CONCORE TŪHURA

Funding of tertiary and vocational education for the construction and infrastructure sector

Executive Summary

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MISCHEWSKI CONSULTING

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The primary authors are naturally responsible for any errors of interpretation or fact.

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1. Introduction

The Construction and Infrastructure Centre of Vocational Excellence (ConCOVE Tūhura) commissioned us to make recommendations about the funding and incentive structures for technical and vocational education (TVET) and workforce development in the construction and infrastructure sector.

This report summarises the background research and analysis we conducted to provide an overview of how the funding system is organised, the economic and social returns from post-secondary education and an exploration of how the current funding system incentivises innovation in teaching and learning, the implications of Te Tiriti o Waitangi and efforts to address inequities in the system.

The report incorporates a literature review, a thematic summary of key informant interviews and a discussion of the implications of the findings. It is intended as a background resource for readers of a companion discussion paper that sets out a range of options for changes in how workforce development in the construction and infrastructure sector is funded.

While our study focuses on the construction and infrastructure sector, much of our analysis and conclusions would apply equally to TVET for other sectors.

We find that the current tertiary education funding model undervalues vocational education's social and economic returns, particularly in construction and infrastructure. It treats work-integrated learning as an add-on rather than a core element of workforce development and reinforces outdated hierarchies in post-secondary education. The government's management of the system prioritises learner protection and risk minimisation over industry needs for skilled workers.

Key findings highlight misaligned incentives between employers, learners, and government, resulting in a fragmented approach to workforce development. The system is unduly bureaucratic and inflexible, pushing key actors to adopt a patchwork approach.

Our analysis emphasises the need for funding structures that better align education outcomes with workforce needs, recognise employers' contributions to work-integrated learning, and improve access and outcomes for traditionally underserved communities.

We present options to optimise the funding structure to align education outcomes with workforce needs, strengthen industry-education-government partnerships, and promote equitable access and outcomes. We reimagine how New Zealand funds and supports TVET to build a more skilled, adaptable, and resilient workforce.

We sought to identify funding structures that mean:

- employers see greater recognition and support for their contributions to work-integrated learning.
- traditionally underserved communities (Māori, Pacific peoples, women, disabled peoples) experience improved access to and outcomes from vocational education.
- industry sees a better alignment between education outcomes and workforce needs.
- educational institutions have more flexibility to innovate and collaborate with industry partners and each other.

This report draws on a set of more detailed supporting reports:

- The Funding of TVET – Literature Review
- Te Tiriti o Waitangi – Implications for TVET Funding
- Commentary on Equity and Inequity – Structural Disparities in TVET

- Key Informants – Stakeholder Views about TVET Funding
- Snapshot – Work-integrated Learning.
- Funding of Construction and Infrastructure TVET – Methodology and Bibliography

This report serves as a foundation for a companion discussion paper that will present options for reforming workforce development funding in the sector. Its recommendations aim to create a more integrated, responsive, and equitable vocational education system that supports a skilled and resilient workforce in construction and infrastructure.

2. The change we are seeking

We have identified five key changes we think should be made to the TVET funding system. The fuller account of our findings can be read in the section '*Implications for the TVET system*'.

The current state	Desired future state	Mechanism
The TVET system in construction and infrastructure cannot supply and retain enough qualified staff to meet the needs of employers. Many young people with skill and potential are lost to the industry because of the patchwork nature of the pathways and support for senior secondary students, apprentices and trainees.	The pathways for people/learners are clear and easy to navigate, and more efficient and effective.	<u>Change 1 - Take a people-centred approach to learning support</u> Funding used for apprenticeship and trainee support is directed to a network of navigators who deliver better-aligned, personalised and well-resourced pathways.
The funding system is poorly aligned with long-term regional construction and infrastructure needs and lacks flexibility because of an accumulation of rules and regulations that govern how funding can be used.	Decisions are made closer to where the most relevant information and capacity for implementation exists, ensuring better matching of skill needs and the supply of training, as well as greater efficiency, innovation, and flexibility in how those needs are met.	<u>Change 2: Devolved decision-making</u> National and regional planning for housing and infrastructure incorporate an explicit education and workforce planning component. The Construction and Infrastructure ISBs are given power to direct funding for relevant TVET (WBL, ITPs, PTEs, Wānanga, Universities). TEOs have the flexibility to design training solutions that meet industry needs without overbearing regulatory regimes.
The investment plan system takes a short-term, risk-averse approach which encourages TEOs to be conservative and limits their ability to maintain critical regional training capability through the economic cycle.	TEOs have security of funding so they have the confidence to innovate and sustain their delivery capacity and capability through the economic cycle and cope better with short-term shocks, such as natural disasters.	<u>Change 3: Strengthening the investment approach</u> The government guarantees construction and infrastructure TVET funding levels for up to five years at high performing TEOs. The government creates a more strategic, holistic framework to assess TEO performance at the end of the five-year period – that is, looking at the value created, not simply by counting how many enrolments have been achieved. Funding is based on value-add measures, not just enrolments.

The current state	Desired future state	Mechanism
The system lacks sufficient resources to understand the needs of industry and learners, rations what support is available and underinvests in employers' critical role in skill development. The result is mixed completion rates, particularly for demographic groups that will make up a larger share of the working age population in the future (Māori and Pacific) or are underrepresented in the construction and infrastructure workforce (women and disabled people).	There is adequate support for learners and employers engaged in training, the industry has a stronger voice in resource allocation, free rider issues have been reduced, and key system infrastructure around skills development has been maintained.	<u>Change 4 – Increase work-based learner fees</u> Learner fees for work-based learning should be higher, and providers should be able to charge a compulsory student services fee. Fees for work-based learning should be eligible for the student loan scheme. <u>Change 5: Introduce industry training levies</u> Industry training levies should be introduced to support employer capacity to train and employer-directed innovation with rebates for employers who actively contribute to education and training.

We hope readers will see this as a package where the elements will operate together to improve learner outcomes, address free rider issues in the sector and address systemic problems with how TVET for the construction and infrastructure sector is funded.

Some of these changes may affect how TVET is funded more generally. While outside of the scope of this particular study, we think that some of the changes we propose have broader applicability, particularly those relating to the need to take a people-centred approach and strengthen the investment approach.

3. Methodology

This section summarises the methodology we followed to produce the background technical report. For more detailed information, please see Funding of Construction and Infrastructure TVET – Methodology and Bibliography.

A note on terminology

In this report, the term TVET (technical and vocational education and training) signifies any tertiary education that is focused on a particular occupation or career.

The authors of this report have deliberately sought to cover the whole system of human capital formation encompassing the full mix of foundational skills, vocational education, and more advanced learning required by the construction and infrastructure sector and the role of professional and industry organisations in deepening the skills and competencies of their members.

In our view, the case for distinguishing as strongly as the New Zealand system does between (principally) sub-degree and other forms of advanced learning and vocational education is mistaken for reasons we address in this paper.

In essence, we think it is a trap to treat training for plumbers separately from professional engineers, or to assume that education and training starts and ends at the conclusion of a learner's enrolment with a tertiary education organisation.

Generally, we use the term tertiary education organisation (TEO) or providers to refer to all those organisations that deliver and arrange TVET for the construction and infrastructure sector.

In some cases, for ease of understanding, particularly when it is necessary to distinguish between the kinds of education and training that was provided historically, we refer to institutes of technology and polytechnics (or simply polytechnics) and industry training organisations as separate entities.

Methods

This report employs a mixed-methods research design, integrating qualitative and quantitative approaches to provide a comprehensive analysis of TVET funding for the construction and infrastructure sector in New Zealand.

The research began with an extensive literature review, which provided a foundational understanding of the economic rationale, costs and benefits, and incentive structures underpinning tertiary education with a particular focus on vocational education.

The literature review examined international and domestic research on vocational education systems, funding models, economic and social returns, and equity considerations. Particular attention was given to comparative international models, exploring their applicability to the New Zealand context.

To complement the literature review, primary qualitative data was gathered through semi-structured interviews with 49 key informants. Participants included industry employers and leaders, vocational education providers, government officials responsible for tertiary education policy, and other stakeholders familiar with the funding system's design.

These interviews were structured around core themes identified from the literature review, including alignment between education outcomes and workforce needs, industry-government partnerships, equity in access and outcomes, and innovation in teaching and learning practices.

Interview data were analysed thematically to identify recurring themes, tensions, and insights regarding the current funding model's effectiveness. Particular attention was paid to identifying systemic barriers affecting

traditionally underserved groups (Māori, Pacific peoples, women, and disabled learners). Interviews also explored informants' perspectives on funding incentives, work-integrated learning (WIL), employer contributions to training costs, and institutional flexibility.

Quantitative analysis was conducted using secondary data sources from government administrative datasets (such as Ministry of Education statistics), industry reports (e.g., BDO Construction Sector Reports), and research studies examining labour market outcomes from vocational qualifications. These data provided insights into learner participation trends, completion rates, employment outcomes, earnings premiums associated with VET qualifications, attrition rates within apprenticeships, and demographic patterns in participation.

Findings from both qualitative interviews and quantitative analyses were triangulated with existing literature to ensure robustness of conclusions. The report also critically evaluates current performance measurement practices within New Zealand's TVET system—identifying gaps such as insufficient tracking of workforce retention or employer satisfaction—and proposes areas for future development.

