

# Promotion of Vocational Education and Training Career Pathways in the Australian Construction Industry

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## Abstract

*This discussion paper considers the benefits of promotion of qualification pathways related to individual career pathways for new entrants and current workers in the Australian construction industry. Benefits are considered from an individual, organisational and social view accounting for licencing and health and safety obligations in the industry. The paper condones the promotion of training pathway programs, particularly those that increase in level and stimulate upskilling. Increases in uptake of pathways programs linked to career objectives can have a positive impact on recognised skill shortage occupations and enhance skills in younger workers in an industry subject to an aging workforce.*

*Registered Training Organisations and government agencies are encouraged to develop innovative ways to increase the uptake of pathways and to ensure retention through the range of qualifications completed.*

**Keywords:** learning pathways, vocational education and training, construction industry training, learning programs

## 1. Discussion

### 1.1 A framework for pathways

The Australian Industry and Skills Committee (2020) outlines the construction industry is focused on a range of activities that include construction, demolition, renovation, maintenance or repair of building and infrastructure. The illuminate that it covers a wide range of services, from planning and surveying to structural construction to finishing services such as painting and decorating (Australian Industry and Skills Committee, 2020). Artibus Innovation (2019) reports that the construction sector produces around 9% of Australia's Gross Domestic Product, as it generates \$367.2 billion in revenue and is projected to grow at an annual rate of 2.4% in the next five years (2019-2024). Most businesses in this industry are either sole traders or very small, employing less than 20 people (Australian Industry and Skills Committee, 2020). Given the majority businesses in this industry are either sole traders or very small, these businesses benefit from multiskilled operators that are able to perform a range of roles. Individuals who have completed a range of qualifications are able to contribute to these small businesses at a higher level.

Construction and Property Services Industry Skills Council (2015) notes that the Australian Qualifications Framework (AQF) forms a basis for Australian Vocational Education and Training (VET) and provides a comprehensive and nationally consistent framework for qualifications in compulsory post-education and

training in Australia. The framework enables learners to have flexible pathways than can cover more than one training provider. Pathways can be horizontal (across AQF qualifications at the same level) and vertical (between qualifications at different levels), and are designed to eliminate unnecessary and unfair barriers to AQF qualifications (Artibus Innovation, 2018).

## **1.2 Qualifications and Licencing**

Builders licencing is required for those undertaking construction activities. In Australia, each state or territory has different requirements for builders seeking licencing. These can range from education and experience to a number of references and financial resources.

In Victoria, for example, for domestic building work, practitioners must be registered as a building practitioner with the VBA to (Victorian Building Authority, 2020):

- perform domestic building work that costs more than \$10,000 (including labour and materials)
- provide more than one type of building work (such as plastering and painting) that costs more than \$10,000 (including labour and materials).

There are a number of different types of builders' registration in Victoria, with the most common types including Domestic Builder (Limited), Domestic Builder (Unlimited), Domestic Builder (Manager), Commercial Builder (Limited) and Commercial Builder (Unlimited) (Open Colleges, 2019). There are a number of limited registrations available such as Domestic Builder – Limited to Painting and Decorating. The VBA Experience Statement suggests that completion of CPC30611 Certificate III in Painting and Decorating satisfies some of the technical knowledge required for Painting and Decorating work.

In NSW, requirements include have at least 2 years' relevant construction industry experience working in a wide range of building construction work. In addition to the 2 years' experience, applicants for the licence will also need to gain a Certificate IV in Building and Construction and a Diploma of Building and Construction (Building) and one of the following (Open Colleges, 2019):

- A current Carpentry or Bricklaying Contractor Licence or Supervisor Certificate, or an approved qualification that would allow the issue of such a licence
- CPC50210 Diploma of Building and Construction (Building) (Western Australia)
- CPC50210 Diploma of Building and Construction (Building)
- Bachelor of Housing from an Australian University or a Degree in Civil Engineering, Structural Engineering, Architecture, Housing, Construction, Construction Management, Construction Economics, Applied Science (Building), Quantity Surveying
- Degree in Building, Construction, Construction Management, Construction Economics, Applied Science (Building), or Quantity Surveying

The 2 years' experience can be gained as an employee under the supervision of a licensed builder, as a sub-contractor who is appointed the supervisor of a (company or partnership class) Contractor Licence or as a sub-contractor who holds an Endorsed (individual class) Contractor Licence (Open Colleges, 2019).

