



# CONCO>E TŪHURA

## Degree-Level Apprenticeships (DLA)

A systems gap analysis for transformative change in the Aotearoa New Zealand vocational education and training sector pipeline.

Peter Scalan | November 2023

A photograph of two construction workers in high-visibility yellow vests and white hard hats. They are standing on a construction site, looking at a tablet held by the worker on the right. The background shows various pieces of construction equipment and a blurred site environment.



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# Executive Summary

## Purpose

The purpose of this paper is to develop a system gap analysis to identify what is holding back the establishment of degree-level apprenticeships (DLA) as a legitimate higher-level qualification delivery method in the Aotearoa New Zealand education framework for tertiary providers and learners, and what adjustments would be required to enable further use of higher-level apprenticeships as a delivery solution, for existing degree qualifications.

## Introduction

There are very few degree-level apprenticeships in Aotearoa New Zealand compared with other countries. Internationally, the DLA is used as a legitimate delivery solution, with clear benefits established through multiple research projects such as in post study earnings, greater socio-economic and social mobility advantages. This paper will examine some of the research findings that support DLA delivery and consider what current barriers there may be to adopting DLA as a delivery solution for tertiary providers, industry, and learners.

Aotearoa New Zealand traditionally has under-utilised the DLA due to several factors including the pursuit of academic research-based degree study, the widely held view that teachers and parents in Aotearoa New Zealand consider apprenticeships to be a trades-based learning choice for learners. The Tertiary Education Commission (TEC) and the New Zealand Qualifications Authority (NZQA) processes are also a potential barrier to entry for DLA as they are not currently funded nor approved as a specific programme of study.


Under the recent changes introduced through the Review of Vocational Education (RoVE), Workforce Development Councils (WDCs) are responsible for setting the standards for vocational education only up to level 6 on the New Zealand Qualifications Framework (NZQF). The NZQF, developed and overseen by the New Zealand Qualifications Authority (NZQA), does not recognise apprenticeships as a qualification type on the framework. NZQA considers apprenticeships as a delivery method rather than a qualification. The Tertiary Education Commission (TEC) considers apprenticeships as a *funding mechanism* for delivery that leads to qualifications at level 3 and 4. DLA are not currently managed by a central agency, and each key agency involved considers apprenticeships differently, which may

have contributed to the difficulty in establishing DLA as a legitimate or recognised pathway to employment. By contrast, degree delivery in NZ is largely dominated by traditional delivery through universities, approved by the Universities NZ's Committee on University Academic Programmes (CUAP) process and Institutes of Technology and Polytechnics (ITPs), as well as Private Training Establishments (PTEs) approved by NZQA. There are a number of degree programmes that are delivered with industry input and where learners get taught with the input of industry, such as teacher training in schools, health science in hospitals, and some professional degrees. However, the traditional model of a degree taught primarily through the provider is a model that will be a barrier that is difficult to overcome without policy development and a clear level of support from industry, agencies, universities, and providers such as Te Pūkenga, PTEs, and Wānanga.

The Food and Fibre CoVE has looked at this topic carefully and concluded in a draft paper that advanced and degree-level apprenticeships are considered a crucial part of redefining apprenticeships in Aotearoa New Zealand beyond the scope of the NZ Apprenticeship model. This paper attempts to build on their work and look at potential delivery models referencing the Food and Fibre CoVE model where appropriate.

As noted in the following chapters based on the six conditions of systems change, there is a wide gap between the current state and the future state of DLA in the Aotearoa New Zealand education context. For DLA to become a recognised delivery method (providers to develop, get funded, and recognised as a fully supported option for tertiary education) will require significant adjustment from agencies, employers, providers, and recognition by the general public as a legitimate pathway to higher level and degree study. In an advanced "future state" the same qualification could be delivered either at an institution (e.g., university, Te Pūkenga, or PTEs) or in the workplace and be considered academically equivalent.

Development of this proposal would have many positive benefits, including filling skill shortages with higher-level competencies, producing more work-ready graduates, and providing a range of industries with a more productive workforce. It would also produce a greater commitment to priority groups with a focus on equity and diversity in enrolments and provide a more hands-on environment for learning. Many priority groups do not believe that university is a viable option and are therefore excluded from careers that are only



available through universities (for example architecture, and quantity surveying). In addition, a university education is often not viable due to the loss of earning in many economically depressed households. Opening up degree level study to these groups would allow a broader talent pool and a more diverse workforce.

DLA would also mean that learners could earn-as-they-learn potentially reducing training fees and promoting participation with a more diverse workforce and second-chance learning. Those learners that would not traditionally go back to education and training may be encouraged to do so particularly if there was not a significant opportunity cost to retraining and giving up current employment.

To successfully develop and promote DLA delivery, collaboration, and support from key agencies such as NZQA, TEC, Workforce Development Councils, CoVEs, Te Pūkenga, industry and employers would be essential and ultimately, support from the university sector would assist in making the proposal a NZ-wide education initiative.

Developing DLA will require policy shifts from the education agencies and public acceptance of the value of degree-level apprenticeships to benefit learners, industry, and society. DLA would assist in strategic alignment with key strategies for increased productivity, diversity and equity, better career progression and keeping pace with technological changes and innovative practice in the workplace.

### **Gap Analysis based on the Six Conditions of change model.**

The overall purpose of this paper is to identify gaps in the system to enable the development and implementation of DLA considering a range of current resources in addition to an examination of where DLA work well and produce a delivery model that may be used as a guide for future development.

The paper lists the gap analysis using the traditional model of current state, future state, gap description and next steps and proposals. A short review of the vocational education landscape looks at the key agencies and their roles and responsibilities with respect to where they could assist with the development of DLA. The paper examines current relevant models, firstly the Te Pūkenga pilot project through Otago Polytechnic and a brief look at other relevant examples in the Aotearoa New Zealand context.



Two international models are examined with the long-standing German apprenticeship model and the more recent UK degree-level apprenticeship model delivered through universities. Finally, a review of the potential benefits through lessons from the UK model and conclusions and recommendations.

This paper examines a gap analysis between the current state and the desired future state applying the six conditions of systems change model.<sup>1</sup> The key advantages of this model are that systems change is about advancing equity by shifting the conditions that hold a problem in place; to embrace change, funders should be prepared to see how their own ways of thinking and acting must also change; and shifts in system conditions are more likely to be sustained when working at three different levels of change: explicit structural change (policies, practices and resource flows), semi-explicit relational change (relationships and connections, and power dynamics) and implicit transformative change (mental models). The model is represented in the reverse triangle as below.<sup>2</sup>

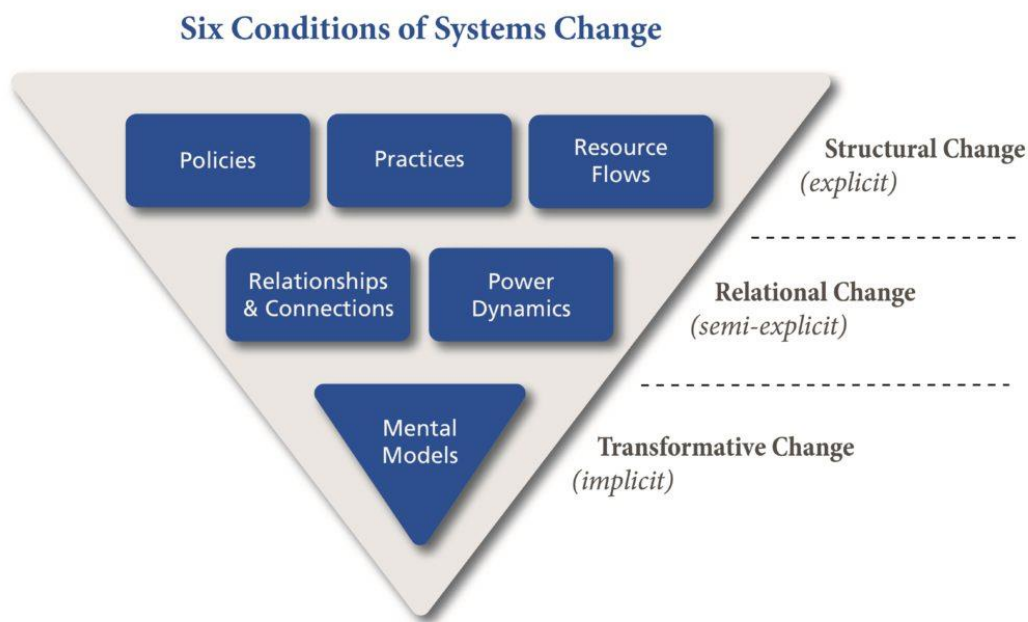


Table 1: The Six Conditions of Systems Change

<sup>1</sup> Kramer, Mark R., John Kania, and Peter Senge. "The Water of Systems Change." Report, FSG, May 2018.

<sup>2</sup> [https://www.fsg.org/resource/water\\_of\\_systems\\_change/](https://www.fsg.org/resource/water_of_systems_change/)



## Structural Change to Transformative Change

The above model is the basis for this gap analysis paper. However, this paper is not designed to provide answers to bridging those gaps rather it is a start of the conversation that agencies, employers, industry groups, training providers and learners need to engage with together to bring about transformative change. Questions that will need to be addressed in such discussions include: how to engage employers to support the proposal of such a transformative change; what are the policy settings that will be required to enable DLA to operate across multiple sectors; which are the most relevant industries to start this transformative change and is the New Zealand education and training sector ready to embrace such a new concept. If the answer is yes, then the potential change could be truly transformative.

## Key themes examined in this paper

The following key themes highlight the opportunities and challenges of degree-level apprenticeships that are examined in this paper:

- The benefits to learners of an earn and learn qualification.
- The benefits of degree-level apprenticeships to further equity and diversity.
- The roles of the central government agencies to develop relevant policies and encourage, fund, and promote degree-level apprenticeships.
- The central role of providers such as Te Pūkenga, wānanga, and universities to deliver degree-level apprenticeship education and training in collaboration with industry and employers.
- The terminology around apprenticeships training and what this means in a degree delivery model.
- The role of industry and employers to build relationships and promote and encourage degree-level apprenticeships within key industries to fill skill shortages.
- The delivery models available from international experience to provide valuable insights for Aotearoa New Zealand's education and training landscape.