Ethical considerations were addressed by providing participants with clear information about the purpose of the study prior to interviews (see Participant Information Sheet in the appendices of the Key Informants–Stakeholder Views about TVET Funding paper).

Participants gave informed consent before contributing their insights. Interview data was analysed thematically to identify key themes related to funding structures, system alignment with workforce needs, equity considerations, and stakeholder experiences.

Finally, implications drawn from this combined methodological approach informed recommendations aimed at improving VET funding structures. These recommendations are intended to guide policy discussions detailed further in the companion discussion paper.

4. Literature review

This section summarises the more comprehensive literature review in the companion report, *The Funding of TVET – Literature Review*.

This literature review explores the economic rationale, benefits, and funding of vocational education in Aotearoa, with a focus on the construction and infrastructure sectors, highlighting gaps in performance measurement, access barriers, and funding misalignments while also offering policy insights aligned with Te Tiriti o Waitangi.

TVET is commonly defined by its strong links to specific occupations and the labour market, having evolved from personalised apprenticeships to meet the growing demand for skilled workers in industrial economies (Cedefop 2025; UNESCO-UNEVOC 2025; OECD 2024; Anderson 2009).

In New Zealand, TVET spans a diverse range of education and training—from apprenticeships to vocational degrees—reflecting an increasingly blurred boundary between theoretical and applied learning across universities, polytechnics, and other providers, despite policy and funding frameworks that maintain rigid distinctions (Stratton & Mannix 2005; Geschwind & Boström 2020; Cedefop 2015).

The economic and other benefits

TVET delivers both private and public benefits by improving individual earnings, job security, and employability while also boosting productivity, reducing unemployment, and generating social gains such as improved health and civic engagement (Hűfner 2003; Russo et al. 2013; Cedefop 2011b, 2011c; Vaughan 2017).

In New Zealand, studies show positive financial returns from TVET, particularly at Level 4, along with lower opportunity costs, better job stability, and higher asset accumulation—though benefits may decline in later career stages compared to general education (Crichton 2009; Pacheco et al. 2023; Hanushek et al. 2017; Wößmann 2019).

TVET also benefits employers and firms by enhancing productivity and innovation, though training investments may be unevenly distributed, creating risks of free-riding (Crook et al. 2011; NZIOB 2021; Kau 1998).

Off-job training offers financial and industry engagement benefits for providers while learners gain skills, identity, and long-term career prospects (Evesson et al. 2009). Work-integrated learning further enhances outcomes by linking theory with practice, building confidence, and improving post-graduation employment prospects (Jackson 2014; Finnie & Miyairi 2017).

The costs of TVET

In workplace-based VET systems, employers shoulder substantial, but often hidden, costs related to training, mentoring, and productivity loss while also playing a key role in trainee development and sometimes funding off-job training (Kao 1998; Jones 2023; Alkema 2016; Eichhorst et al. 2021).

Off-job providers and trainees also bear costs, including equipment, tuition, and lost income, while the government contributes through funding, regulation, and targeted initiatives like Māori and Pasifika Trades Training (MPTT) and Apprenticeship Boost (Squires et al. 2015; James Relly & Laczik 2022).

Work-integrated learning (WIL) is particularly resource-intensive yet underfunded outside a few traditional fields, making it difficult for institutions to scale high-quality WIL under current funding settings (Jackson 2013; Smyth 2024; McNamara 2014).

Costs and benefits of TVET

The costs and benefits of TVET identified in the literature are summarised in the table below.

Table One: Summary of costs and benefits

	Market Benefit	Non-market Benefit	Costs
Trainee	• Training wages • Enhanced future earnings potential • Enhanced employability prospects	• Greater job satisfaction • Other possible[1] benefits in social, cultural and identity capital – health, self-esteem, civic engagement	• Wage discount – trainees are paid below the rate they could otherwise command • Cost of buying tools • Fees and associated costs for off-job courses
Employer	• Increased firm productivity over time as trainees get more skills • Recruitment advantage – trainees are likely to stay with the training firm after completion • Short-term wage discount – training wage is lower than minimum wage	• More satisfied workforce • Picking up on trends in the industry through engagement with off-job provider and training advisors	• Loss of productivity as trainees learn and as experienced staff mentor trainees • Transaction costs of training/mentoring, dealing with off-job providers and training advisors • Depreciation on use of capital for training purposes • Subsidising off-job courses for trainees
Off-job provider	• Revenue from fees/funding • Greater use of equipment – return on capital investment	• Improved links to industry • Up-to-date information on industry trends	• Tutor time • Overhead costs, including depreciation on equipment • Transaction costs – dealing with employers/training advisors
Public/society - by proxy, the government	• Availability of skills in labour market – increased aggregate productivity • Containment of price/costs of advanced skills • Increased innovation in the economy • Lower costs in justice, social welfare etc	• Social inclusion benefits • Public confidence in the quality, safety etc of providers technical services (such as electricians, motor mechanics, builders etc)	• Funding for the TVET system and for trainees • System costs – regulation, monitoring, funding, policy
Firms in the industry that don't train	• Containment of price/costs of advanced skills • No loss in productivity loss from training		

Source: Authors' summary of the findings of the literature review

[1] Note that the causality of these benefits is unclear – however, there is clear correlation between those outcomes and TVET.

Performance

Our TVET system produces around 9,800 graduates annually to support the construction and infrastructure sector, but persistent skills shortages and mixed system performance highlight the need for improved measurement of outcomes such as firm productivity, workforce retention, and employer satisfaction (Waihanga Ara Rau 2024; BDO 2023, 2024; MBIE 2023; Cedefop 2011c; Pacheco et al. 2023, 2024).

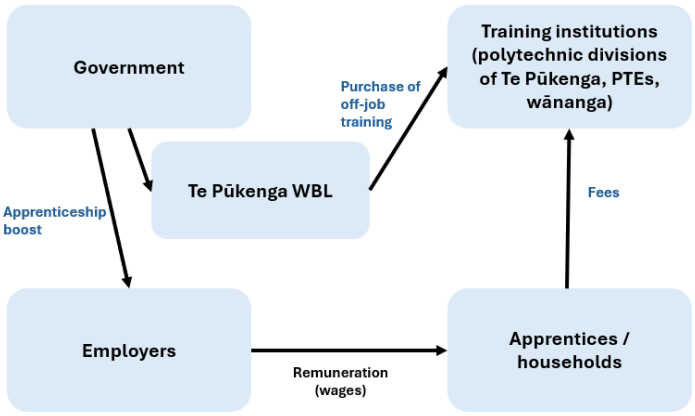
Despite steady participation, especially at Level 4, challenges such as low credit accumulation, high attrition—particularly among under-35s—and under-representation of women in construction persist, alongside barriers for Māori, Pacific peoples, and older learners (Smart 2018; Waihanga Ara Rau & Ipsos 2024; Farrell et al. 2016; Sweet Analytics n.d.; MartinJenkins 2025).

Funding

Public education funding aims to balance societal benefits and prevent under-investment by lowering costs for learners while ensuring providers can deliver sustainable, high-quality TVET and recognising contributions from learners and employers (Glomm et al. 2011; Friedman 1982).

In New Zealand, workplace-based apprenticeship training is decentralised, with training advisors acting as key intermediaries between learners, employers, and government agencies to coordinate, support, and monitor training. The resourcing flows to support this function are represented schematically in Figure 1.

Figure 1: Work-based training resource flow schema in New Zealand, as of 2024



Source: Authors.

Overseas models

Northern European countries contrast strongly with New Zealand in their more centralised and heavily subsidised TVET systems, which often achieve higher completion rates and include government support for off-job training, living costs, and employer expenses (Cedefop n.d.).