Completing a Certificate III level qualification allows the person seeking licencing to build their experience as a trades person in a specific trade and following the completion of the Certificate IV in Building and Construction and a Diploma of Building and Construction (Building), meeting the academic requirements for licencing.

There are a large number of Certificate III level qualifications available within the Vocational Education and Training sector (Australian Government, 2020c), including but not limited to, for example, Certificate III in Fire Protection Certificate III in Construction Waterproofing, Certificate III in Painting and Decorating, Certificate III in Shopfitting, Certificate III in Wall and Ceiling Lining, Certificate III in Plumbing (Mechanical Services) , Certificate III in Roof Tiling, Certificate III in Wall and Floor Tiling, Certificate III in Concreting , Certificate III in Gas Fitting, Certificate III in Carpentry and Certificate III in Bricklaying/Blocklaying.

Queensland offers number of builders' licences to choose from. Generally, applicants need between 2 and 4 years' experience and formal qualifications specifically related to the class of licence amongst other requirements (Open Colleges, 2019). The Department of Housing and Public Works. (2019) outlines, for example, a Builder—low rise licence requires Certificate IV in Building and Construction (Building).

The discussion above highlights the extent to which licence classes are aligned to qualifications available from the Construction, Plumbing and Services Training Package. The qualifications allow construction industry practitioners through transition vertically through the levels to apply for higher level licences and progress in the industry. The qualifications are designed for pathways and, in turn, transition of a building practitioner through to unrestricted level licences. The structure allows individuals to undertake qualifications commencing at Certificate II level and work their way through to a licenced builder with development of vocational trade skills through the journey.

Availability of pathways further allows those undertaking programs to qualify for licencing in a number of states and therefore allows for mobility which is one of the fundamental tenements of Australian vocational education and training, as based on a national competency based system. Austin, Mellow, Rosin and Seltzer (2012) reinforce this concept with the notion that many people advocate taking strong action that will result in development of career and educational career pathways that will provide the people most at risk to obtain and build upon credentials. They speak of three important aspects to qualifications, namely that they are credentials that are portable, stackable and part of a career pathways system. Construction industry qualifications have been developed in this way.

Vocational Education and Training Construction Industry Qualifications are developed within the Australian Quality Framework using a national system and are therefore portable throughout Australia. They are stackable in that learners are able to earn shorter-term credentials with clear labour market value, such as a Certificate III level qualification, and then build on them to access more advanced jobs and higher wages, such as Certificate IV or diploma level qualifications. Austin *et al.* highlight that stackable postsecondary certificates and credentials offer an accelerated entrance to the job market. The notion of

qualifications being part of a career pathways system, is one that utilises clear education, training strategies, mechanisms, and supports for movement from the acquisition of core skills and credentials for job entry on through to increasingly higher levels of relevant skills and credentials and thus advancement to higher levels of employment. The training package derived qualifications are reflective of this approach, such as is evidenced through the industry licencing system.

### **1.3 Health and Safety Duties**

SafeWork NSW (2019) outline that the nature of construction work means there are various businesses or undertakings with duties relating to the same construction work. It can involve Persons Conducting a Business or Undertaking (PCBUs) who:

- carry out construction work
- design the building or structure
- commission the construction work (except for a home-owner where they are not a PCBU)
- are principal contractors
- have management or control of a workplace at which construction work is carried out, or
- carry out high risk construction work.

There are also other duty holders who have responsibilities under the WHS Act and WHS Regulation (as relevant to the particular state) and these may include officers (for example, company directors), workers and other persons (such as, for example, visitors to construction sites).

SafeWork NSW (2019) further recognise that it is common in the construction industry for a person to fall into more than one duty holder category. As an example of this scenario, SafeWork NSW (2019) offers that a principal contractor will have the duties of a principal contractor as well as other duties of a PCBU. Further, a subcontractor is a PCBU and can also be a worker when working at a construction workplace. Given the obligation to multiple duties and registration processes, it is more than reasonable that an individual completes a trade qualification and building licence qualification as they may perform multiple roles in the building industry and resulting in multiple duties under WHS legislative requirements.