## Recommendations


That ConCOVE disseminate this report and seek feedback from the key organisations noted in the report and other relevant groups including employers and industry groups.

That large employers such as construction and infrastructure companies be approached to act as conduits to learners seeking to develop higher level skills and qualifications to assist learners to be work-ready upon graduation through the DLA model.

That WDCs take the lead along with CoVEs in collaboration with industry, employers and MBIE to promote DLA as a legitimate pathway to higher education and skills acquisition.

That Te Pūkenga take a leadership role in promoting the delivery of DLA throughout the regional campuses and particularly target traditionally disadvantaged groups.

That agencies promote through public awareness the benefits of learn as you earn a degree qualification.



That MBIE, TEC, Regional Skills Leadership Groups and others involved in the Cyclone Gabriel and other large infrastructure projects discuss the benefits of the DLA concept as an opportunity for learners to gain valuable skills and qualifications to be prepared for future climate-related challenges.

That a pilot project be developed with the key agencies to explore the best settings required for higher level apprenticeships to be used effectively in Aotearoa New Zealand.

## Glossary of Terms

| Term                | Meaning   |
|---------------------|---|
| ATNZ                | Apprentice Training New Zealand   |
| CoVE                | Centres of Vocational Excellence  |
| ConCOVE             | Construction and Infrastructure Centre of Vocational Excellence   |
| <b>DLA</b>          | <b>Degree-Level Apprenticeships - While the commonly adopted term 'Degree-Level Apprenticeships' has been utilised, the aim is to investigate the implementation of apprenticeships at higher levels, irrespective of the qualification's specific level.</b> |
| Food and Fibre CoVE | Food and Fibre Centre of Vocational Excellence  |
| IfATE               | Institute for Apprenticeships and Technical Education (UK)  |
| Industry Training   | On-job or off-job learning to develop skills and key competencies   |
| ITOs                | Industry Training Organisations (e.g., Connexis) now part of Te Pūkenga   |
| MBIE                | Ministry of Business, Innovation and Employment   |
| NZQA                | New Zealand Qualifications Authority  |
| NZQCF               | New Zealand Qualifications and Credentials Framework  |
| RSLGs               | Regional Skills Leadership Groups   |
| RoVE                | Reform of Vocational Education  |
| Te Pūkenga          | New Zealand Institute of Skills and Technology  |
| TEC                 | Tertiary Education Commission   |
| TEOs                | Tertiary Education Organisations  |
| UFS                 | Unified Funding System  |
| VET                 | Vocational Education and Training   |
| WBL                 | Work-based learning that occurs in a work environment   |
| WDCs                | Workforce Development Councils  |



# 1. Policies

## Key themes of the current state of policies

There is no established policy framework for DLA in Aotearoa New Zealand. As noted in this chapter, the Education and Training Act 2020 enables DLA but lacks detailed policy provisions. In the Aotearoa New Zealand tertiary landscape DLA are not managed or controlled by any agency nor fully enabled by the current policies and rules around delivery of degree-level qualifications. NZ tertiary education does not have a history of formal DLA. However, there are currently some initiatives that support an approach that is similar to DLA such as teacher training, health worker training and some business models.

There are challenges related to the definition of a degree in the context of DLA programmes such as the NZQA requirement for degrees as taught by people mainly engaged in research. This would potentially be a barrier to implementing DLA delivery if industry mentors are considered to be teaching staff.

### 1.1 The Vocational Education Landscape

There is currently no established policy framework to support DLA delivery in the Aotearoa New Zealand tertiary education system. The Reform of Vocational Education and the Education and Training Act 2020 enables DLA delivery but there is no policy that specifically encourages or enables DLA in place at present. Aotearoa New Zealand does not have a history of formal DLA delivery but there are a number of informal arrangements that resemble DLA delivery. As noted in this chapter, the Tertiary Education Commission (TEC) taking greater interest in the subject as evidenced by a recent delegation examination of the UK and Ireland models for DLA in their tertiary education system. This chapter looks at the two key education organisations in tertiary education and proposes that in order to make progress, there needs to be development of comprehensive policies supporting DLA as a legitimate delivery option. The future state related to policy development is examined with respect to key themes that would need to be considered for a comprehensive policy framework to support DLA in the tertiary education landscape.

## 1.2 The Reform of Vocational Education (RoVE)

In 2020 the Government introduced the Reform of Vocational Education (RoVE) aimed to create a strong, unified, and sustainable vocational education system that is fit for the future of work and delivers the skills that learners, employers and communities need to survive.<sup>3</sup> NZQA describes vocational education as “about learning specific skills for a job”. Learners can do this while working or studying with a tertiary provider. NZQA states that most vocational qualifications and credentials are at levels 3 to 6 on the NZ Qualifications and Credentials Framework (NZQCF).

Briefly, the aims of the reforms are to create a system which is collaborative, flexible, innovative, and sustainable for all regions of Aotearoa New Zealand, by allowing more flexibility and portability of learning (classroom, work-based learning or online) and move between mode of study and where in NZ they wish to study. The reforms are designed to facilitate more consistent qualification content, honour Te Tiriti o Waitangi, bring industry, employers, and iwi closer to the design of the qualifications and be more inclusive and equitable for all learners.


The new vocational educational system now comprises: Te Pūkenga as one institution that combines the 16 Institutes of Technology and Polytechnics and nine Industry Training Organisations; six Workforce Development Councils (WDCs); Taumata Aronui, an independent group providing advice and recommendations on how tertiary education can respond better to the needs of Māori learners and communities; two Centres of Vocation Education (CoVEs) driving innovation and excellence in vocational education; Regional Skills Leadership Groups; and a Unified Funding System (UFS) to fund the delivery of vocational education and training.

## 1.3 New Zealand Qualifications Authority (NZQA)

The stated purpose of NZQA is to support learners by making sure they have access to quality training to support lifelong learning, keeping records of learners’ educational achievements, making the achievements portable and setting learners up for success

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<sup>3</sup> A new vocational education system (NZQA) <https://www2.nzqa.govt.nz/about-us/strategies-projects/vocational-education-system/>



through NZQA resources and services.<sup>4</sup> NZQA manages the NZ Qualifications and Credentials Framework (NZQCF), run assessments, check providers (other than universities), and set some standards and qualifications.<sup>5</sup>

The NZQA view is that there is no inherent barrier to providers seeking NZQA approval for DLA programmes, and using this model as a mode of delivery, providing they meet the NZQA degree approval criteria.<sup>6</sup> Delivery of degree programme in New Zealand includes the need to be taught by people mainly engaged in research. As noted in this paper, the interpretation of this criterion may or may not be a barrier to DLA depending on the interpretation of whether workplace learning should involve research-level teaching, or that the involvement of the employer is as a workplace mentor, rather than a teacher.

#### **1.4 The Tertiary Education Commission (TEC)**

The Tertiary Education Commission (TEC) Te Amorangi Mātauranga Matua's stated purpose is "To ensure that all New Zealanders have the skills, knowledge and confidence to create a fulfilling life."<sup>7</sup> TEC invests over \$3bn per year into tertiary education by funding over 700 tertiary education organisations (TEOs) to provide thousands of courses to hundreds of thousands of learners and monitors the performance of TEOs and also provides information and advice to Government about Tertiary Education.<sup>8</sup>

In discussion with members of TEC we were able to establish their views on a number of perceived barriers to delivery of DLA programmes. With regard to DLA as a legitimate delivery method the TEC view is that there are no structural barriers to prevent providers from delivering DLA programmes under current TEC rules. The TEC consider that the funding mechanism was the same regardless of delivery method.<sup>9</sup> TEC note that the difference between traditional delivery at a provider and a partnership model with employee/provider and workplace was the complexity of the delivery and the additional expense that this entailed. For smaller providers with few students this would be a large barrier. However, at

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<sup>4</sup> See <https://www2.nzqa.govt.nz/about-us/why-we-are-here/>

<sup>5</sup> See <https://www2.nzqa.govt.nz/about-us/why-we-are-here/our-responsibilities/>

<sup>6</sup> Discussion with Eve McMahon, Deputy CE NZQA

<sup>7</sup> <https://www.tec.govt.nz/about-us/who-we-are/>

<sup>8</sup> <https://www.tec.govt.nz/about-us/>

<sup>9</sup> Conversation with Joey Randall, Deputy CE (Acting) Careers and Investment Design, TEC, 17 July 2023



scale it could be possible to fund a delivery model based on degree apprenticeships. Te Pūkenga would certainly be large enough to operate at scale for DLA delivery. TEC consider that workplace staff role was more of a mentoring role, than a teaching role. The other factor was whether staff at work-based employers had the necessary skills and expertise to mentor learners when they are in the workplace. Therefore, staffing might require a different focus to the current academic staff at an institution. Start-up funding would be difficult, and a challenge would be building the model from scratch. However, for existing approved and funded providers, there would be no significant barriers to DLA under the current legislation.

On the possibility of this being a good option for traditionally disadvantaged groups such as Māori and Pasifika learners; it was noted that there are many other difficulties faced by these learners, including home life responsibilities, cost of learning and materials, appropriate cultural support for learners. However, with the ability to earn and learn, this is considered a positive option for learners that have traditionally been disadvantaged for higher-level study.

The Code of Good Practice for NZ apprenticeships<sup>10</sup> has recently been updated by TEC. The code currently relates to level 3 and 4 qualifications (a total of 120 credits where at least 60 credits are at level 4), with good practice guidelines for providers, learners, and workplaces. TEC would be required to expand this code to encompass DLA delivery at higher levels.