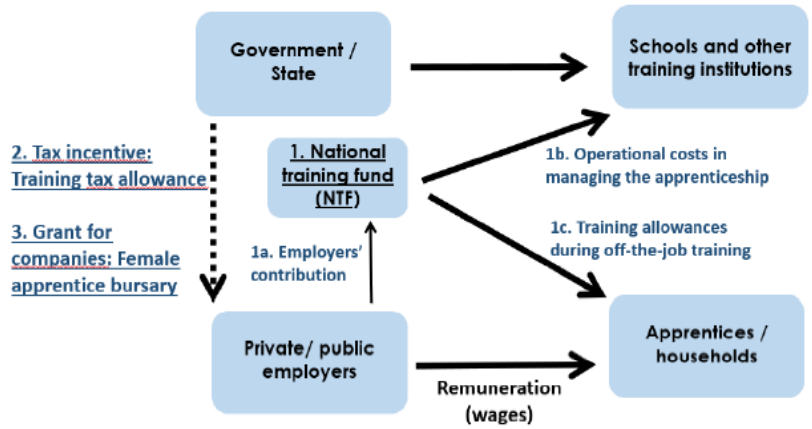
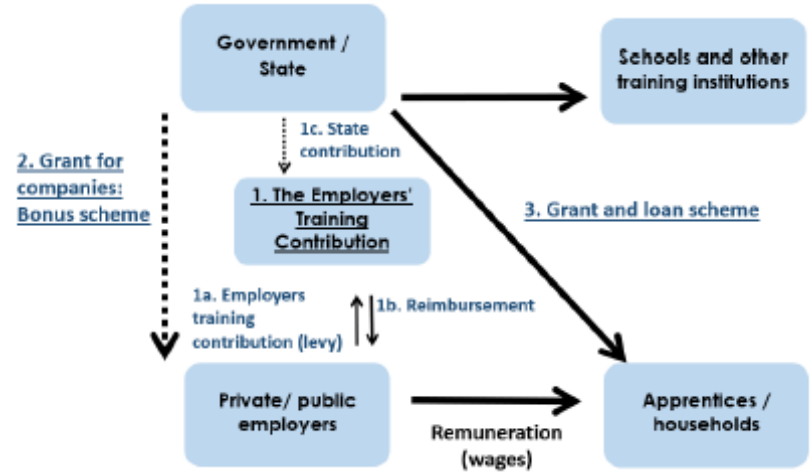
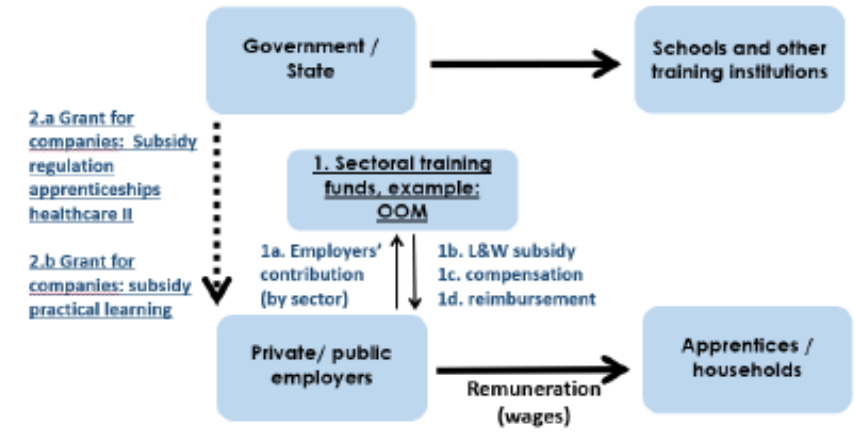
Many also use employer levies to fund training and specify the duration of apprenticeships, with most northern European apprentices spending over half their time on the job, similar to New Zealand. Figure 2 below shows the resource flows in three northern European countries.

While international examples offer valuable insights, TVET systems cannot be directly transplanted across countries due to differences in education culture, labour markets, public financing, and institutional structures (Li & Pilz 2023).

The German system, for example, demonstrates strong integration between on-job and off-job training and includes a high-level "meister" qualification, but it is underpinned by deeply embedded institutional arrangements and social esteem for vocational pathways (Cedefop 2024; Deissinger et al. 2011).

Many countries also use employer levies or national training funds to co-finance TVET, with over 75 nations operating such schemes to support equity, workforce development, and quality improvements (UNESCO 2022). Australia, for instance, operates several levy-funded initiatives targeting priority groups, workplace trainers, and free training places to expand access and meet national skills needs.

Figure 2: Work-based training resource flow schema, selected European countries

Details	Resourcing flows
Ireland	
Training duration: 4 years, 1,600 hrs/year On-job training: >50% Employers get a tax break for training. Employers pay into a central fund that pays a stipend to trainees during off-job and subsidises off-job courses. Government also funds off-job courses.	
Denmark	
Training duration: 2-4 years, 1,110 hrs/year On-job training: >50% Employers pay into a central fund and claim back to offset the costs of training. Government subsidises that fund. Government subsidises apprentice's wage. Government pays full cost of off-job courses.	
Netherlands	
Training duration: 1-4 years, 1,280 hrs/year on average. On-job training: >50% Government subsidises employers' training costs. Employers pay into central funds and claim back to offset the costs of training. Government pays full cost of off-job courses.	. 

Source: CEDEFOP – see this set of summaries of national TVET policies

Addressing these issues requires sustained investment in high-quality vocational education, culturally responsive support, enhanced data tracking, and stronger advocacy to elevate the status and attractiveness of work-based training pathways (James Relly 2021; Alkema 2016).

Connecting investment to other policies in New Zealand

Exploring changes to how construction and infrastructure tertiary and vocational education and training is funded in New Zealand involves consideration of other related policies.

Our Change Proposal 2 argues for the devolution of decision-making. This change links to the National Infrastructure Plan and the key local government planning mechanisms like the proposed **City and Regional Deals** initiative. Formal partnerships between central and local governments are designed to stimulate regional economic growth by integrating infrastructure investment with education and skills development, ensuring local workforces can benefit from new opportunities (HM Government, 2011; Barca, 2012).

International examples such as Greater Manchester's City Deal in the UK and Townsville's in Australia provide a lead on how devolved governance and shared funding responsibilities might be used in New Zealand to foster stronger collaboration among local authorities, industry, iwi, and educational institutions, aligning training with regional needs (Cabinet Office, 2012; Infrastructure Australia, 2016).

Manchester's model—through a combined authority and devolved skills budget—enabled employer-led curriculum design, improved post-16 education, and created a City Apprenticeship and Skills Hub, ultimately boosting workforce outcomes and supporting growth in key sectors like digital and advanced manufacturing (Simpson Grierson, 2024; GMCA, 2012; UKCES, 2015).

Change Proposals 2 and 3 – devolution of decision-making and shifting to a true investment approach in the funding system – have implications for the regulatory framework governing the TVET system. That system is prescriptive and rules-bound; our proposals would see a simplification of the decision-making, with training organisations having greater freedom to operate strategically and to respond to industry demand within the policies set by the government. That links to the government's approach to reducing compliance costs through **regulatory reviews.**

5. Demographic change: equity and inequity in TVET

As industry demand for high-quality skills increases, training organisations must ensure they recruit learners from all parts of New Zealand's increasingly diverse population. Equally important is designing training that supports the success of this diverse learner group—ensuring all trainees gain strong, relevant skills.

This shift requires a deliberate focus on meeting the needs of population groups that have traditionally been underserved. For example, women make up only 4.9% of workplace-based trainees in the construction and infrastructure sectors. Providers must ensure their training models and work placements are inclusive and appropriate for women.

For Māori and Pacific learners, success depends on on-site and off-job training that reflects their culture, identity, and language. This approach is essential to lifting historically low completion rates. The TVET system must also cater for learners with disabilities, those who are neurodiverse, from low socio-economic backgrounds, or who are balancing training with caregiving or other family responsibilities.

Structural inequities

New Zealand's technical and vocational education and training (TVET) system reflects inequities shaped by gender, ethnicity, disability, and socio-economic status. These inequities are often so normalised in organisational systems and practices that they are invisible in day-to-day operations but are evident in their effects (Acker, 2006; Veenstra, 2011).

The historical roots of these disparities mean they are self-reinforcing. However, demographic and cultural shifts offer opportunities to disrupt and redesign inequitable systems (Mirza & Warwick, 2024). Underserved learners—including Māori, Pacific peoples, women, disabled learners, and those from low socio-economic backgrounds—experience differences in access, retention, and achievement in TVET, which cannot be explained solely by prior academic preparation (Meehan, 2017).

Socio-economic disadvantage is a significant compounding factor, adding to the challenges faced by those with disabilities, women, Māori and Pacific peoples; students from high-deprivation backgrounds often arrive with lower levels of school achievement (Earle, 2018) and struggle to manage training costs, including fees, opportunity costs, or transportation (Howell, 2024). Many adult learners, particularly those with caregiving responsibilities, cannot fully participate in workplace-based learning due to inflexible delivery models.

The design of funding mechanisms has historically reinforced these inequities. Between 2007 and the introduction of the Unified Funding System (UFS) in 2022, funding supplements for equity groups were applied only to degree-level qualifications. This excluded most industry training and non-degree TVET provision at Levels 3–7, despite these being the entry point – the first point of contact with the post-secondary education system – for many underserved learners (Coolbear, 2012).

Ethnic disparities

Ethnic disparities are well documented: Māori and Pacific peoples are overrepresented in entry-level training but underrepresented at advanced qualification levels. Completion rates remain a concern, with 2023 data showing that Māori (66%) and Pacific learners (61%) in achievement in workplace-based training trials behind Pākehā/European learners (75%) (MoE, 2023).

Barriers include the self-directed nature of much work-based learning, which can disadvantage learners unfamiliar with navigating education systems and those who do not actively seek support[2] (Alkema, 2016;

[2] The research finds that this is a particular issue for Māori learners.

Holland, 2012). One of our key informants pointed out that, in Pacific communities, training often ranks below family, work, and church commitments, further affecting engagement.

These disparities are reflected in national qualification statistics: only 9.1% of Māori adults and 7.1% of Pacific adults aged 15 years or older held a bachelor's degree or higher in 2023, compared to 18.6% of Europeans (Stats NZ, 2025a).

Disabled and neurodiverse learners

Disabled learners face their own set of barriers. Training environments are often not designed with accessibility in mind, and disabled students may not disclose their needs due to stigma or fear of being perceived as a burden (All is for All, 2024).