As an illustration, where an individual has completed both a Certificate III in Plumbing and CPC40110 – Certificate IV in Building and Construction (Building), the qualification description (Australian Government, 2020a) for CPC32413 – Certificate III in Plumbing (Release 2), states:

“This qualification provides a trade outcome in plumbing”.

The qualification description (Australian Government, 2020b) for CPC40110 – Certificate IV in Building and Construction (Building), states:

“This qualification is designed to meet the needs of builders and managers of small to medium-sized building businesses.

The builder may also be the appropriately licensed person with responsibility under the relevant building licensing authority in the State or Territory. Builder licensing varies across States and Territories and additional requirements to attainment of this qualification may be required”.

A licenced builder in this context, could be undertaking construction work in the capacity of a licenced trades person or a Domestic Builder or both depending on the context of the work. Similar arrangements can exist for a person, for example who has completed a Certificate III in Painting and Decorating and Diploma of Building and Construction (Building) and is engaged as the registered builder on a medium rise project and for the project working as a commercial painter. These cases are examples of vertical pathways and an effective use of the qualifications in a manner that they are intended.

By means of an example of horizontal pathway use, an individual who has completed a Certificate III in Plumbing may subsequently complete a Certificate III in Gas Fitting to extend their career opportunities and service offerings.

All variations of packaging for pathways are valid, whether vertically or horizontally as they are linked to career pathways.

#### **1.4 Skills shortages**

Aritbus Innovation (2019) advises that the Australian Government Department of Jobs and Small Business researches and compiles a list of skills shortages in the labour market and this list captures shortages in skilled occupations using the Survey of Employers who have Recently Advertised (SERA). The following occupations have been identified and listed as experiencing either a national or state-based skills shortage in 2017-2018: Building Associate (site supervisor); Construction Project Manager; Bricklayer and Stonemason; Carpenter and Joiner; Fibrous Plasterer; Plumber; Wall and Floor Tiler; Painting Trades Worker; Fibrous Plasterer; and Roof Tiler (Aritbus Innovation, 2019).

Some of these skills shortages can be addressed through delivery of pathway programs by vertical pathways that allow for a trade qualification, such Carpenter or Painter, followed by a higher level qualification, such as a Certificate IV or Diploma, to allow the individual to participate in the role of Site Supervisor.

The skills shortages are compounded by an aging workforce in the Construction Industry. Aritbus Innovation (2019) outlines that vital skills are at risk of being lost, resulting from an aging workforce, as proportionally fewer younger workers are replacing retiring workers. This then drives the need to retrain and upskill current workers. Pathways programs spanning qualification levels for both current workers and new entrants will provide to contribute to the reduction of the skills shortage. The Australian Industry and Skills Committee (2020) summarises that employment in the construction industry reached nearly 1,118,000 in 2018 and is projected to exceed 1,300,000 by 2023. The most common identified vocational education and training related occupation in this industry is Carpenters and Joiners, at 9.5% of the total workforce. This is a very large cohort many of which may be interested in upskilling, presenting an opportunity for both the Vocational Education and Training sector and construction industry.

The benefit of pathways training is available to all student cohorts, including Apprentices, domestic student cohorts and international students. All benefit from the additional higher level skills attained and all

provide advantage to their current or prospective employers.

## **2. Conclusion**

There is a solid opportunity for the promotion of training pathways to potential entrants to the construction industry through Vocational Education and Training. Increased uptake of a group of qualifications to achieve higher level skills will help the industry to meet current employment demands and to address legislative requirements on the industry. The qualifications specified in the Construction, Plumbing and Services Training Package are designed in such a manner that they suit a career progression from trades person through to construction management and given the structure of the industry in Australia, these are often the same sole trader. Subsequent research is required to determine the best approaches to further promote uptake of pathways by Registered Training Organisations and Government Agencies. Likewise, research should also focus on innovative methods to maintain retention through the pathway.

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