### **TEC examination of DLA models in the United Kingdom and Ireland**

A high-level delegation from TEC including TEC, Chief Executive Tim Fowler along with the Chair and Deputy Chair of the Commission recently visited the UK and Ireland to look at various aspects of degree-level apprenticeships there. Fowler noted that three key themes for apprenticeship training in New Zealand are funding, system sustainability and career prospects.<sup>11</sup> It is fair to say that the TEC delegation returned to New Zealand with a high level of enthusiasm for the concept after spending time with UK education and employer contacts. Fowler noted that the levy system in both the UK and Ireland has been embraced

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<sup>10</sup> TEC (2023) <https://www.tec.govt.nz/teo/working-with-teos/kis/new-zealand-apprenticeships/code-of-good-practice-for-new-zealand-apprenticeships/>

<sup>11</sup> Discussion with Tim Fowler, TEC Chief Executive, 14 September 2023.



by industry and employers and that he had not heard any negative comments about the DLA levy and delivery. He was surprised to learn that the concept had been picked up by long-standing universities and that learners were attracted to the model who would not previously have considered university level study due to the fact that there is no debt, and learners are working and graduate with a degree qualification.

Fowler believes that with support from industry, employers, and providers the concept could work well in Aotearoa New Zealand and could be the key to getting more engagement with priority groups such as Māori, Pasifika, and women. He can see the benefit of school leavers going straight into a DLA with an employer in accounting, financial services, and IT as well as engineering and construction and other trades-based courses. He noted that the potential was there but would require the right infrastructure to work with business, given the relatively low number of employers currently supporting on-job training.

### **Key themes of the future state of policies**

To enable a future state that supports DLA as a legitimate delivery option, there would need to be the development of comprehensive policies supporting DLA delivery. Policies would need to be formulated and refined to address funding, recognition, and support for DLA delivery.

A key aspect would be testing the funding model to ensure alignment with government funding mechanisms and enables an education system that allows and promotes DLA as a normal delivery option. NZQA and TEC would need to agree on the definition of degree delivery in the context of work-based learning.

Māori and Pasifika learners and other disadvantaged groups in Aotearoa New Zealand benefit from a model that is further geared to success factors for these groups.

## 2. Practice and Delivery

### Key themes of the current state of practice and delivery

In general terms degree-level apprenticeships (DLA) are not a recognised or common practice in Aotearoa New Zealand's education system. Industry, employers, learners, and providers are unfamiliar with the concept of DLA. There are some exceptions to this as noted in Chapter one, related to teacher training in schools, health worker training in hospitals and other courses in, for example business courses with workplace components. However, in all cases, learners are not paid when learning in workplace settings at higher levels.

### 2.1 Current relevant models

#### Te Pūkenga-The New Zealand Institute of Skills and Technology

Te Pūkenga – The New Zealand Institute of Skills and Technology is New Zealand's largest tertiary education provider with a nationwide reach with the aim to become a long-term skills and training partner for firms and industries and brings together on-the-job, on campus, and online vocational education and training through a unified, sustainable network or regionally accessible provision.<sup>12</sup>

Te Pūkenga offers a number of apprenticeship programmes at level three and four in a range of industries. However, there is currently no courses offered at level 6 and 7 (other than that noted below at the Otago Polytechnic campus). If Aotearoa New Zealand is going to make progress on DLA, Te Pūkenga will need to be a key driver in the development and delivery. As a nation-wide unified system of vocational education provision, Te Pūkenga is an ideal provider to drive this development if the funding model accommodates scale delivery and Te Pūkenga is able to provide sufficient numbers to make the model work.

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<sup>12</sup> See <https://www.xn--tepkenga-szb.ac.nz/our-work/about/>



## Otago Polytechnic (Te Pūkenga) model

The Otago Polytechnic branch of Te Pūkenga offers a Bachelor of Engineering Technology (Asset Management Apprenticeship)<sup>13</sup>. As described in the programme information, this qualification is a first for NZ and learners may choose an apprenticeship pathway, where students gain experience in industry projects within their chosen specialty - Civil, Mechanical or Electrical Engineering. This degree is accredited by Engineering New Zealand (ENZ) which ensures it meets national and international standards. Successful graduates will also be eligible to become a graduate member of ENZ. Internationally, the degree is accredited to the International Engineering Alliance's Sydney Accord and also supported by the Institute of Public Works Engineering Australia (IPWEA).

The model uses apprentice managers whose primary role is to maintain the relationship between the apprentice, the workplace mentor, and Otago Polytechnic to monitor progress and facilitate further opportunities for the learner. This model is already in place to support current apprentices, so it would be a matter of extending this model to DLA learners. There is a final assessment (portfolio of evidence) that is moderated by a panel of industry experts and learning leaders from the Polytechnic.

In discussion with staff at the Polytechnic, they note that they secured TEC funding to develop and deliver a pilot out of the Engineering Education to Employment (E2E) programme which was looking to specifically boost the numbers of learners enrolled in Level 7 engineering programmes.<sup>14</sup> Staff are also working with another group outside of engineering to try and start an apprenticeship pathway.

The Polytechnic staff noted that they found the NZQA approvals process surprisingly straight-forward. However, the staff noted that there were some technical things to work through but because they were developing a new delivery pathway for an existing degree programme, which already had a strong emphasis on work readiness and industry

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<sup>13</sup> <https://www.op.ac.nz/programmes/nzqa/bachelor-of-engineering-technology-infrastructure-asset-management-apprenticeship/>

<sup>14</sup> The Te Pūkenga (Otago Polytechnic) team included James Mackay, Richard Nyhof, and Hana Cadzow. Richard noted that he was currently seconded to Te Pūkenga HQ as Director of Delivery, James is based in Wellington and Hana is in the Dunedin Campus.

integration, the NZQA barriers were not significant. The Polytechnic staff noted that establishing a new degree-level programme would be a much more difficult job.

The Otago Polytechnic team noted that the term “apprenticeship” means different things to different groups, providers, industry, and learners. Any organisation contemplating delivery needs to identify what the term means in their own context. The terminology of “apprenticeships” also has a negative bias towards lower-level training. One option is to look at a more proactive name such as on job degree, *higher apprenticeship*, or *degree training, earn and learn a degree* etc. However, it may be that the terminology can remain as degree programme, just delivered differently. The term *apprenticeship* was used based on the UK model of DLA terminology, but in reality, it is just another delivery method of the same content. The Te Pūkenga model may use a different terminology, such as Higher Apprenticeship, which is used in Australia, or fade out use of the term altogether.


Otago Polytechnic and Weltec started the pilot project in 2020 and ended the three-year pilot at the end of 2022. Initially there were five learners which grew to 71 by the end of the pilot. Covid was disruptive, but post Covid there was a large upswing in recruitment and also the way that industry viewed the project. The pilot ended very successfully.

Delivery is face-to-face (F2F), online and in the workplace settings of the learners.

Engineering New Zealand (ENZ) and NZQA have both viewed the pilot as a success. As the programme is part-time there was a total of approximately 30 equivalent full-time students (EFTS).

Employers contribute by paying the student’s fees, release time for block courses and online delivery and mentorship of the learners at the workplace. Typically, there is little “tuition” in the workplace, but industry have team mentors and support the asset management pathway as this was requested by industry. Occasionally experts from industry contribute by teaching content in a relevant topic at the Polytechnic.

The programme needs to be robust enough to meet both quality assurance and funding requirements of TEC and NZQA. It was noted that the research aspect inherent in degree delivery can cover education and pedagogy as well as content. There was some concern over the term “apprenticeship”, but this was accepted by both agencies.



A key point is that the degree programme needs to have approval as a degree programme first which Otago Polytechnic had as the B. Eng Tech which was approved and recognised under the Sydney Accord. The Polytechnic added a strand for Asset Management as requested by industry and the apprenticeship model became a delivery method that has been very successful. This is true also of the UK-based models. This same approach could be taken to add further specialisations e.g., a Quantity Surveying strand.

Another key point is that the partnership with industry and employers which enables the model to successfully make it work. The Polytechnic team noted that there is current discussion with the NorthTec branch of Te Pūkenga for delivery of Occupational Therapy in the same delivery method. As with each programme a business case is needed and discussed with local business, the Te Pūkenga regional director, and regional co-leads throughout the Country as the Te Pūkenga course delivery may span the length of the Country.

The model of DLA is also beneficial for equity reasons where the model assists those at lower socio-economic income levels in addition to traditionally under-served communities such as Māori and Pasifika learners and in the case of engineering, women. The traditional B. Eng Tech model had 5-10% women typically. The Asset Management Strand had 19% women learners for the apprenticeship pilot.

As the programme is part-time, it does take longer than the standard three years, but there have so far been two graduation ceremonies and course completion rates have been positive, although numbers are too small to make comparisons. In fact, the team did not wish to make comparisons as the cohort for the different modes of delivery is different as some learners prefer face-to-face (F2F) learning and some online learning and some prefer a classroom only model and others prefer to earn and learn in a work situation.

Te Pūkenga are keen to develop this model for other related areas such as Construction Engineering. The Bachelor of Engineering Technology (B.Eng.Tech) course is now standardised throughout the campuses of Te Pūkenga which also assists with developing the DLA as an appropriate mode of delivery.

## Connexis (Te Pūkenga)

Connexis arranges, delivers, supports, and assesses work-based learning for the infrastructure industries of Civil, Energy, Telecommunications, and Water<sup>15</sup> to help upskill the infrastructure workforce by setting programmes, evaluating assessments, and supporting employers and learners to obtain nationally recognised micro-credentials and qualifications through apprenticeships and traineeships.

Connexis encourages diversity to reach underrepresented groups such as women, Māori, and Pasifika learners. Connexis is the infrastructure business division of Te Pūkenga, creating a network of on-job, online and on-campus learning to give learners more flexibility in what, where and how they learn. Being part of Te Pūkenga means that Connexis is part of the wide network of organisations delivering vocational and applied education in Aotearoa New Zealand, enabling them to increase their service offerings to employers, learners, and industries.

## 2.2 Other notable examples of apprenticeships training in Aotearoa New Zealand

The NZ Government website offers a range of options for learners to consider which includes training and apprenticeships under training while you work.<sup>16</sup>

The Moneyhub website offers a “Definitive Guide” to apprenticeships in New Zealand<sup>17</sup>. This presents a very useful overview of trades-based apprenticeships.