Employers are often unprepared to accommodate physical disabilities, citing health and safety risks as concerns. More than half of those surveyed in a recent study reported a lack of confidence as a barrier to employing disabled people (All is for All, 2024). Nevertheless, with appropriate support, disabled learners can achieve success rates on par with their peers (Te Pūkenga, 2021a).

Additional challenges affect neurodiverse learners and those with limited language, literacy and numeracy (LLN) skills. The Workplace Literacy and Numeracy Fund supports LLN skill development in TVET (Alkema, 2020), but research shows that tutors often lack the resources to integrate LLN support into programmes effectively (Farrell et al., 2016). Solutions require tailoring which comes with additional cost and complexity.

Gender-based disparities

Gender-based disparities are also pronounced. While women dominate enrolments in service-related qualifications, they remain significantly underrepresented in construction, engineering, and mechanical trades—in which more than 90% of apprentices are men.

Traditional role stereotypes create significant barriers for women, discouraging them from entering male-dominated industries.; and women who do enter industries like construction and engineering may face hostile learning environments, including harassment and a lack of basic facilities (Hurd & Dyer, 2024; Waihanga Ara Rau & Hanga Aro Rau, 2023).

Universal Design for Learning (UDL)

Universal Design for Learning (UDL) provides a promising equity-centred framework. Rather than offering retrofitted support for select groups, UDL calls for learning environments and curricula to be designed inclusively from the outset (Bong & Chen, 2021; Staring et al., 2022).

In TVET, this includes offering multiple forms of content delivery and assessment (e.g., visual, oral, hands-on), integrating practical and theoretical components, and ensuring accessibility of tools and materials. Such design dismantles systemic barriers and improves the learning experience for everyone (UoA, 2025).

Inclusive pedagogy complements UDL by embedding cultural responsiveness into teaching practices (Gay, 2018; Bishop, 2009). Examples include using plain language for learners with low literacy, recognising prior learning for adult learners, and establishing peer networks in male-dominated fields (Taffard, 2022). Technology can further support universal design with tools such as assistive software and alternative assessment methods (Fernández-Batanero, 2022; WHO, 2022; Yenduri, 2023).

These approaches acknowledge that learners bring different experiences, responsibilities, and strengths and that one-size-fits-all models can reproduce inequity. While universal design and inclusive pedagogy require deliberate investment, they offer a systemic solution to equity challenges that persist in New Zealand's TVET system.

In summary

The funding system does not adequately support the additional pastoral care or mentoring that might help disadvantaged learners persist. In many cases, short-term government programmes aimed at employment prioritise rapid job placement over long-term skill development, leading to cycles of "long-term limited employment" (McGirr & Earle, 2019). Without strategic changes, policies that are formally neutral in terms of ethnicity, gender, neurodiversity and disability may continue to produce inequitable outcomes.

6. The Implications of Te Tiriti o Waitangi in TVET

We discussed the implications of Te Tiriti o Waitangi/The Treaty of Waitangi in our companion paper '*Te Tiriti o Waitangi – Implications for TVET Funding*'.

That paper explores the Crown's obligations as expressed through legislation and legal decisions, including those of the Waitangi Tribunal, and the efforts to give effect to these obligations and the gaps and challenges that remain.

Some examples include remaining limits on the role and authority of Māori in decision-making, design choices that focus on 'fixing Māori' rather than the system, persistent inequities in outcomes and gaps in support.

We have not explored in detail the commitment made by the current government to a broader shift in its approach to meeting the Crown's obligations across the public sector. These shifts include moving away from explicit co-governance models and changes to how Te Tiriti o Waitangi is used to shape institutional arrangements, which have already begun to be implemented in the TVET system.

Our proposed changes (see Implications for the TVET system) do, we think, offer opportunities for Māori to be more directly involved in the TVET system. The two main opportunities we see are:

- The ability for iwi to play a greater role in the people-centred approach to learning support (Change 1) by extending whanau ora-like models to the TVET system.
- Building on the often-strong relationships between local and regional government and iwi, as we seek to give more weight to decision-making at a local level about demand for training (Change 2).

These changes should build greater accountability for TEOs to ensure their approaches meet the needs of iwi and Māori.

These opportunities build on several existing strengths including the very substantial role that Wānanga already play in tertiary education and training, the strategic role that groups like the National Iwi Chairs Forum play, the substantial role that many iwi have in supporting their people through education and training and growing importance of iwi and Māori-owned businesses in construction and infrastructure, both in terms of ownerships of key assets and the supply of related services.

7. Key informants' insights

Overview

We conducted interviews with 49 key informants – employers and leaders in the construction and infrastructure industry, people who work in education and training providers, government tertiary education officials, and others familiar with the design of the funding system (see *Appendix A*).

An overarching message

One overarching theme from the interviews was the tension between the need for system stability and the recognition that the current TVET system is not fit for purpose. Many interviewees emphasised that constant change has led to widespread fatigue among providers, learners, employers, and industry stakeholders. Since the Reform of Vocational Education (RoVE) began in 2020, the system has remained in a state of flux, and now, with further changes underway, many feel disengaged. Several interviewees expressed frustration, stating that no one truly understands how the system works or how to navigate it effectively.

At the same time, there was almost universal agreement that the system, as it stands, does not meet the needs of learners, employers, industry, or our nation. Many interviewees pointed to misalignment between TVET provision and workforce needs, with some highlighting that what learners choose to study often does not correspond with employment opportunities. Others noted that funding mechanisms, particularly for workplace-based learning, are poorly aligned with industry needs, creating further barriers to effective training. Several interviewees raised concerns that current funding models disadvantage Māori and Pasifika learners by imposing structures that do not fit their realities.

This tension between the need for reform and stability must be considered across all aspects of TVET policy, not just the resourcing system. Interviewees stressed that, while change is necessary, it must be managed carefully to avoid compounding uncertainty and disruption. Industry representatives noted that they invest significant time and resources in understanding how to engage with the system, only to find that the rules keep changing. Employers need clearer alignment between education and workforce needs, while learners require confidence that their training will lead to sustainable employment.

The challenge, then, is to develop a system that better serves learners, employers, and industries without subjecting them to the ongoing disruption of reform. Stability must be a key lens through which any changes are viewed, ensuring adjustments do not cause further disengagement or confusion. A well-functioning system should provide clarity and certainty to learners, providers and employers while also being responsive to the evolving needs of industry and communities.

The following is a high-level summary of the more detailed themes that emerged from the discussions, which are documented in the standalone report, *Key Informants – Stakeholder Views about TVET Funding*.

Whose needs should drive the TVET system?

One of the most significant tensions in vocational education emerges from the interplay between industry and learner needs. Analysis of the interview responses shows that this represents a fundamental challenge. At its core lies a critical question: what is the optimal balance in the vocational education system between industry demands and learner career development?

One interviewee told us that, in theory, the system aims to serve learner needs on the assumption that learner choices will naturally align with industry demands through market forces. This theoretical model assumes learners, acting rationally, will make educational choices that align with labour market demands, creating a system meeting both individual career aspirations and industry workforce needs. However, that same interviewee (and many others) revealed significant complexities and contradictions in this approach.

Industry and regulatory perspectives dominate many discussions, and participants also highlighted tensions

between these perspectives and learners' needs.

The needs of employers

Some employers recognise a tension between being *qualified* and being *capable*, suggesting that the skills developed in training don't match workplace needs.

Likewise, for some employers, there is a tension between training for immediate job needs versus preparing learners for future industry developments. Interviewees noted that technological change, sustainability requirements, and evolving building practices require a workforce with adaptable skills beyond current job specifications. For example,

> *"training isn't future focused, because it's too expensive to rewrite training programmes, resources, and upskill trainers"*

This highlights how funding constraints directly impact the system's ability to balance immediate needs with future preparation.

The needs of learners

Many interviewees questioned whether learners have access to the information necessary to make well-informed choices that align with current and future industry demands (and that industry often lacks the information to predict demand). That gap challenges the theoretical model of rational learner choice leading to alignment with the labour market. Interviewees pointed to systemic bias in career guidance, steering learners into traditional career pathways and also away from high-demand trades and toward professions that require university study. For example,

- workforce planning is driven by current shortage rather than long-term need
- Occupational stereotypes are an issue, especially, university vs VET

There is a tension between learning design that serves institutional efficiency versus designs that optimise learner success. Many interviewees advocated for more genuinely learner-centred approaches to better serve individual needs and industry requirements.

> *"we've got to work in partnership together and work out what's the best for that particular learner and not put up barriers to seamless movement from one thing to the other"*

The needs of industry

A recurring concern was the perception that those making funding and regulatory decisions did not understand industry realities. Interviewees told us that the funding model is not well aligned with industry needs, supporting what people will enrol in, not what industry needs. Regulations and funding are sometimes poorly aligned to industry practices or priorities, creating friction.

An example quoted by several interviewees was the requirements of NZQA; the qualifications framework is seen by many as not meeting industry needs and is unresponsive to industry technology change.

The system lacks flexibility and agility, leading to challenges for education providers attempting to deliver relevant training while maintaining compliance with regulatory requirements. This highlights the challenge of designing regulatory frameworks that maintain quality standards while enabling responsive innovation.

