areas such as technology, materials and energy usage and application.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

- The industry workforce of Certificate III and below is at high risk during periods of **economic downturn**.
• 16.5% of building/construction diploma graduates go onto HE degree
• On a % basis this Field provides similar pathway outcomes as for all diplomas
• BUT actual student numbers are very small – 460 students nationally per annum
• AND Diploma qualifications are the only qualifications providing pathways in this Field – only 1.1% of III/IV go on to HE (5.6% all Fields)

Previous studies…….

Students indicated that there were a number of reasons they had undertaken 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 is a variable.
• 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.

Research Question:

• 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?
Data collection methods…

- a review of the published data pertaining to movement from VET to HE (upskilling and credentialing) in this field
- semi-structured interviews (36/7 institutions) with students who had transitioned from VET to HE in this field.
- industry roundtable discussions (2 x 25 invitees) of issues to emerge from the reviewed data and interviews.

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.
Enablers to emerge….

• assembling of resources that were “people-rich” and sustained over time

• engagement of learners that recognized difference and led to enhanced learning experiences in both sectors

• building of confidence in learners through collaborative VET to HE working and communication

Assembling of resources that were “people-rich” and sustained over time….

• staff and others in VET/HE who provide a people–rich experience/articulation project officers/ “go to people”

• intervention of institutional staff and institutional systems that affected the individual’s aspiration and motivation to undertake HE.

• use of mentors, tutors and peers
“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)

“At work they told me the degree would be more helpful...I wasn’t sure till I spoke with the programme director.” (Holmesglen, Vic)

Engagement of learners that recognized difference and led to enhanced ongoing learning experiences in both sectors....

- a common understanding that transition students did not have the same prior learning experiences
- time and effort by HE staff to adjust, even minutely, learning experiences or learning activities
- recognition of prior learning or addressing knowledge gaps.
• the lower staff/student ratios in VET which helped develop study skills and success in learning
• learning experiences that support the students in transition
• Flexible delivery of curricula

• “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 uni), it was an adult environment. I’m more reliable now thanks TAFE. (NSW)
• “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 number in the classes blew me away at first…. ”(USA,SA)
• “I wanted to study online because of my work- mostly I would find it hard to get here of a weekend anyway” (Holmesglen, Vic)
Building of confidence in learners through collaborative VET to HE working and communication……

• Agreed and published credit
• provision of informed ‘link’ people both within the HE institution and the VET institution
• Completion of the diploma
• Orientation and information nights/ meeting university staff / Geographical access
• “extended conversations” with learners
• examples of university work and assessment,

• “Well this uni had a relationship with the Leederville TAFE and that meant you could find out about the degree.” (Curtin,WA)

• “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)
TAFE environment as an enabler ....

- 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 appears TAFE experience is a critical enabler.

- “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)
And finally…..

• “some of my friends from TAFE were not accepted, but they were just as good as me” (UTS articulant) and

• “definitely, it was still a worry after I got my diploma......to try and think whether I got in or would I still get in. You apply and wait and wait and worry and then start thinking that everyone else gets in but you” (RMIT articulant)