The Education Counts website gives an overview of industry training and other workplace-based learning trends for the year ended December 2022.<sup>18</sup> The data shows a number of trends but is clearly affected by the Covid-19 outbreak between 2020-21. Some positive trends include greater participation in apprenticeships across the board, but particularly by Māori and Pasifika learners between 2017 and 2022. Women learners also show an upward trend for apprenticeships training between 2017 and 2022.


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<sup>15</sup> <https://www.connexis.org.nz/>

<sup>16</sup> See <https://www.govt.nz/browse/education/training-and-apprenticeships/train-while-you-work/>

<sup>17</sup> See <https://www.moneyhub.co.nz/apprenticeships.html>

<sup>18</sup> See Bachelor of Engineering Technology (Asset Management Apprenticeship)



In the New Zealand Medical Journal article *Could Mental Health apprenticeships help a system on brink of collapse*<sup>19</sup> the authors from the University of Otago's Department of Psychological Medicine argue that the Country's mental health system and those working in it are on the brink of collapse. The authors are concerned that more than 10% of funded positions are vacant and the workforce is aging rapidly. They consider a viable short-term option would be to train people with different skills into the roles and train them on the job, like an apprenticeship. This would widen the scope of current health practitioners to include those with desirable attributes such as lived experience of mental illness and understanding of tikanga and Pasifika culture.

### 2.3 Examples of good practice in Aotearoa New Zealand

There are examples of good practice currently in Aotearoa New Zealand such as the Ako Mātātupu Teach First NZ Programme that is employment-based and provides participants with the opportunity to teach in a secondary school serving a low-income community, whilst competing a postgraduate qualification.<sup>20</sup> Other degrees such as the Auckland University of Technology (AUT) Business School workplace experience programme called Co-operative Education, with strong support from industry and employers.<sup>21</sup>

However, there are very few DLA programmes in NZ compared with other countries.

Teacher Training degree study is a DLA model of sorts where students spend time in schools on placement experience as well as at a provider. Nursing degrees requires time spent in hospitals as clinical practice as well as at a provider. Registered nurses are required to complete 1100 hours of clinical placements in hospital currently, but this is unpaid work.<sup>22</sup>

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<sup>19</sup> Stuff.co.nz (2023) <https://www.stuff.co.nz/national/health/300886474/could-mental-health-apprenticeships-help-a-system-on-brink-of-collapse>

<sup>20</sup> See <https://teachfirstnz.org/about-us>

<sup>21</sup> See <https://www.aut.ac.nz/study/study-options/business/partner-with-auts-business-school/workplace-experience>

<sup>22</sup> <https://www.nzherald.co.nz/nz/politics/exclusive-we-have-to-do-better-government-considering-paid-placements-for-nursing-students/V47SOA2AUVGVLA2TS62DMSWJFU/#:~:text=But%20as%20it%20stands%2C%20that%20work%20is%20unpaid.,year%2C%20and%20has%20garnered%20more%20than%2017%2C000%20signatures.>



## Key themes of the future state of practice and delivery

The future state anticipates DLA becoming a normal and accepted practice in the education system. Educational institutions and industries would need to incorporate DLA into their practices, including curriculum design and delivery. Aspects of educational elements to consider include programme development that fully embraces both work-based learning (WBL), assessment in the context of DLA including both theory and practical assessment, enrolment criteria and adequate funding. Other elements to consider are the quality assurance requirements across delivery modes to ensure consistency.



## 3. Resource Flows

### Key themes of the current state of resource flows

There is currently a lack of a funding model or funding mechanism in place for DLA in the Aotearoa New Zealand tertiary education landscape. There is also no financial support or resource allocation for the development and promotion of DLA.

### 3.1 Unified Funding System (UFS)

The Tertiary Education Commission Unified Funding System (UFS)<sup>23</sup> funds the delivery of vocational education and training that is focused on learners, supports employers, and addresses national and regional skill priorities.

In December 2021, Cabinet approved the design of the UFS for vocational education and training (VET). The UFS unifies funding for provider-based study at levels 3 to 7 (non-degree) and for all industry training.

The UFS has been operational since 1 January 2023. The Cabinet paper and the policy papers supporting the high-level design of the UFS, prepared by the Ministry of Education, and supported by the Tertiary Education Commission, are available on the TEC website.<sup>24</sup> These include briefing notes, education reports and the final Cabinet paper. The definitions of the vocational education and training under the UFS is outlined on the TEC website.<sup>25</sup> Briefly, this includes all industry training funded provision at levels 1 and 2, and student achievement component funded study at certificate and diploma levels 3-7 (non-degree). It excludes provider-based training at levels 1 and 2 and degree and above study at levels 7 on the NZQCF.

### Strategic intent of Unified Funding System

The intent of the funding system is to put the needs of learners at the centre to ensure they can access training that is right for them, at the right time and in the right place. Funding is

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<sup>23</sup> TEC (2023) <https://www.tec.govt.nz/vocational-education/vocational-education/unified-funding-system-ufs/introduction-to-the-unified-funding-system/>

<sup>24</sup> TEC (2023) [Advice seen by the Minister of Education about the UFS.](#)

<sup>25</sup> TEC (2023) [Definition of VET for UFS.](#)

designed to encourage providers to make more relevant and quality work-based training options available for learners and employers. It provides funding for improved support for learners and employers and their businesses. It also aims to address national and regional skills priorities to better support our economy and communities.

The increased funding to support learners comes with higher expectations of tertiary education organisations (TEOs) to support greater success for learners, employers, and their communities.

The UFS has three components: the learner component, the delivery component, and the strategic component.<sup>26</sup> The learner component is aimed at securing funding for those that have not been well served by the education system and puts learners at the centre of their organisations and to improve outcomes. The Minister's priorities<sup>27</sup> for the learner component of the UFS required providers to demonstrate how they will deliver results for VET learners by building capability to reduce barriers for VET learners, particularly in accessing work-based learning; ensuring VET teaching and learning meets learner, employer, and industry needs; and delivers skills relevant to the workplace. This includes supporting employers who deliver VET. The above priorities support the concept of DLA as well as the RoVE aims.


The Delivery Component comprise most of the UFS and replaces what was the funding for level 3-7 (non-degree) delivery and all funding from the industry training fund. The delivery component supports the delivery of education and training in all settings including at providers and workplaces.

The Strategic Component of the UFS seeks to support the VET system to respond to regional and national skills priorities, including supporting Te Pūkenga to build and sustain a national network of provision. Te Pūkenga is expected to show that it is innovative and prioritise projects that align with the strategic priorities of TEC, particularly national and regional priorities, for example looking at new ways to train. This strategic component could be used

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<sup>26</sup> TEC (2023) [Learner Component](#) [Delivery Component](#) [Strategic Component](#)

<sup>27</sup> Note, these were the then Minister, Hon Chris Hipkins priorities for vocational education and training in May 2023. The Minister has since become Prime Minister.



to develop and deliver DLA programmes, for example the East Coast Recovery Alliance following the Cyclone Gabrielle in 2023 or the rebuild of the Dunedin Hospital.

There will be a large number of tradespeople requiring upskilling over a significant number of years. The large construction projects would be an ideal way of delivering a model that develops local talent and builds higher level qualifications particularly for local iwi engagement, and helping young tradespeople move into higher level qualifications. The Budget 2023 the Government announced the National Resilience Plan, that included \$6bn to rebuild following the North Island weather events in 2023, including future proofing road, rail, and local infrastructure wiped out by the extreme weather.<sup>28</sup> It would be worth exploring the impact that DLA training might have on upskilling the existing and future workforce to deliver the large infrastructure challenges faced by Aotearoa New Zealand. The Budget included \$71bn over the next five years for such rebuilding the infrastructure related to the national resilience plan.

TEC notes that the Māori and Pasifika Trades Training (MPTT) funding that provides fees-free tertiary places for Māori and Pasifika learners aged between 16 and 40 is a partnership model comprising iwi, hapu, Māori and Pasifika community groups, employers, and tertiary education organisations and industry bodies<sup>29</sup>. While this funding currently leads to qualifications at levels 1 to 4, there would be benefit in extending this to higher level apprenticeships. Education Counts data for 2017-2022 show<sup>30</sup> that participation rates for apprentices increased across all ethnic groups with the largest increase for Māori and Pasifika learners. The same data set also shows an increase in the proportion of female apprentices from 12% in 2017 to 18% in 2022.

Work and Income have various a subsidy schemes including Apprenticeship Boost<sup>31</sup> where a payment made to employers to help them keep and take on new apprentices. The payment

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<sup>28</sup> <https://www.beehive.govt.nz/release/new-national-resilience-plan-rebuild-better>

<sup>29</sup> TEC (2023) Māori and Pasifika Trades Training <https://www.tec.govt.nz/funding/funding-and-performance/funding/fund-finder/maori-and-pasifika-trades-training/>

<sup>30</sup> Education Counts (2023) New Zealand's workplace-based learners <https://www.educationcounts.govt.nz/statistics/new-zealands-workplace-based-learners#4c>

<sup>31</sup> See <https://www.workandincome.govt.nz/employers/subsidies-training-and-other-help/apprenticeship-boost/index.html>

is made directly to employers. It means apprentices can keep earning while training towards their qualifications. Note the initiative is due to end in Dec 2024.

### **Key themes of the future state of resource flows**

The future state envisions a fully funded model for DLA, making it a financially viable delivery option. Industry participation and the potential for industry funding for DLA would need to be examined.

All apprenticeships are funded by TEC at levels 3 and 4 (or combination of both levels). This would need to be amended to allow for the inclusion of higher-level apprenticeships up to Level 7. The future state would include a fully funded model of DLA that promotes this as a legitimate delivery option.

Policy in a future state may include industry/employers contributing to the funding of DLA through, for example the levy scheme that operates successfully in the UK, which is examined in Chapter 6, Mental Models.