Funding mechanisms that are focused on numbers of enrolments rather than outcomes or quality are also seen as creating misaligned incentives.

Is a balanced approach possible?

Many interviewees suggested moving beyond viewing learner and industry needs as competing priorities, instead advocating for integrated approaches: a system that would recognise and take account of industry needs, learner needs and employer needs, balancing the needs of multiple stakeholders rather than assuming those needs will naturally align through market mechanisms.

Interviewees emphasised the need to integrate work-based learning with theoretical or academic

knowledge. Many interviewees acknowledged the challenge of balancing technical, job-specific skills with broader transferable competencies, arguing that socio-emotional skills — interpersonal or "soft" skills — are an essential complement to technical skills and that the lack of them in the workforce is a key barrier to productivity. There is also a strong argument that TVET qualifications can help develop leadership and that training should support longer-term career development.

Similarly, some interviewees told us that the qualifications system needs to move away from siloed training In practice, tradespeople need a range of skills from other trades and career pathway development.

Learner equity

The VET funding system faces significant equity challenges and systemic barriers. Interviews consistently highlighted structural inequities affecting Māori, Pacific peoples, women, disabled and neurodivergent individuals in construction and infrastructure training. The majority of interviewees acknowledged the importance of addressing equity concerns.

There is a complex relationship between addressing individual support needs and confronting deeper systemic issues of racism, sexism, ableism, and cultural barriers that cannot be solved through funding mechanisms alone.

> *"The current focus is on 'fixing' women and 'fixing' Māori and Pacific so they fit into our current system rather than actually **fixing the system** so that everybody fits, not just your standard tradie. We need to change the shape of the box rather than change people to fit the box*" .

The inadequacy of current equity funding was frequently mentioned, with participants noting that equity funding has never met the costs of meaningful interventions.

Financial barriers

Financial barriers disproportionately affect some participants in vocational education, particularly those from lower income households. Participants identified multiple economic challenges, including training costs, lost income during study, and transportation issues, particularly for rural learners.

Many learners are also key earners for their households. Career changers, in particular, often need to maintain an income to support their families, making full-time study unfeasible. Apprenticeship training wages are typically lower than both the minimum wage and what can be earned in unskilled work and placement poverty (the costs of undertaking professional or clinical placements) means some learners are forced to leave training because they simply can't afford to continue.

Gender inequity

Interview participants consistently highlighted the massive underrepresentation of women in the construction industry and related training programs, with some describing the industry as "appalling" at gender diversity in the workforce.

That led some interviewees to suggest strategic targeting of incentives. However, several interviewees said that funding initiatives focused on training access may be necessary but that such initiatives alone will be insufficient; there needs to be cultural and structural changes in the industry to make training an attractive option for all learners, irrespective of their gender.

Māori and Pacific peoples

Note that Māori and Pacific peoples are not homogenous groups, but many comments discussed both together, so the commentary is combined here while acknowledging the rich diversity in and between these communities.

Systemic barriers affect Māori and Pacific learners' engagement and success in vocational education. These barriers extend beyond simple access issues; they include cultural responsiveness, recognition of prior

learning, and alignment with cultural values and practices.

Many interviewees criticised the current "one-size-fits-all" approach that fails to recognise the diverse learning needs and cultural contexts of Māori and Pacific learners, arguing that “the system, in seeking to be learner-centred, needs to recognise personal identity as well as identities as an employee and a learner" .

Some TEOs were identified as positive models providing valuable wraparound support for learners and employers, including pastoral care, mentoring, and connections to additional resources.

Several participants emphasised honouring Te Tiriti principles through resource allocation, governance structures, and success measures.

Disabled people

Interviewees noted that disabled and neurodivergent learners face significant barriers in vocational education, with the funding system providing little additional support. While physical accessibility was discussed, participants also emphasised a lack of information and communication as a significant barrier. Several interviewees noted that many TEOs and employers do not understand how to support disabled learners, with one interviewee stating that employers see disabled employees as a burden and a cost, recognising that, in some cases, it's more expensive to train disabled people.

A recurring theme was the need for job redesign and rethinking competency assessment: "We need to help employers see [that] the way that one person might do the job isn't the only way". Participants noted assessment and learning need to be designed to be accessible, suggesting universal design principles.

Some learners can't afford to pay for an assessment of a learning disability, a prerequisite for access to support.

Several interviewees said that the work environment isn't a “safe” place for disabled people to identify as disabled and ask for support.

> “*There's a real need for us to build disability confidence of employers, because part of the reason why disabled people and apprentices aren't putting their hand up is their boss and their colleagues may not necessarily have a good understanding of the kind of support needed*”.

Employer contributions and an industry training levy

While some of those interviewed said that industry isn’t ready for levies, overall, there was strong support for introducing a training levy paid by industry.

Support for an industry training levy on employers

Many interviews indicated support for an industry levy as a potential solution, with some interviewees arguing that there is potential for levy discounts to be used as an incentive for employers to engage in training.

There was recognition that, at present, employers see themselves as *users* of the system (as opposed to owners of the system). Interviews suggested that industry levies could be linked to greater industry ownership of the training system. Countries where employers “own” the quality control are more likely to be open to industry levies.

This perspective suggests that increased financial contribution could give industries a greater stake in training outcomes, addressing concerns that no-one is looking after the employer or the industry in the current system and that the current system disempowers employers.

Some interviewees suggested that a key argument for levies is their potential to address the persistent issue of “free-loading” on the training system, where employers are incentivised to employ skilled workers trained in other firms to avoid training costs. That creates a disincentive for employers to invest in training. A levy could create a more equitable distribution of training costs across all employers, including those who benefit from a skilled workforce without contributing to its development.

Levy implementation

While many interviewees supported a levy, many identified implementation and design challenges. How a levy would be administered could be costly. There would need to be a clear, agreed basis for the charge. These concerns reflect the need for careful design with industry input to ensure administrative efficiency and minimise unintended consequences.

A common theme was the importance of targeting levy payments and exemptions appropriately (for instance, to ensure levies are proportionate to the firm's scale) and to reward those employers who do train.

Some interviewees discussed the potential for differential impacts, noting that small firms lack economies of scale and may have less financial headroom to pay a levy. That suggests there is a need for the design to account for the different capacities and resources of employers across the size spectrum.

Interviewees emphasised that industry should have control over how levy funds are used to ensure that that the levy revenue is directed to industry-specific training needs and priorities. For instance, a portion of the revenue might support employer capability development, particularly for small and medium enterprises.

Several participants linked training quality to broader employer quality and business practices, suggesting a levy system should promote overall employer quality, not just training provision.

Others cautioned that, in a cyclical industry like construction, any levy system would need a design that is sensitive to economic conditions and business viability.

Provider needs

TVET providers navigate multiple competing pressures: financial sustainability, maintaining educational quality, a lack or certainty in funding, accountability measures that are not fit for purpose. They make choices between market-driven and quality-focused delivery models. These tensions significantly impact providers' ability to deliver effective training while maintaining financial viability, investing in innovation, and meeting diverse learner needs.

The funding model – financial sustainability

Interviewees pointed out that TVET providers need to maintain financial viability by maintaining high enrolment numbers while simultaneously ensuring educational quality. Because provider revenue depends on enrolment numbers and because providers can benefit from economies of scale, they have a strong incentive to prioritise student numbers, sometimes risking quality.

Most government funding of providers is delivered as bulk funding. This gives providers the autonomy to allocate funds on the basis of managers' perception of strategy and need. It allows the cross-subsidisation of smaller, specialised courses that are vital for industry but not financially viable independently; it enables providers to invest in innovation, research, and quality improvement initiatives, develop new curriculum and teaching approaches and maintain learner support services.

However, from the industry perspective, there's often an expectation that funding nominally allocated for specific training areas should be spent directly and transparently on those areas. When providers make strategic decisions about resource allocation that don't align with this expectation, industry stakeholders may perceive this as providers misusing funds intended for "their" training.

This misalignment creates challenges for providers who must balance strategic financial management with maintaining stakeholder trust. The perception that providers aren't directing funding toward its nominal purpose can erode industry confidence in the system, even when providers are making legitimate decisions to maintain overall quality and sustainability.

Providers told us that resource constraints impact providers' ability to deliver industry-relevant training with

current equipment and technology. The gap between available resources and actual requirements creates difficult trade-offs between different aspects of provision.

Providers also report that the funding structure can create perverse incentives in delivery mode selection. In particular, the disparity in funding rates between workplace-based learning and provider-led delivery means that delivery might be where funding is greatest rather than what industry needs.

The structure of the funding system

The short-term nature of funding creates significant planning challenges for providers. Interviewees complained that funding is too short term, creating barriers to change. While funding is notionally tied to three-year investment, those plans don't come with three years of funding; in practice, the system treats funding as annual and that, we were told, stifles innovation. There can be in-year funding claw backs that create major problems for providers.

This misalignment between funding cycles and necessary planning horizons makes it difficult for providers to make strategic investments or align with industry workforce needs.

Staffing providers

One of the greatest challenges is the ability of providers to employ the best tutors who can command higher remuneration in industry.

> "*We've got a lack of experienced people. So how do we value experience and how do we fund experience.*"

These staffing challenges impact training quality and the ability to support diverse learner needs. The competition with industry for qualified personnel creates an expertise gap in training delivery.

