

VOCATIONAL PLACEMENTS AND OPERATOR CAREER PATHWAYS DISCUSSION



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ABSTRACT

Wide Bay Institute of TAFE (WBIT) is currently investigating the viability of vocational placements for new water students in QLD as a way of opening study options for non-workers. The NWP07 Water Operations qualifications have been developed to support experienced industry practitioners and new entrants seeking to commence or develop a career within the water industry. The majority of learners participating in water operator and wastewater operator studies currently come from existing workforces of the water service providers in QLD and across Australia. This is due partly to the fact that not many registered training organisations have current and working water and wastewater treatment facilities on their campuses. The potential issue with this approach and the recognition of an aging workforce means opportunities for new and younger operators remain very limited. Vocational placements for students may enhance workforce development strategies and succession planning in regional areas of QLD. This discussion will explain training packages, vocational placement in QLD, the difference between vocational placements and work experience students, and workforce development planning. WBIT intends to gauge the level of support from industry in this strategy through completion of a survey of participants.

KEY WORDS

Vocational placement, workforce development planning, succession planning, career pathways, aging workforce, student, VET, TAFE.

1.0 INTRODUCTION

The Priority issues for the 2013 Environmental Scan identified by Government Skills Australia include recognition of the aging workforce; new technologies; providing more for less; increased professionalism within the sectors, requiring up-skilling and the VET sector reform.

Vocational placements are used in many industries as opportunities to provide a real work environment to students who would not otherwise have sufficient access to the facilities, equipment and range of work necessary to develop and consolidate their skills to the level required of the course/qualification.

Despite limited access to water treatment facilities for non-working students, currently there are no known vocational placement students participating in NWP07 studies in Australia. All vocational study participants work within a water service provider organisation prior to enrolment.

2.0 DISCUSSION

2.1 What Training Package is used for water treatment operator job outcomes?

The current Training Package designed for water treatment operator outcomes is NWP07 release 3.0 Water Training Package.

2.2 Is NWP07 Water Operations Training Package Only For Existing Water Industry Workers?

The NWP07 Water Operations training package is not restricted to existing workers and training can be provided in a simulated environment providing competency assessment requirements are met. It states *“The competencies in this Training Package may be attained in a number of ways including through:*

- *Formal or informal education and training*
- *Experiences in the workplace*
- *General life experience, and/or*
- *Any combination of the above.*

... Learning and assessment pathways may include structured programs in a variety of contexts using a range of strategies to meet different learner needs. Structured learning and assessment programs could be: group-based, work-based, project-based, self-paced, action learning-based; conducted by distance or e-learning; and/or involve practice and experience in the workplace.”

Whilst it is within the training package rules, there would be little recognition within the Australian water industry for a graduate who has been issued a water treatment qualification and never worked onsite in an operational water treatment facility. This is partly a risk management strategy to ensure the general community are provided with safe drinking water from adequately trained operators.

2.3 What is competency?

NWP07 Water Training Package defines competency as *“...the ability to perform particular tasks and duties to the standard of performance expected in the workplace... Workplace competency requires the ability to apply relevant skills, knowledge and attitudes consistently over time and in the required workplace situations and environments. In line with this concept of competency Training Packages focus on what is expected of a competent individual in the workplace as an outcome of learning, rather than focussing on the learning process itself.”*

2.4 Are NWP07 competency units suitable for vocational placement students?

Some skills and knowledge outcomes are more obviously suitable to a simulated workplace environment, such as NWP201B where the outcome is to ‘follow defined OHS procedures and regulatory requirements related to the work being undertaken in order to ensure one's own safety and that of others in the workplace’. Others require a real work environment and access to defined physical resources (i.e. an operational water treatment plant) to attain competency, for example NWP268B which has the required skill of ‘identify and respond to operational and process faults with chlorine dosing equipment problems’. Some units may be restrictive in their training in a vocational setting due to access to specific testing and plant equipment, such as reverse osmosis technology.

As vocational placement students do not hold a job in the water service sector they need access to an employer willing to allow them onsite to acquire the required skills of a competent worker. These skills are negotiated as part of the vocational placement training plan, which typically includes a similar table to the below Table A.

Table A:

Competency detail	Nominal hours	Start and End study dates	Workplace tasks to be undertaken	Assessment arrangements	Workplace assessor	Result	Date achieved
NWP201B Follow defined OHS procedures and regulatory requirements	16		Identify and report hazards using workplace hazard identification forms Wear appropriate PP&E. Complete chemical dosage records	Evidence of completed workplace records	Verification by workplace supervisor		
NWP210B & NWP218B Perform basic water quality tests & Sampling	20		Correctly take samples from sampling points Conduct basic water quality tests; including pH, chlorine residuals, temperature and turbidity; and record results	Evidence of completed workplace records	Verification by workplace supervisor		
NWP268B Monitor, operate and report chlorine disinfection systems	30		Complete operational logs for this process identify and respond to operational and process faults with chlorine dosing equipment problems perform work-related calculations	Evidence of completed workplace records	Verification by workplace supervisor		

2.5 How Will the Queensland Skills and Training Taskforce Strengthen Vocational Training For the Water Industry?

The Skills and Workforce Development Investment Plan 2013 (2013 Investment Plan) maintains a focus on transforming VET investment, trade training pathways and improved workforce development and planning, as advocated in *Securing a skilled future*, Skills Queensland's first Investment Plan. On-the-job training is a fundamental component of skills acquisition and knowledge, and regarded by many industry sectors and employers as the distinguishing feature that links workplace training to quality and industry relevance. More intensive off-the-job training may make certain individuals more attractive to potential employers, as they would be likely to increase their productivity at the workplace more quickly once they commence. This may also help them to complete elements of their training faster.