## 4. Connections and Relationships

### Key themes of the current state of connections and relationships

There are no established connections or relationships between educational institutions, industry, and government agencies for DLA as a delivery mechanism. DLA is not managed or controlled by any agency. WDCs are responsible for setting the standard for vocational education, but only to level 6 on the NZQA framework. This chapter examines the connections and relationships between the current key agencies in the tertiary vocational education sector in addition to the agencies covered in previous chapters.

#### 4.1 Centres of Vocational Excellence (CoVE)

#### 4.2 ConCOVE Tūhura

ConCOVE is the centre of vocational education for the construction and infrastructure sector. It aims to connect and align industry, learners, and vocational education to re-imagine clear, equitable and supported career pathways within the sector. ConCOVE began as part of the vocational education reforms and was established in 2020 and represents a consortium, the Construction Sector Accord between government and industry, representing major industry organisations, unions, peak bodies, and government agencies. The organisation facilitates participation in projects, access resources and disseminate findings.<sup>32</sup> It is hosted at the MIT campus of Te Pūkenga.

ConCOVE has commissioned this paper as a gap analysis to explore what changes may be required to enable degree-level apprenticeships as a delivery method for vocational education and training.<sup>33</sup> The next step in the project and a key recommendation of this report is to disseminate recommendations to key agencies who can influence the implementation of DLA.

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<sup>32</sup> See <https://concov.ac.nz/about/>

<sup>33</sup> See [https://concov.ac.nz/projects/degree-level-apprenticeship-systems-gap-analysis/?utm\\_source=newsletter&utm\\_medium=email&utm\\_campaign=monthly&mc\\_cid=32ea6e764c&mc\\_eid=110775be23](https://concov.ac.nz/projects/degree-level-apprenticeship-systems-gap-analysis/?utm_source=newsletter&utm_medium=email&utm_campaign=monthly&mc_cid=32ea6e764c&mc_eid=110775be23)

### 4.3 Food and Fibre CoVE

The Food and Fibre Centre of Vocational Excellence (Food and Fibre CoVE) works with their industries, employers, workforce development councils and regional skills leadership groups, Te Pūkenga to support the growth of excellent vocational education. It is currently working with 54 organisations across the food and fibre sector and is hosted at the EIT campus of Te Pūkenga.<sup>34</sup>

The Food and Fibre CoVE has written a discussion paper *Pathways, Pride and Possibilities- Food and Fibre Apprenticeships in Aotearoa (Discussion paper)*.<sup>35</sup> With RoVE and disestablishment of the ITO system the Food and Fibre CoVE consider this a good time to review the apprenticeships model.

The discussion paper notes that some European countries have long-standing experience with DLA that is embedded within their education systems. In UK (and NZ) apprenticeships are considered working class (vocational) and therefore less desirable than a university education. The UK has turned around on this recently in a significant way as noted above and in the international model section below.


Industry involvement is the key to determining the success and value of apprenticeships, particularly with industry involvement in the assessment process. Examples of flexibility built into the different apprenticeships systems, are for example, pre-apprenticeships and taster courses and upskilling for the unemployed as a way to continue with learning leading to employment.

Benefits of the apprenticeships system include the soft skills as well as technical skills to assist apprentices to be work ready and have a wider range of skills to contribute to the workplace. In NZ similar findings to overseas except at a lower level. Buy in and support from regional skills groups and economic agencies is important in terms of promotion and encouragement to ensure industry involvement. This aligns with regional skill shortages and workforce development needs.

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<sup>34</sup> See <https://foodandfibrecove.nz/introducing-the-food-and-fibre-cove/>

<sup>35</sup> <https://foodandfibrecove.nz/wp-content/uploads/2023/04/230421-NZ-Apprenticeships-Review-.pdf>



It is crucial that the apprenticeships are industry-led and industry-endorsed qualifications to ensure the qualifications truly reflect the needs of employers and industry. Skills and knowledge that reflect industry requirements are the key to successful apprenticeships. The discussion paper proposes that WDCs should lead the standards setting for apprenticeships and particularly set capstone assessments as they have been given the legislative ability to set and moderate capstone assessments.

The paper looks at DLA, and the potential for this in the food and fibre sector and the engineering sector. The paper examines DLA in terms of structure, characteristics, funding, and best practice apprenticeships model. From October 2022, responsibility for apprenticeships now sit with Te Pūkenga and are approved by the WDCs.

The paper makes key point (p.31) that focussing solely on Level 3 and 4 apprenticeships has held industries and NZ back, failing to account for the increasing technological sophistication in industries and IT. It concludes that New Zealand (and Australia) need to catch up with UK and European models to avoid being left behind.

#### **4.4 Workforce Development Councils (WDCs)**

##### **Waihanga Ara Rau Construction and Infrastructure Workforce Development Council**

Waihanga Ara Rau - Construction and Infrastructure Workforce Development Council is one of six WDCs and was established in October 2021 as part of the RoVE reforms and represents a wide range of industries within construction and infrastructure including civil infrastructure, electricity supply, plumbing, gasfitting and drainlaying industries. Waihanga Ara Rau sets standards up to level 6.<sup>36</sup> However, they also have an advocacy mandate and DLA delivery comes within this advocacy mandate and is of interest to the WDC.<sup>37</sup>

In discussions, Waihanga Ara Rau note their interest in the development of technicians such as those involved in surveying moving from a two-year diploma course to a 4-year professional degree course such as the Bachelor of Surveying offered at the University of Otago<sup>38</sup>. Transitioning the diploma graduates into degree graduates, through cross-credit

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<sup>36</sup> See <https://www.waihangaararau.nz/>

<sup>37</sup> Conversation with Mark Williams, General Manager Strategy, and Insights on 7 September 2023

<sup>38</sup> See [https://www.otago.ac.nz/subjects/surv.html?gclid=CjwKCAjw6eWnBhAKEiwADpnw9piWIDnMQ-AU7hvweTZJlQGeHs62mZl8JfWEVxRietlqp0M0nTdJxoC-c0QAvD\\_BwE&gclidsrc=aw.ds](https://www.otago.ac.nz/subjects/surv.html?gclid=CjwKCAjw6eWnBhAKEiwADpnw9piWIDnMQ-AU7hvweTZJlQGeHs62mZl8JfWEVxRietlqp0M0nTdJxoC-c0QAvD_BwE&gclidsrc=aw.ds)



arrangements plus work experience and earn while you learn in the field would enable a large number of technicians in the field to develop the much-needed skills required for this important infrastructure field. Waihanga Ara Rau consider that the recent weather-related emergencies in the North Island and the need for large-scale re-construction is an ideal opportunity to provide a much needed boost for apprenticeship training.

### **Key themes of the future state of connections and relationships**

The future state aims to build connections and relationships between key agencies such as TEC, Te Pūkenga, WDCs, CoVEs, MBIE, NZQA. Collaboration between educational institutions and industries/employers would be vital to the success of DLA. Acceptance of DLA as a valuable delivery option would give employers, industry, and learners the confidence to promote the concept as a legitimate pathway to higher education achievement.



## 5. Power Dynamics

### Key themes of the current state of power dynamics

Currently, no agency has the authority or control over DLA, leading to a power vacuum in decision-making. NZQA does not currently recognise DLA as a qualification type and TEC does not fund providers to deliver apprenticeships training beyond Level 4. However, as TEC and NZQA have stated, there are no structural barriers to using this method of delivery of currently approved degree programmes. In this Chapter, the power dynamics between other agencies such as MBIE, Engineering New Zealand, Apprentice Training New Zealand, and Universities New Zealand.

### 5.1 Ministry of Business, Innovation and Employment (MBIE)

MBIE has a purpose to “Grow Aotearoa New Zealand for all”.<sup>39</sup> One of the key outcomes is the success of people that are skilled and engaged in safe and fulfilling work. MBIE oversees the 15 Regional Skills Leadership Groups (RSLGs) which are independent advisory groups locally based and regionally led. Their task is to identify and support better ways to meet future skills and workforce needs in their regions.<sup>40</sup> As an example see the Hawke’s Bay Regional Skills Leadership report that includes prioritising the regional recover following Cyclone Gabrielle.<sup>41</sup> The report highlights the need for targeted skills workforce development as a focus area as part of the Cyclone Recovery and Resilience plan.

Our discovery conversations have concluded that MBIE is currently looking for examples of how tertiary education is assisting in closing the workforce gap and examples of industry practice relating to training and education that works or not in the current system. The following is a summary of responses that indicates a number of themes that emerged from the feedback.

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<sup>39</sup> See TEC website <https://www.mbie.govt.nz/about/who-we-are/>

<sup>40</sup> See <https://www.mbie.govt.nz/business-and-employment/employment-and-skills/regional-skills-leadership-groups/>

<sup>41</sup> <https://www.mbie.govt.nz/business-and-employment/employment-and-skills/regional-skills-leadership-groups/hawkes-bay/local-insights-report/>

There is concern that the two-year diploma was insufficient time to properly train employees and graduates lacking in basic and technical skills. There is also a concern that Level 6 learning does not include an expectation of research into complex issues that is required for Level 7 learning, which means that learners often do not get in-depth knowledge of the subject matter.

Feedback also indicated that learners need a third year to build on two-year diploma (e.g., degree-level study). Employing fresh graduates is not always financially viable and may cost an employer, as it takes too long to train fresh graduates to become work-ready, which eats into profit margins. Graduates often require work experience before employment. It is possible that an apprenticeships model with on-job development, would be helpful for individuals to become more sufficiently trained with on-job development and to contribute more positively to the bottom line. It is also a different agreement where the employer expects the training and upskilling element with an apprentice. Further feedback indicated that the best graduates are those with good background skills and experience to do the basic work required as a new person in the field. The feedback also noted the need for a model that brings graduates into the industry in a way they can gain experience without being a financial drain on the employer.

Another theme highlighted the cost to the employers of hiring graduates in a complex industry where there is a gap between the training and the demands of the discipline; the requirement for close supervision of graduates and a lack of enthusiasm for hiring and investing in new graduates.

The matter of skills, training, and competence of graduates is a key issue for employers. There is a strong case for vocational degrees delivered through apprenticeships. Anecdotally, the feedback from some employers noted that, unfortunately, many employers are looking overseas to get the right skills rather than employing local graduates.