Another concern is the availability of the training advisors, with some interviewees saying that workplace-based learners make progress when the advisor arrives, but that training advisors don't call often enough.

Funding and innovation

Providers reported that they face significant barriers to innovation; the funding system is focused on maintaining basic operations, not funding innovation. Interviewees told us that the bureaucratic processes of the government agencies stifle innovation, although we also heard that learners are less interested in innovative approaches.

These perspectives highlight a complex challenge: while providers theoretically have flexibility within the bulk funding model, financial constraints and limited demand for innovation create practical barriers to developing new approaches.

Interviewees' comments suggest that innovation requires a coordinated ecosystem approach that extends beyond individual providers. However, the fragmentation of the system creates structural barriers to systematic innovation.

Alignment of training with future needs

Providers can't train for future needs without more certainty in the national infrastructure pipeline. Information gaps about future workforce needs limit providers' ability to plan effectively.

If government and industry could set out a secure pipeline of future work over a longer time period, providers could plan more effectively.

Supporting learners

Interviewees emphasised the challenges for TVET providers of meeting the costs of learning support for an increasingly diverse learner population within the current funding system. For example, training a person with disabilities is more resource intensive. There are difficult trade-offs between expected support and available resources. It was noted that learners may struggle to identify what support they need or to discover what supports are available.

Providers face significant challenges addressing fundamental skill gaps. Literacy and numeracy are

particular problems but are not cheap to fix; providers must allocate substantial resources to foundation skills development, often without adequate funding recognition or clear evidence of effective approaches.

The interviews reinforced the need for learner wellbeing in training. Effective vocational education requires comprehensive support systems beyond just technical training. The interviews also identified the importance of holistic learner support.

8. Implications for the TVET system

Our research literature analysis and key informant interviews identified gaps and challenges in the arrangements and the funding system for TVET, particularly the workplace-based industry training system. Some of these are business-related or process concerns, rather than funding system concerns *per se,* but each has funding implications. Therefore, we have included these in our findings and this summary of the implications for the funding system.

In the discussion below, we take account of the decisions announced or signalled by the government on the shape of the TVET system from 2026. However, many of the gaps and challenges we raise are unaffected, or are affected only in a marginal way, by those decisions. If New Zealand is to have an effective TVET system, more change is needed.

We have grouped our findings into five broad areas. This will underpin a package of measures that, together, will address those challenges. The key informant interviews identified numerous suggestions for changes to the funding system, some general, others detailed and specific. Each of those suggestions has value. In some cases, what we suggest below is to create frameworks that can be used to accommodate those suggestions.

For instance, we propose moving away from an annual funding system driven by a single quantitative formula and instead adopting an actual multi-year investment plan where a multidimensional compact between the construction and infrastructure Industry Skills Bodies (ISBs) and a TEO can form the basis of stable multiyear funding, and which is reconciled on a spread of indicators that have quality – as well as quantity – elements.

That sort of approach can be used to accommodate many of our key informants' suggestions. We hope readers will see this as a *package* where the elements will operate together and provide a vehicle that can be used to advance a range of suggestions.

In the companion discussion paper, we summarise options for change and pose questions for stakeholders to respond to. The dialogue prompted by that discussion paper will lead to recommendations that ConCOVE may wish to include in advice to the government on the approach to resourcing the TVET system.

Change 1: Take a people-centred approach to learning support

The issue

New Zealand's post-secondary education and training system includes a variety of programmes designed to provide learners, particularly those at risk or facing educational disadvantage, with a foundation for entry into TVET or the workforce.

These programmes include foundation education (such as Youth Guarantee), pre-trade training (including MPTT), and government-led employment initiatives (such as Te Puni Kōkiri cadetships, and MSD programmes designed to prepare people for employment).

While each programme serves a specific purpose, key informants have indicated that their coordination is non-existent, invisible, or haphazard, leading to low transition rates into higher-level TVET pathways or sustainable employment. Yet transfer from those programmes into higher-level TVET programmes – either workplace-based or provider-based – is likely to be a positive outcome for some (or many) participants in those programmes.

The lack of a structured transition process means that many of those who complete these programmes are left with no clear next steps, often falling into precarious employment or further cycles of low-level, disconnected training.

This disjointed, patchwork approach fails to build long-term skills or create meaningful career pathways, particularly for learners facing additional barriers such as financial hardship, caregiving responsibilities, transport challenges, or a lack of cultural and pastoral support.

Learning from the success of Whānau Ora and Enabling Good Lives….

We think that we can better coordinate funding for apprenticeship and trainee support through a network of dedicated navigators who provide integrated, personalised and well-resourced learning support and guidance.

To break the cycle of fragmented interventions and low completion rates, a coordinated, people-centred approach is needed—one that moves beyond the patchwork of disconnected short-term programmes and provides holistic, wrap-around support tailored to individual learners working with their whānau.

This approach should be modelled on successful frameworks such as Enabling Good Lives and Whānau Ora, which take a people-centred approach (rather than a programme-centred one) by addressing the broader social, financial, and cultural factors influencing educational and employment success.

The Enabling Good Lives (EGL) approach, which has been successfully implemented in disability services, provides a strong model for addressing these challenges. EGL principles focus on self-determination, flexible funding, and integrated service delivery, ensuring that individuals can access the support they need in a way that is tailored to their personal goals and circumstances.

Applying these principles to vocational education could help create a seamless, learner-centred system that removes structural barriers and empowers individuals to succeed. Key components of this approach would include:

- Personalised, flexible budgets allow learners to access the support services they need—transport subsidies, childcare, mentoring, literacy support, or career guidance—without being constrained by rigid programme eligibility criteria.

- A dedicated brokerage or navigator service to coordinate services across education, employment, and social sectors. These navigators (Kaitūhono or Kaiārahi) would work alongside learners to develop a personalised training and employment plan, ensuring they receive the right mix of academic, pastoral, and career support. Navigators could be embedded within TEOs, iwi organisations, industry bodies, or social service agencies.
- Better integration of funding across government agencies, drawing from Vote Tertiary Education, Vote Social Development, and Vote Māori Development, ensures resources are used efficiently and effectively. Instead of multiple agencies running disconnected programmes, a more coordinated funding model would enable services to follow the learner, providing sustained support from pre-training to employment.
- Embedding EGL principles into TVET system design ensures learners have more choice and control over the supports they receive and that services wrap around the individual rather than requiring them to fit within predefined funding categories.

Some TEOs take this approach as a matter of course, using a patchwork of funding streams and drawing them together into some more coherent. We think that the system should be designed with this coherence in mind.

This approach recognises that education, employment, and wellbeing are deeply interconnected, and that long-term success requires a whole-of-government response rather than a series of disconnected initiatives.

By drawing on mana-enhancing principles and investing early, this model would create a more flexible, responsive, and effective vocational education system.

The benefits of a people-centred approach

Higher completion rates and improved workforce readiness would result from removing key barriers such as financial insecurity, transport challenges, and inadequate pastoral care. With these obstacles addressed, more learners could persist in their training and complete their qualifications.

Tailored support systems would allow learners to balance study with other life commitments, ultimately leading to higher retention and success rates. Employers, in turn, would benefit from a more stable and reliable pipeline of well-supported, job-ready graduates, ensuring that those entering the workforce are fully prepared to meet industry demands.

This approach also strongly aligns with the obligations of the Crown under Te Tiriti o Waitangi, ensuring that Māori learners have equitable access to vocational education and employment pathways that reflect their aspirations and cultural values. By embedding kaupapa Māori principles into training and support services, vocational education would become more inclusive and culturally responsive.

This change would not only enhance learner outcomes but also contribute to greater representation of Māori within skilled professions, supporting long-term economic and social development in Māori communities.

A more coordinated, people-centred model (as opposed to a model built on fitting young people into the patchwork of programmes) would provide structured transitions from pre-trades programmes into apprenticeships and higher-level TVET opportunities. Many young people interested in skilled trades are currently lost within the system due to a lack of support, making it difficult for them to advance into sustainable employment.

A people-centred approach would ensure that young people, particularly those at risk, receive the guidance

and resources needed to move successfully from training into meaningful careers. Over time, this would break the cycle of long-term low-wage employment, creating better employment and economic outcomes for disadvantaged learners.

The long-term economic and social benefits of this approach would be significant. Reducing the number of young people cycling through ineffective training and unemployment programmes would increase employment rates, reduce welfare dependency, and improve overall community wellbeing.

With a more structured and integrated approach to learner support, the government would see a greater return on investment in education and employment programmes. Ensuring that funding follows the learner—rather than being tied to disconnected, short-term initiatives—would allow for more efficient resource allocation and greater impact over time.

A more cohesive vocational education system would also help fill critical skills gaps in construction and infrastructure by ensuring that a wider range of learners can access and complete apprenticeships successfully.

With improved support structures, more diverse cohorts could enter skilled trades and remain in long-term employment. Employers would benefit from a larger, more resilient workforce, helping to address chronic labour shortages while fostering a more inclusive and equitable training system.

This approach would build a more sustainable and future-focused workforce that meets New Zealand's long-term infrastructure and economic needs by creating stronger industry pipelines.