This includes occupational health and safety, familiarity with tools, understanding of

workings of the industry, and foundation skills.

The Apprenticeships for the 21st Century Expert Panel Report identified the need for countercyclical approaches, and recommended a cooperative and flexible approach to allow for the continuation of both training and employment of apprentices during periods of economic downturn. Specific measures recommended included:

- Reduction of work hours offset by additional training
- Increased off-the-job training
- Placement with other employers within the industry
- Increased mentoring and support.

2.6 How Can Your Workforce Development Plan Accommodate Newcomers to the Industry?

The ageing workforce and upcoming retirements is a longstanding issue for the water sector, and while transitioning to retirement is included in many workforce development plans, the GSA E-scan also recognises a lack of suitably skilled workers in remote and regional areas. Experienced staff are attracted to higher paid opportunities in the resource sector, and no longer can a water service provider rely on the culture of ‘a job for life’ as a depending factor in (previously) low turnover rates.

Table 1:

Table 1. The proportion of survey respondents experiencing recruitment and retention issues across the five government and community safety sectors

	Correctional Services	Local Government	Public Safety	Public Sector	Water	Total
Organisations that have had difficulty recruiting in the last 12 months	50%	59%	40%	69%	53%	57%
Organisations that anticipate recruitment challenges in the next five years	100%	74%	40%	85%	73%	72%
Organisations that have experienced difficulty retaining staff in the last 12 months	75%	29%	7%	50%	20%	28%

Results are based on responses to the GSA enterprise survey

Water service providers must recognised this challenge and ensure that they are well-prepared to meet current and future workforce challenges, they need to embed a culture of training and professional development, providing a ready qualified pool of labour to draw upon when positions become available. Vocational placement students help to create a pool of skilled persons in the local community that can be drawn upon when needed by the water service provider.

2.7 What is the Difference Between Vocational Placement and a Work Experience Student?

Neither short vocational placement students nor work experience students are paid employees of a water service provider. A short vocational placement arrangement is generally an appropriate option for students who would not otherwise have sufficient access to the facilities, equipment and range of work necessary to develop and consolidate their skills to the assessable level required of the course/qualification, for example, students not employed in the vocational area in which they are studying and students undertaking their course/qualification through an institutional pathway.

They cannot participate in more than 240 hours of work per calendar year and all hours

must relate back to the direct achievement of competency as a course requirement.

2.8 The following Scenarios provide an example of each.

Scenario 1 Short Vocational Placement (unpaid). Katrina is in her first year of a Certificate 3 water treatment course. A requirement for successful completion of her qualification is to achieve competency for monitoring and operating chlorine disinfection systems for a low complexity assessed water treatment facility. Katrina approaches her Council as they have this type of system and have student placements through their local TAFE. The arrangement is authorised under state law, and Katrina understands the placement is a learning exercise and she will not be paid. As the arrangement meets the definition of a vocational placement under the Fair Work Act, Katrina would not be covered by the Fair Work Act, and is therefore not entitled to receive remuneration. Once Katrina is assessed as competent, her placement activity ceases.

Scenario 2 Work Experience (unpaid). A local council has advertised an internship program for TAFE students interested in water treatment processes. The internships have been advertised as voluntary and students are allowed to select the hours they spend at the council facility over a 2 week period. As the council is careful to ensure that the role is mainly observational, there is no expectation that the students will perform productive work during their internship and the student is gaining the main benefit from the arrangement, it is unlikely to create an employment relationship.

2.9 What About Workplace Insurance for Vocational Placement Students?

The TAFE requiring a vocational placement must apply to Skills Queensland for recognition of the scheme and obtain insurance under the Workers' Compensation and Rehabilitation Act 2003 (section 22). This is to ensure a student is covered for injury arising out of, or in the course of, the vocational placement. Such insurance must remain in place until the course is no longer offered.

The TAFE must also obtain and retain liability insurance that indemnifies the placement person against proceedings for damages brought by a student, another person injured and loss or damage to the placement person's property caused by the student during the placement.

2.10 How does Vocational Placement Support Career Pathways?

Vocational placement study for a TAFE student provides opportunities to apply new skills a real work environment with a host employer. It can lead to a formal Traineeship and forms a step in a defined career pathway supported by developing qualifications:

1. School based student completes of NWP10110 Certificate I in Water Operations
2. Vocational placement student completes NWP20107 Certificate II in Water Operations
3. Trainee completes NWP30107 Certificate III in Water Operations
4. Advanced Operator completes NWP40107 Certificate IV in Water Operations
5. Coordinator completes NWP50107 Diploma of Water Operations
6. Area Manager completes Higher Ed studies with University

2.11 How Does Vocational Placement Support the Proposed National Certification

Framework 2012: Operators Within Drinking Water Treatment Systems?

The proposed Framework includes the provision for drinking water suppliers to provide adequate opportunities to allow new workers or existing workers who require up skilling to develop their competencies and provide evidence for assessment in order to achieve the competencies required for certification.

The below table aligns study with expected timeframes of competency for a certified operator, noting the need to balance training and workload.

Suggested Study Option	System complexity	Maximum timeframe for training
Operator in Training completes NWP20107 Certificate II in Water Operations as a vocational placement student.	Low	12 months
Certified Operator completes NWP30107 Certificate III in Water Operations	Medium	24 months
Certified Operator maintains certification and is responsible for complex systems. NWP40107 Certificate IV in Water Operations	High	36 months

Note the above table is the presenter's interpretation for suggested study options.

3.0 CONCLUSIONS

Balancing the off-the-job underpinning knowledge and skills with on-the-job operational duties supports the vocational placement student to be more productive, faster and develops a pool of skilled persons in the local community from which the workplace can draw upon to meet their immediate workforce development needs.

4.0 REFERENCES

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