## 5.2. Engineering New Zealand – Te Ao Rangahau

Engineering New Zealand (ENZ) is a non-profit membership organisation that promotes the interests of engineers and the engineering profession.<sup>42</sup> ENZ is positive about the benefits of qualifications that allow learners to earn and learn and the value of this DLA concept for the engineering profession for engineering students in New Zealand.<sup>43</sup> ENZ is supportive of the Te Pūkenga Bachelor of Engineering Technology (Asset Management Apprenticeship) pilot noted above and is hopeful that the concept would be extended to other providers including universities in the engineering sector in due course.

## 5.3. Apprentice Training New Zealand (ATNZ)

Apprentice Training New Zealand (ATNZ) is a stand-alone Trust (from 2021) due to the disestablishment of ITOs under the RoVE reforms. It was previously a subsidiary of Competenz. It is now a registered PTE and offers apprenticeship programmes specifically in the engineering and manufacturing sectors.<sup>44</sup>

Tim Wilson, the General Manager of ATNZ notes that much of the maritime education internationally has used the DLA model since the late 70's but has never referred to it as a degree apprenticeship). As Chairman of the International Association for Maritime Schools, Wilson had the opportunity to compare a large number of different models of delivery – and notes that these different models, typically had more in common than difference despite sitting under vastly different national education systems. He also looked at degree apprenticeships for the primary industry while in a former role at Manukau Institute of Technology and has watched closely what has developed with DLA in the UK. ATNZ offers Engineering Apprenticeships, but not yet at the degree level<sup>45</sup>. For these courses there are no fees and there is an assigned account manager as a mentor for apprentices.

In the view of ATNZ, some of the barriers to delivery of DLA in NZ educational context includes the definition of what a degree is and notes that the graduate outcomes are what is most important. Wilson believes that apprenticeships are an undefined construct that TEC

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<sup>42</sup> See <https://www.engineeringnz.org/>

<sup>43</sup> Discussion with Brett Williams, 14 September 2023

<sup>44</sup> Discussion with Tim Wilson, CEO, ATNZ 13 July 2023

<sup>45</sup> See the ATNZ website [engineering-apprentice](https://www.engineeringnz.org/apprenticeship)

officials have not effectively coded as a stand-alone qualification but more as a funding method.

Wilson noted that degree apprenticeships are non-existent as an educational construct in NZ, but that in Europe apprenticeships exist as an educational construct. He noted the major difference in apprenticeships training compared to for example, nursing, social working, or teaching education. Critical difference is the tripartite nature of apprenticeships with training provider-learner-and workplace, all under a workplace training model.

Wilson considered that there are some barriers to delivery of the DLA model in New Zealand. He notes that there are no structural barriers under TEC to offer work based learning (WBL), however, in his view, the system does not fully understand WBL and favours a more traditional approach to degree delivery over three years in a provider setting, and level three and four apprenticeships.


Wilson noted that the Education and Training Act 2020 allows for funding of the WBL model, but not for understanding of how to implement the model of WBL. Wilson considers that under the RoVE reforms there is a lack of will to understand the WBL model and where it fits into the NZ educational landscape. He noted that the Maritime model at MIT in Marine Engineering worked well in practice, but that awarding a degree is where the structural barrier exists. This is due to the standard model for degrees that to award a degree qualification the programme “is taught mainly by people engaged in research”<sup>46</sup>.

In Wilson’s opinion there is no academic or educational rationale for this policy, and it is a significant barrier to delivery of non-traditional degrees in NZ. He believes that no other comparable country has this requirement for teaching in degree courses and that this is a significant barrier that prevents industry training and WBL that may be able to be delivered by people that are not researchers but have significant experience in education and training. They may use research to inform their teaching without actively engaging in research.

Wilson believes that the need to have teaching staff mainly engaged in research has changed apprenticeship training models such as nursing, teaching, and accountancy all predominantly based on an apprenticeship model. However, as the requirement for

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<sup>46</sup> See the Education and Training Act 2020 (s454 3a)



research-based staff meant that only academics were able to teach, many have limited vocational/industry experience. Therefore, the tutors who were not interested in engaging in research were not favoured over research staff. The effect of the Performance Based Research Fund (PBRF)<sup>47</sup> has further created the predominance of research in the tertiary education arena.

The consequence of the above is that graduates from degree programmes are not necessarily work-ready. The apprenticeship construct with 50% of learning in the workplace does not fall within the NZQA definition of being taught by people mainly engaged in research. The staff may be research-informed but not mainly engaged in research. Wilson believes that that ITPs that bought into this model contributed to creating 2<sup>nd</sup> class universities rather than 1<sup>st</sup> class vocational education institutes.

#### 5.4. Universities New Zealand-Te Pōkai Tara

Universities New Zealand is the peak body for the eight universities in New Zealand and has a statutory body under the Education and Training Act 2020 to quality assure academic programmes through their Committee on University Academic Programmes (CUAP).<sup>48</sup>

The Universities NZ website includes a paper from 2019 *Should NZ consider DLA model?*<sup>49</sup> The paper supports serious consideration of DLA for NZ universities, where 82% of students are studying vocational qualifications. Key points include the fact that to study at university students need to take time out of paid employment in order to study. However, with apprenticeships students can earn and learn as they qualify.

The report notes that in 2016 England made a deliberate effort to close the gap by introducing 'degree apprenticeships', aimed at the professions such as engineering, business management, and finance.

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<sup>47</sup> See TEC <https://www.tec.govt.nz/funding/funding-and-performance/funding/fund-finder/performance-based-research-fund/>

<sup>48</sup> See <https://www.universitiesnz.ac.nz/quality-assurance>

<sup>49</sup> See <https://www.universitiesnz.ac.nz/latest-news-and-publications/should-nz-consider-degree-apprenticeship-model>

Funding of the system is largely by government, but employers also pay a levy that gives them a credit to be spent on apprenticeships, universities also gain funding from the levy fund by negotiation with employers.

In our discussion with Chris Whelan, CEO of Universities NZ – Te Pokai Tara, he noted that, unfortunately, the earlier discussion in 2019 has not progressed. He noted that under the Student Achievement Component (SAC) funding model for universities<sup>50</sup>, DLA has just not been financially feasible at scale. He lamented that the funding system is currently still based on the old 1990s model of large classes on campus, with little technology which is not the modern way of delivering education and training. He noted, however, that with the announcement of a higher education funding review announced in July, this may be a concept that can go back on the table. Support from Universities NZ would be essential to the acceptance of the DLA model in the Aotearoa New Zealand education landscape.

### **Key themes of the future state of power dynamics**

The future state would require a clear delineation of authority and control over DLA, through policy development and agreement between the agencies, WDCs, CoVEs.

In addition to TEC and NZQA, other key agencies would need to acknowledge DLA as a legitimate delivery model and exercise their authority accordingly. Collaboration and support between MBIE, Engineering New Zealand, Apprentice Training New Zealand and Universities New Zealand, employers and industry would strengthen the option of delivery of DLA, and most importantly, give students the option to gain a degree qualification while studying and learning on the job.

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<sup>50</sup> See <https://www.universitiesnz.ac.nz/about-university-sector/how-nz-universities-are-funded>



## 6. Mental Models

### Current state of Mental Models

The current mental model in Aotearoa New Zealand does not consider DLA as a common or recognized form of education delivery for degree level qualifications. Educational staff, industry stakeholders and learners are not accustomed to the concept of DLA as a delivery option for degree qualifications.

In this Chapter we examine some of the key international models from Germany and the UK to see what could be possible in the New Zealand vocational education and training sector and also in the university sector.

### 6.1 International models

#### The German model of Degree-Level Apprenticeships

The German vocational education sector has a long history of supporting DLA for vocational education and training.<sup>51</sup> The German model is a mature system where skills training is elevated to a higher level to produce master craftspeople in a wide range of industries. The higher-level training in Germany is crucial for developing skilled tradesmen as the system in Germany recognises the importance for learners to have both in-depth knowledge of their trades and superior skills.

The Skilled Crafts International Vocational Education and Training (SCIVET) sector comprises 130 occupations and focus on individual products and solutions<sup>52</sup>. The skilled craft sector is regulated by law and a code determines which occupations are part of the skilled crafts sector and which qualifications are required as a prerequisite for self-employment in specific trades. Dual Vocational Education and Training (enterprises and vocational education providers) combines practical work experience and reflective theoretical knowledge. Following 3½ years of training there is a skilled worker's examination. The

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<sup>51</sup> Interview with Michael Koch, Skilled Crafts from Germany (SCIVET) and CE of Building Metrics (Wellington).

<sup>52</sup> See <https://scivet.de/en/dual-vet-in-the-skilled-crafts-sector/>



governance (oversight) is a strong partnership between state, employers, and trade unions and both market and state control the content of the vocational education and training.

Key dual benefits of this training include the involvement of employers and businesses in the training process. Learners are trained in the workplace applying skills daily. In addition, mandated representatives of employers and employees participate in the curricular development process within each trade. This means that the training content and exam is in line with the actual needs of real-world business requirements. The places of learning, the business or workplace as one learning site and the school as the other. Instruction at one is coordinated with instruction at the other. This enables businesses to offer apprenticeships that cover a wider range of skills that would not be available to either school or workplaces separately.

Three papers that focus on the benefits of companies' recruitment of apprenticeships within the company based on recruitment strategies, and why apprentices drop out of the programme. In the first paper<sup>53</sup> the effects of marketing strategy for influencing recruitment of young job seekers is examined. The paper concludes that the way apprenticeships are presented to young people is very important to the perceived attractiveness of the company that is trying to attract school leavers. Therefore, having the right people with enthusiasm and recruitment events that are attractive to young people makes a big difference. The second paper by the same author<sup>54</sup> examines the effect of recruitment based on the image of the sector as an attractive career option. It also notes the benefits of gender-specific differences in recruiting apprenticeships.