Change 2: Devolved decision-making

The issue

There is a disconnect between regional industry needs and how training and funding decisions are made in New Zealand. Currently, key decisions about funding and investment in TVET are controlled by central government agencies, with regional employers, communities, and iwi having, at best, only an advisory role.

This top-down approach slows responses to changing labour market demands, frustrating employers who struggle to secure a skilled workforce while leading to skill mismatches and underutilised local labour potential. It also means there is a risk that problems particular to one region can be overlooked, being swamped by national concerns or issues in large population centres.

Regions with growing infrastructure and construction demands often find that training provision is not aligned with their specific workforce needs, leaving employers reliant on migrant labour or facing costly delays in project delivery.

Training providers, in turn, are bound by national-level funding models that do not always prioritise local skills shortages, limiting their ability to offer relevant courses that directly respond to regional industry needs.

This monolithic approach undermines New Zealand's efforts to improve regional economic development, particularly as regions attempt to attract investment and develop long-term infrastructure projects.

A more regionally responsive investment approach is needed to ensure that vocational education aligns with local workforce needs, supports economic development, and maximises the impact of public investment in skills training.

Making decisions at the right level

We think we can address this issue by enabling:

- National and regional planning for housing and infrastructure to incorporate an explicit education and workforce planning component.
- the Construction and Infrastructure ISBs to direct funding for relevant TVET (WBL, PTEs, ITPs, Wānanga, Universities).
- TEOs to have the flexibility to design training solutions that meet industry needs without overbearing regulatory regimes.

One way to achieve a more responsive system is through the *subsidiarity principle* – the idea that decisions should be made at the lowest *effective* level of authority — that is, where the most relevant information and capacity for implementation exist. This principle means:

- central government should create a broad framework for the system, the overarching policies for the system, but
- regional and industry interests – local government and industry groups – should take responsibility for decisions that are best understood and implemented at their level (e.g., local priorities for infrastructure and construction tailored to regional needs).

This approach would improve the economic efficiency of decision-making as local/regional decisions would be aligned with national policy, but would be made by those with the best local knowledge. Policies can adapt to

regional differences such as economic conditions and cultural preferences (Portuese 2020). It improves accountability, as local decision-makers are closer to the people affected by decisions (Bermann 1994).

And this principle is well-aligned with New Zealand's constitutional framework (Gussen 2014).

In relation to the TVET system, local decision-making, within a national framework, like the National Infrastructure Plan and long-term commitments like City and Regional Deals (see below) would give firms a view of the longer-term work pipeline, giving them the confidence to invest in training, taking a longer-term strategic view. That, in turn, would flow through to training organisations with the confidence to gear up to meet the expected demand for trained, skilled workers.

We are not proposing recreating the Regional Skills Leadership Group framework. That approach had merit but lacked effective mechanisms to set priorities or make decisions. Getting devolved decision-making right will require some relinquishing of control by the 'centre' trusting that regions can make informed decisions and that TEOs should have the flexibility to organise what education products and services they offer with only light-touch oversight from central funding and quality assurance bodies.

We think a key way this should happen is by ensuring the ISBs for the construction and infrastructure industry have an explicit role in determining investment in construction and infrastructure training nationally that goes beyond "investment advice to the TEC." This role would be assumed once the transitional arrangements for the Work-based Learning divisions of Te Pūkenga expire. Advice to Cabinet indicates that funding to these divisions will be subject to a 'sinking lid' where comparable programmes are offered by providers in any case.

We also think that there needs to be considerable reform of the regulatory regime, particularly as it relates to quality assurance. We need to trust TEOs more to develop innovative and flexible education products and services to meet the needs of industry and learners. It takes too long to develop new qualifications and programmes, there are an array of limitations on how existing education products like microcredentials are used and moderation and related processes are duplicative and costly.

Subsidiarity in practice – the City and Regional Deals infrastructure approach

The government has acknowledged the potential of this approach in its infrastructure planning. Its new City and Regional Deals programme proposes a framework to support economic growth, productivity, and long-term infrastructure planning, and the National Infrastructure Plan is a 30-year outlook on infrastructure priorities and related education and training needs.

City and Regions Deals represent long-term agreements between the central government, local councils, iwi, and industry to drive regional economic development. These deals are designed to promote investment in infrastructure, housing, and local industries, ensuring that regional economies are positioned for sustainable growth.

Because these deals centre on investment in infrastructure and construction, their success will depend on the pipeline of the right types of skills in the region; vocational education and training will need to be fully integrated into the framework, ensuring that regional labour forces have the skills necessary to support economic growth.

The National Infrastructure Plan is expected to have an education and training component, but it is not yet clear how the TVET system is expected to use this advice.

To bridge this gap, the ISBs for the construction and infrastructure industries should have an explicit role in working with City and Regional to embed skills and workforce development into City and Regional Deals and draw on the National Infrastructure Plan to advise on investment levels.

This role should go beyond the current advisory function to the Tertiary Education Commission (TEC) and includes a direct influence on funding allocations to ensure that training provision reflects regional economic priorities, major infrastructure projects, and long-term workforce planning.

As part of this integration, investment advice from the ISBs should guide how key funding streams are used, including:

- The people-centred funding models to inform the implementation of personalised, flexible budgets that enable learners to access training aligned with local job opportunities (*see Change 1*).
- The strengthened investment approach to TVET funding, ensuring that regional skills priorities are funded appropriately by the TEC through TEOs (*see Change 3*), potentially informed by regional investment plans, as we have seen in Te Tai Tokerau in the past.
- Support industry with the application of the revenue generated from the industry training levy (*see Change 5*), ensuring that this funding complements regional and national investment planning.

This regionally-led investment model would shift decision-making closer to the communities that understand their workforce needs best, allowing for a more dynamic, responsive, and strategic approach to skills training.

It would also ensure that iwi and Māori businesses have a stronger role in shaping training provision, particularly in regions where iwi economic development projects play a significant role in local employment and there are strong partnerships between iwi and local and regional government.

Empowering regions to take a leading role in skills investment would provide certainty and consistency in training provision for the construction and infrastructure sectors. Rather than being subject to slow-moving, centrally managed funding processes, regional stakeholders could proactively plan workforce development around infrastructure investment and economic growth priorities.

By integrating training investment into City and Regional Deals, this approach would also strengthen the representation of firms in workforce training development decisions.

A stronger role for the ISBs in regional investment decisions would lead to better alignment between qualification development, training delivery, and industry demand. With clearer industry leadership in skills planning, training providers would have stronger incentives to develop programmes that directly match employer needs, reducing skills mismatches and improving employment outcomes for graduates.

Finally, shifting decision-making closer to regional stakeholders would create a more efficient, responsive TVET system. Government agencies would still maintain a strategic oversight role, but by delegating more responsibility to regions, employers, and iwi, the system would become more adaptable to changing workforce needs, ensuring that public investment in training delivers maximum economic and social benefits.

Change 3: Strengthen the investment approach

The issue

The current funding model for TVET in New Zealand is short-term, reactive, and limits strategic development. It does not operate as a true investment system focused on the workforce and skills needed to deliver longer-term outcomes. Funding allocations are primarily based on prior enrolments, meaning that future funding is dictated mainly by historical demand rather than actual workforce needs or strategic priorities.

Additionally, funding rates were originally set with little empirical validation and assume a high level of cross-subsidisation between different programmes, making it difficult for training providers to maintain financial stability.

This current funding system does not adequately consider the financial, social, and employment returns on investment in construction and infrastructure investment, nor does it address the long-term needs of industries facing persistent skills shortages.

While providers must submit multi-year Investment Plans, in practice, funding is allocated annually and subject to 'in-year' adjustments. This approach creates uncertainty, making institutions risk-averse and limiting their ability to innovate, invest in specialised training, or develop long-term partnerships with employers and communities. The current system creates a misalignment between the funding cycle and the planning horizon, which TEOs need to make strategic investments or align with industry workforce needs.

This short-term approach has contributed to the financial precarity of regional institutes of technology and polytechnics (ITPs), many of which struggle to maintain viability despite widespread skill shortages in regions and reliance on migrant labour.

If targets are not met, funding can be reduced unilaterally. Indicative outyear funding determinations do not commit the government. The process gives providers limited scope to manage the peaks and troughs of learner demand over a longer timeframe.

It also means that during shocks to the system due to natural disasters or other major events that TEOs are dependent on discretionary decisions by the government through the TEC about whether funding is sustained.

In practice, the government has all the power in this relationship. While there are obvious advantages in redirecting funding to respond to short-term demand pressures and for the TEC to intervene in response to issues with providers, we think the current one-year funding agreements stifle innovation, makes TEOs risk-averse and contribute to the poor financial performance of some parts of the sector.

Furthermore, the current funding model does not account for the systemic barriers contributing to inequitable vocational education outcomes. By treating funding primarily as a simple formula based on historical enrolments, the system fails to grapple with the complex structural issues that affect access, retention, and success for Māori, Pacific peoples, women, and learners with disabilities.

This isn't necessarily simple

Investment needs a balance of risk and monitoring. But when the investment planning system was developed in 2006, the government appears to have prioritised monitoring; the reasoning then was (presumably) that it might be more difficult to "clean up the mess" after three or five years if a TEO's plans went awry, meaning that annual monitoring would remain important.