The third paper also by Andrea Greilinger<sup>55</sup> looks at the reasons why some apprentices drop out, primarily due to learners realising early that the choice of profession is wrong for them. Those that stay longer benefit from the cumulative knowledge and training that occurs at later stages of the apprenticeship's training.


It needs to be noted here that the funding model in the German system goes more directly to employers which encourages more engagement in the partnership model. Note the

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<sup>53</sup> Greilinger, A., (2015) Effects of Apprenticeship Marketing on Employer Brand Dimensions

<sup>54</sup> Greilinger, A., (2015) Attracting Young Job Seekers with Traditional Recruitment Practices?

<sup>55</sup> Greilinger, A., (2015) What goes wrong when it goes Wrong? Empirical Analysis of the Timing and Reasons for Premature Apprenticeship Terminations in Germany.



current funding system in NZ is completely different to this type of model where the funding goes to the tertiary provider not the employer.

Another paper is the VET Data Report Germany<sup>56</sup> with selected findings on the basis of 2019 data. The report notes that dual vocational education and training, where students spend time in both on-the-job training and classes at a vocational school is important in the German education system. Numbers have increased since 2018 due to a trend towards and increased preference for higher-level education. In 2018 craft trades recorded the highest number of company-based apprenticeships for the previous 10 years at 157,400 apprentices.

The report noted the problem of mobility outside of the regions for gaining an apprenticeships place within a workplace in the home region of the student. It notes that: male numbers are increasing while female numbers are falling; there is build-up skills drive to fill gaps in the skills for workers in energy efficiency and renewable energy fields. However, the existing framework for apprenticeships and master craftsman examination regulations cover the necessary skill sets and that gaps in the apprenticeship's frameworks are closed later through the examination process. But there is still a need to provide more work placements.

It is noted here that in Aotearoa New Zealand the RoVE changes to the Education Act opened up the possibilities for an examination process, similar to that seen in Germany, otherwise known as a capstone assessment. The examination process is key to the success of German model. However, none have yet been developed in the Aotearoa New Zealand context. One of the benefits of capstone assessments include the option of a person sitting a final examination without going through traditional training if they have the skills and knowledge to complete the capstone assessment.

### **The United Kingdom (UK) Model-the learner experience**

Degree-level apprenticeships in the UK are a type of apprenticeship program that allows individuals to earn a full bachelor's or master's degree while working and gaining practical

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<sup>56</sup> Federal Institute for Vocational Education and Training (Ed.): VET Data Report Germany 2019. Facts and analyses to accompany the Federal Government Report on Vocational Education and Training – Selected findings. Bonn 2022

experience in a specific field. These programs are designed to combine academic learning with on-the-job training, providing a pathway for individuals to develop both theoretical knowledge and practical skills.

Degree-level apprenticeships were introduced in the UK as part of the government's efforts to enhance vocational education and provide more opportunities for individuals to gain higher education qualifications. These apprenticeships are typically offered by universities, colleges, and employers in collaboration, providing a blend of classroom-based learning and work-based training. The UK Government website has information for students seeking further education, skills, and vocational training.<sup>57</sup>


Degree-level apprenticeships lead to the attainment of a full bachelor's or master's degree, depending on the programme of study. The qualifications are awarded by universities or colleges in partnership with the employer. The duration of degree-level apprenticeships can vary depending on the specific program and level of study. Generally, they last between three to six years, combining work-based training and academic study. Entry requirements for degree-level apprenticeships vary depending on the program and institution. Typically, applicants are expected to have completed their secondary education (A-levels or equivalent) and meet specific academic and competency requirements set by the employer and the university or college.

Degree-level apprenticeships are funded through a combination of employer contributions and government funding. Apprentices are employed by the participating organisation and receive a salary throughout the program. Tuition fees for the academic component are typically covered by the employer and government funding. Degree-level apprenticeships are available in a wide range of fields, including business, engineering, IT, healthcare, construction, finance, among other sectors. The availability of specific programs may vary depending on the region and the participating institutions.

The application process for degree-level apprenticeships typically involves applying directly to the employer or institution offering the program. Degree-level apprenticeships provide a valuable opportunity for individuals to gain practical skills, earn a degree, and kick-start their

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<sup>57</sup> See <https://www.gov.uk/education/apprenticeships-traineeships-and-internships>



careers. They offer an alternative path to traditional university education while equipping apprentices with both academic knowledge and relevant work experience.

In a report published by the UK Government Apprenticeships and social mobility<sup>58</sup> The report that highlights that the apprenticeships are one of the few indisputably effective tools currently available to the UK government, with a mountain of evidence to confirm the benefits they confer to workplace learners – such as enhanced career earnings, continued education, and richer, more fulfilled working lives. However, the report also notes that the system, since the introduction of the employer levy in 2015, in the UK is failing learners from disadvantaged backgrounds and favouring learners from more advantaged communities.

The report makes many recommendations to support greater support for apprentices from disadvantaged backgrounds. This would be important reading for Aotearoa New Zealand agencies if recommendations for greater support of DLA are adopted here.

Quacquarelli Symonds (QS) is a British company specialising in the analysis of higher education institutions around the world.<sup>59</sup> QS website<sup>60</sup> notes the benefits of a degree apprenticeship at UK universities. The main benefit of doing a degree apprenticeship compared to the traditional university route is that the degree is paid for by the company, so learners leave with a degree and zero student debt. Students are also employed full-time throughout the degree and earn a salary.

QS notes that degree apprenticeships allow learners to get a head start in their profession over students leaving university without the same level of work experience. Apprentices also develop ‘soft skills’ from working, which employers value, such as communication skills, the ability to work under pressure to deadlines, teamwork and problem-solving. Learners also get mentoring and support from their employer.

Apprentices can put what they learn at university straight into practice, helping develop their understanding of the material, and by the time the apprenticeship ends they will have

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<sup>58</sup> Social Mobility Commission (2020) *Apprenticeships and social mobility-Fulfilling Potential*  
<https://www.gov.uk/government/publications/apprenticeships-and-social-mobility-fulfilling-potential>

<sup>59</sup> See [https://en.wikipedia.org/wiki/Quacquarelli\\_Symonds](https://en.wikipedia.org/wiki/Quacquarelli_Symonds)

<sup>60</sup> <https://www.topuniversities.com/student-info/careers-advice/what-are-degree-apprenticeships>

at least three years of networking experience and have made contacts that will help later on in their careers.

Degree apprentices are technically students, so they still get all the student discount perks and most apprentice programs will have a guaranteed job at the end of it, with lots of opportunities for progression within the company.

### Recent studies of the UK model

*Bridging the Digital Skills Gap: Are computing degree apprenticeships the answer?*<sup>61</sup> and an *exploration of degree apprentice perspectives: A Q methodology study*.<sup>62</sup> The key points of the papers include, that DLA has the potential to disrupt traditional approaches to degree study at universities. The papers look at the parity of esteem issue between two approaches, as both may be completed in same time frame and the study looks at the benefits of both approaches from the learner perspective.

In the UK the DLA have been developed to meet the needs of industry sectors, integrating the workplace and the university study. It notes that DLA particularly benefits learners that would not otherwise be able to attend university without workplace paying study fees.


The study explains that benefit includes specific processes to support learners across the domain of work and university, essential to have a three-way agreement between learner, employer and university, a mentor in the workplace and regular visits by university staff to the workplace.

The study notes benefit of having the mentors specifically trained to provide induction, setting workplace expectations of professionalism, proactive facilitation of learning within and outside of the workplace, encouraging engagement with support networks and supporting the achievement of the apprenticeship standards.

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<sup>61</sup> In ITiCSE '19 Proceedings of the 2019 ACM Conference on Innovation and Technology in Computer Science Education (126-132). <https://doi.org/10.1145/3304221.3319744>

<sup>62</sup> Khristin Fabian, Ella Taylor-Smith, Sally Smith, Debbie Meharg & Alison Varey (2022) An exploration of degree apprentice perspectives: a Q methodology study, *Studies in Higher Education*, 47:7, 1397-1409, DOI: [10.1080/03075079.2021.1897094](https://doi.org/10.1080/03075079.2021.1897094)



Studies have found that in some case DLA students do not feel they belong to the university life in contrast to fulltime university students, missing out on sports, socialising etc., due to lack of time on the campus. This may have a negative impact on their studies.

A summary of four questions related to their experience, challenges, support received from both the workplace and the university, and their views on the dual identity and where they belong.

The study concludes that: to successfully implement the DLA model, an understanding of the views of the apprentice is essential; that there are complex intersections between work and study which includes the question of belonging and identity.

### **UK example of the University of Exeter**

The University of Exeter is a good example of a UK university delivering DLA programmes with over 1500 apprentices. The marketing on the University website encourages employers and apprentices and notes that DLA programmes “improve an organisation’s performance, productivity, and resilience by addressing important skill gaps; helping businesses retain and attract the best talent by providing career development opportunities; providing clear progression routes and opportunities for key employees and school leavers wishing to upskill and climb the career ladder”<sup>63</sup>.

The University notes the three-way collaborative partnership between the employer, the apprentice, and the University, is of benefits to all three parties. The industry knowledge and expertise of employers, combined with the hands-on experience from apprentices, gives the University invaluable insight to shape their programmes, ensure they meet industry requirements and standards and contribute to their ongoing research. This includes the byline to “discover how we can help transform your business and diversify your workforce.”

### **Institute for Apprenticeships and Technical Education (IfATE)**

IfATE is part of the Department for Education created in 2017 with an independent chair with a board of employers and business leaders with the aim of ensuring that

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<sup>63</sup> <https://www.exeter.ac.uk/study/degreeapprenticeships/programmes/>

apprenticeships and technical education is of the highest quality to give employers and learners the work skills to succeed. IfATE works with employers to develop, approve review, and revise apprenticeships and technical qualifications. The aim is to put employers at the heart of the system with over 600 occupational standards across 15 occupational sectors.<sup>64</sup>

The IfATE has rules and policies around degree apprenticeships to recognise the role that degrees play in the labour market and that the degree apprenticeship combines the best of work and education as a distinctive product that serves the learner and the employer. It aligns degree learning outcomes with the knowledge, skills, and behaviours of the apprenticeship standards. The qualification also includes an end-point assessment (EPA) when the employer believes with advice from the training provider that the apprentice has reached the occupational competence and is ready to be tested by the EPA in order to complete the qualification.<sup>65</sup>

### Future state of mental models

In the future state, there would be a shift in mental models to view DLA as a valuable and accepted educational pathway. Educational staff, industry leaders, and policymakers would need to embrace the concept of DLA and recognise its benefits both to employers and learners undertaking a degree-level apprenticeship programme.

Awareness of the benefits of DLA, e.g., from the UK experience, where learners from disadvantaged socio-economic backgrounds benefit more from apprenticeships should be a major selling point for government and agencies. As noted in the UK studies, the boost to student earnings, post apprenticeship, is greater than their peers.


## 7. Gap description

The gap between the current state and the future state is significant and multi-faceted. It encompasses the absence of policies, lack of established practices, limited resource flows, disconnected relationships, undefined power dynamics, and prevailing mental models that do not align with DLA. Currently, no agency manages or funds DLA, making it challenging to

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<sup>64</sup> See <https://www.instituteforapprenticeships.org/about/what-we-do/>

<sup>65</sup> See <https://www.instituteforapprenticeships.org/developing-new-apprenticeships/degree-apprenticeships/>



establish this delivery option. The key challenge is to bridge this gap by developing and implementing policies, practices, funding mechanisms, and relationships that support and promote DLA as a legitimate and valuable part of the education system in Aotearoa New Zealand. Additionally, overcoming mental models and gaining acceptance from key stakeholders, including educational staff, industry, and policymakers, is crucial for the successful integration of DLA into the education landscape.

The funding model will need to be tested to ensure that TEC will allow for funding of DLA as a legitimate and appropriate use of government funding model, and fund appropriately for the complexities of the delivery mode.

The key agencies, TEC and NZQA will need to accept DLA as a legitimate delivery model for recognition and funding and staff at the agencies become open to considering the option as a normal method for delivery of vocational degree programmes.

Industry, employers, and providers are not currently funded nor familiar with the concept of degree apprenticeships. Learners are not familiar with DLA as a legitimate pathway to higher level qualifications and the additional benefit of earn while you learn and zero tuition fees.

### **7.1. Can New Zealand close the gap to the UK model?**

Richard Downey from Hague Consulting wrote a recent opinion piece *Is the vocational education model working?*<sup>66</sup> As part of the article, the then Minister of Education, Chris Hipkins was interviewed by *Stuff* in September 2022 around the difficulties faced by Te Pūkenga. In this piece, Minister Hipkins noted that the Government is keen to develop more on the job training as a reflection of the way that education is moving. Hipkins noted that apprenticeships are the best way of delivering the training internationally, with the concept of earn and learn to boost a bigger part of education in the future. He also noted that students in a low unemployment environment are less likely to want formal study at an ITP (Te Pūkenga) or university if they can work and study at the same time.

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<sup>66</sup> Stuff.co.nz (2023) <https://www.stuff.co.nz/opinion/132017518/is-the-vocational-education-model-working-for-nz>



The Stuff article proposes that trade apprenticeships be extended to cover a much wider range of vocational education and earn degrees through the apprenticeships model. The concern is that with a current student debt of \$16bn the traditional model is both too expensive and there are high rates of attrition linked to financial struggles faced by students. On the supply side there is a lack of work-ready graduates. In New Zealand, as noted previously, 82% of all university students are studying vocational degrees. Some of these students would learn better in the workplace. It's vital that we get it right for both the student and the economy. In many countries degree apprenticeships play a key role in talent acquisition.

Both the US and the UK have developed their offerings to a wide range of industries. Apprenticeships are now available in accountancy, law, digital technology, and engineering. Even the UK's police forces now train their detectives on apprenticeship schemes with local universities.


In Australia, BAE Systems and the employer association AI Group will launch Australia's first degree apprenticeship programme in 2023. The National Skills Agreement is an attempt to address the severe skills shortages. As with New Zealand, numbers enrolling in vocational education courses has been dropping recently. In Australia seven of the current top 10 jobs facing skills shortages require vocational qualifications rather than university degrees<sup>67</sup>. The article notes that over the past year, 60% of total employment growth has been in occupations that require a vocational qualification, while just 36% of that growth has been in university qualified professions.

In Aotearoa New Zealand, industries within the health sector are struggling to fill roles and DLA may be a solution for consideration, especially when there is a reliance on recruiting from overseas. Richard Downey notes<sup>68</sup> that having spent seven years working for international professional services firms in the UK, he was lucky to work with many apprentices. Their enthusiasm and maturity impressed him. The employer ensures their employees have the skills to do the job while apprentices contribute to productivity. From a

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<sup>67</sup> Financial Review (20-23) Uni is irrelevant for the workers most in demand <https://www.afr.com/work-and-careers/education/biggest-skill-shortages-in-low-skilled-jobs-that-don-t-need-a-degree-20230305-p5cphf>

<sup>68</sup> Discussion with Richard on 10 August 2023



student perspective there is little or no debt. However, degree apprenticeships can be a more difficult route balancing work and study. Students miss out on the “traditional university experience”.

Done properly, the apprenticeships can address skill shortages, open doors for disadvantaged learners and support the passage from school to work. New Zealand needs to get vocational education right. If RoVE is to produce better outcomes, then it needs to include better learning models.

Since 2010 in the UK, 5.3 million apprentices have started their apprenticeships in a wide range of industries including health, business, and engineering. In 2016 in the UK apprenticeships scheme was introduced which gave more options to students. In the UK students apply to the employer, to undertake an apprenticeship not to the provider as in New Zealand. Large employers in the UK, those with an equivalent of over NZ\$6m payroll, pay an apprenticeship levy of 0.5% of their total annual pay bill<sup>69</sup>. This adds to the incentive to employ an apprentice. The employers that pay the levy have a digital account where they can access the levy funds to spend on apprenticeship training. Only the large employers pay the levy, and those employers with less than a \$6m pay bill (98% of employers in the UK) get access to the fund and only pay 5% of the cost of the of their apprenticeship training and the government pays the rest.

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<sup>69</sup> The Education Hub (Gov.uk) How are apprenticeships funded and what is the apprenticeship levy? <https://educationhub.blog.gov.uk/2023/03/10/how-are-apprenticeships-funded-and-what-is-the-apprenticeship-levy/>

## 8. Conclusions and recommendations

This paper attempts to address the systems gaps to understand what changes may be required to enable degree-level apprenticeships (DLA) as a delivery method for vocational education and training in Aotearoa New Zealand. It is clear that in the current state, the vocational education and training system does not support DLA by a wide margin. The key themes noted in the paper include the fact that currently, there is no history of DLA delivery in Aotearoa New Zealand, apprenticeships are only funded at levels 3 and 4. Workforce Development Councils (WDCs) are responsible for setting the standards for vocational education and training but only up to level 6 of the NZ Qualifications and Credentials Framework (NZQCF), the central agencies do not fully recognise DLA as a delivery mechanism and therefore there is no central agency to manage and control policies around DLA. However, the Education and Training Act 2020 does allow for degree level apprenticeship delivery and there are no systemic quality or funding barriers to overcome according to NZQA and TEC.

The future state that allows and promotes DLA delivery as another method of delivering degree programmes is certainly possible as demonstrated by the UK model and German models noted in this paper. The Food and Fibre CoVE paper includes many other examples from across the world where DLA are a normal part of the vocational education and training landscape. The future state will also bridge the gap between education trends in Europe, particularly the recent UK experience and the inevitable time lag to implementation in Aotearoa New Zealand. The fact that TEC are taking DLA seriously should be a major signal to the vocational training and education sector that change may be on the horizon.

Leadership is required by key agencies such as TEC, NZQA, Workforce Development Councils, Industry, Centres of Vocational Education, MBIE, Te Pūkenga and Universities NZ. The high cost of tertiary education coupled with the increasing costs of living make this an ideal time to look at new options for delivery of vocational training. Te Pūkenga with its national and regional reach is a perfect vehicle for DLA. Coupled with the need for large-scale construction and infrastructure projects that are required to protect Aotearoa New Zealand against future weather events, the time is right to extend apprenticeship training to



higher level skills. The Review of Vocational Education presents an ideal opportunity to push the debate on DLA delivery. The Te Pūkenga model delivered through Otago Polytechnic presents a model and guide for others in this area.

A learn as you earn pathway will be a degree delivery method that will serve traditionally under-represented learners and those from lower socio-economic backgrounds. This will be particularly beneficial for Māori and Pasifika learners and women, as well as other traditionally underserved learners who wish to get trained in the vocational training arena but do not have the means to pay for expensive courses and lose the opportunity cost of not working while taking time out of the paid workforce to study.

It will take time to promote the concept in the hearts and minds of an Aotearoa New Zealand population that equates apprenticeships with lower-level trades training. However, the UK model can be a guide to show the agencies, industry and providers what is possible in the UK and Europe is certainly possible in New Zealand. Workforce Development Councils, Regional Skills Leadership Groups, and key industry groups will need to promote and support employers, providers, and learners to a higher-level pathway to achieve the skills and qualifications required for a transformative change in the future of work in Aotearoa New Zealand.

### **8.1. Next steps and proposals**

What are the necessary adjustments that would allow the gap to be closed?

1. Recognition by key agencies (TEC and NZQA) that DLA are a legitimate qualification worth funding in NZ education system.
2. Leadership by key agencies such as TEC, Te Pūkenga and WDCs to drive the development and acceptance of the DLA model of delivery.
3. All key agencies and providers to agree that DLA are a valuable pathway to higher qualifications. The key agencies are TEC, NZQA, MoE, WDCs, CoVEs, Te Pūkenga and Universities NZ.
4. Awareness by the public and agencies of the benefits of DLA, particularly, but not limited to learners from lower socio-economic and traditionally underserved backgrounds.

5. A public awareness campaign aimed at parents, learners, industry, and the general public about the benefits of DLA as a positive option for learners in Aotearoa.