However, that had the effect of undermining the notion of "investment". Investors – in any sphere – almost

always take on *some* level of risk. The funding system for teaching and learning, in effect, takes an excessively cautious approach to risk. By establishing processes that minimise (or eliminate) risk for the Crown, the government has made TEO behaviour very risk-averse and less strategic, to the detriment of system performance.

Part of the problem is that tertiary education funding, monitoring and accountability is very largely (if not exclusively) anchored in enrolment volumes, something that can be (and therefore, is) monitored annually[3], something that is quantifiable and hence, doesn't require the funder to make a *judgement*. The alternative – driving investment by strategic direction – would require a different, possibly more complex monitoring system.

Most of our key informants wanted greater recognition in funding of the challenges faced by learners – those with disabilities, those with low prior achievement, those who have to balance their commitments to learning with family or cultural commitments, and those who face systemic barriers.

Some suggested funding on value-add, outcomes, or "quality". Or on career progression and retention in the industry, learner capability, or the quality of the learning experience and the outcomes "that learners value". And more accurately take account of the actual cost of delivery[4].

Those suggestions are valuable but are not as straightforward as they sound. For instance, value-add measurement is imprecise and complex, a realistic measure of outcomes would take a long time to be revealed, and there is no precise or clear measure of quality robust enough for it to be encapsulated in a funding formula.

Finding a viable alternative

We think that despite the challenges noted above, there is merit in:

- Government guaranteeing construction and infrastructure TVET funding levels for up to five years at high performing TEOs.
- Funding levels to be based on value-add measures, not just enrolments.

We propose that investment in construction and infrastructure education and training needs to be consistent, sustained and reflect the needs of learners. Accordingly, the government should commit to funding construction and infrastructure TVET for high-performing providers[5] over five-year periods.

We expect that this approach would allow TEOs to set longer term strategies, to stage a development (such as a new programme) over several years – perhaps five years – and would measure performance and success across a broader range of measures (including outcome measures and quality-focused measures, alongside volume measures) over that longer term.

A true investment approach would enable TEOs to behave in a more strategic fashion. There is a powerful argument for allowing TEOs delivering construction and infrastructure education and training to propose true investment plans for that provision and endorsed by the construction and infrastructure ISBs, where funding will be guaranteed for the duration of the plan. That would enable TEOs to meet the performance targets set out in the plan over the plan duration.

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[3] The exception is in research funding. There, the bulk of the funding is allocated for multiple years. In the PBRF, more than half the funding is allocated in six-year blocks with the remainder adjusted annually. CoREs funding is allocated for six-year cycles.

[4] Refer to the Key Informants - Stakeholder Views about TVET Funding paper – where there is a detailed account of interviewees' suggestions and the implications for the design of the funding system.

[5] Performance could include assessments of educational quality such as those conducted by NZQA.

As well as putting TEOs on a more strategic footing, that measure would ensure that ISBs have the ability to ensure that funding is directed to outcomes sought for or by the industry.

A true investment approach to funding would be one based on multi-dimensional compacts where the funder could make a judgement on funding for the TEO's strategic intentions as well as the expected enrolments; that would be moderated by readings on the TEO's past performance on a range of dimensions (such as enrolment volumes, achievement of plan targets, success in reducing disparities in achievement, information on quality, information on learners with additional needs, information on past outcomes, information on value-add, and, possibly some of the many creative suggestions made by our interviewees.

That would enable the funder to limit funding duration where there is risk but to extend the funding duration and the funding scope where the TEO is demonstrably delivering value.

This investment approach would also move beyond outdated funding rates and simplistic recoveries for underdelivery in terms of learner enrolments towards an approach that considers both need and outcome, and grapples with systemic bias in how funding is apportioned. Funding levels should be determined by a combination of industry workforce demand, projected infrastructure and housing needs, broader social and economic priorities and, most importantly, the hard work of determining the return from that investment.

This change would also have implications for other related investments like Apprenticeship Boost which need to be considered in a holistic sense with regard given to the social outcomes we expect from education and training.

The benefits

A reformed investment system for construction and infrastructure tertiary education and training could be designed so as to address the challenges and barriers discussed earlier in this report – financial barriers for learners, systemic barriers to equity in vocational education. And it could and should be designed to provide financial stability for training providers. By shifting from annual, unpredictable allocations to a sustained investment model, institutions would have the confidence to innovate, invest in high-quality training infrastructure, and expand specialised programmes. This would particularly benefit construction and infrastructure, where training often requires significant capital investment in equipment and facilities.

Embedding investment principles would ensure that vocational education supports learners not just to enrol, but to succeed. Rather than merely funding seat numbers, a more strategic investment approach would ensure that learners are given the support necessary to be well-prepared for employment and progress into leadership roles within the construction and infrastructure sectors. Over time, this would broaden the talent pipeline, increase workforce diversity, and strengthen industry resilience.

For government, adopting a long-term investment framework for vocational education would yield higher economic returns, reducing reliance on temporary labour from overseas and ensuring a steady supply of skilled workers for nationally significant projects. Furthermore, ensuring stable funding for regional ITPs and other training providers would bolster regional economies, creating more equitable access to skills training and employment opportunities across New Zealand.

Ultimately, a consistent, outcome-focused investment approach would strengthen the vocational education system, ensuring that learners, employers, and the economy benefit from a workforce that is well-trained, future-ready, and equipped to meet New Zealand's long-term infrastructure challenges.

Change 4: Increase work-based learner fees

The issue

Learner achievement and completion rates in the construction and infrastructure sector remain very low, highlighting significant gaps in the support available to learners. Many trainees struggle with self-directed learning in workplace-based training environments.

The research and key informant interviews indicate that while work-integrated learning offers strong employment outcomes, the lack of structured support means many learners disengage before completing their qualifications.

The current system heavily emphasises employer-led training without sufficiently resourcing the advisory, pastoral care, and employer capability functions critical to learner success. Without comprehensive interventions, completion rates will remain stagnant, limiting the sector's ability to address skills shortages effectively.

A key issue is the imbalance between the benefits learners gain from vocational training and their financial contributions to the system. While learners ultimately experience long-term wage and employment benefits, the majority of costs are covered by government funding and, to a lesser extent, employers.

Learner fees paid to TEOs vary widely for construction and infrastructure education and training. For example, an undergraduate civil engineering student might pay around $10,000 per annum, while fees for workplace-based training at the level of a New Zealand certificate can be as low as $1,000 per annum.

We think one of the key constraints is the limits on the availability of student loans for workplace-based learners who can only access these loans for some of the off-job components of the programme[6]. The inability to access the student loan scheme means that workplace-based learners cannot spread the costs of training across their working lives, making employers more likely to pay learner fees.

We do not consider higher fees or higher debt to be a desirable outcome more generally[7], but we think that one of the implications of the current low level of learner contribution is that it is difficult to provide adequate support to learners during their workplace training. The system relies on training advisors to offer a wide range of pastoral care and the rationing of access to more intensive support services that assist with learner-specific needs; at current resourcing levels, that support is spread too thinly.

For example, training advisors employed by the work-based learning subsidiaries of Te Pukenga play a crucial role in bridging the gap between learners, employers, and off-job education providers, yet their workloads remain unsustainably high. With caseloads often exceeding 80 trainees per advisor, the ability to provide meaningful, personalised support is limited.

While responsible for on-the-job training, employers are not always equipped to provide structured learning support, increasing the pressure on training advisors. Without a reduction in advisor caseloads, an expansion of available learning support services or more investment in the capability of employers, attrition rates will continue to be a challenge.

In addition to funding constraints, systemic issues within the training model contribute to the lack of

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[6] Student Loan Scheme rules make it clear that trainees may not borrow for the *on-job component* of their qualification; they can get loans but only for off-job training. See this page on the TEC website and scroll through to the heading *Student Loan Scheme payments.* One of the obvious implications of the recently announced changes to how work-based learning is organised in New Zealand is the alignment of several aspects of the funding system including presumably extending access to the student loan scheme.

[7] Not least because for some learner groups, debt can be a disincentive to engage with formal TVET.

adequate support. The rigid funding model, which is largely volume-driven, does not account for the additional needs of learners who require extra assistance to succeed. This is particularly problematic for Māori, Pacific, disabled, and women trainees, who often face additional barriers in workplace-based learning environments.

Some industry stakeholders have suggested that a more flexible funding approach—one that recognises the varying levels of learner need and allocates resources accordingly—would help close these gaps. Investing in culturally responsive and tailored support mechanisms would improve completion rates and ensure that the workforce reflects the diversity of New Zealand's population.

Certainly, efforts to increase the support provided to learners would incur additional costs, particularly when the government has signalled an intention to remove additional funding to account for the needs of specific learner groups as part of the disestablishment of the UFS.

Ultimately, addressing these challenges requires a shift in how vocational training is resourced and supported. A combination of learner contributions, enhanced funding for training advisory services, and a more responsive funding framework could help create a system that better meets the needs of both learners and employers.

By ensuring that training advisors have manageable caseloads, improving employer engagement in structured learning, and embedding stronger support services for underserved learners, the vocational education system can improve outcomes while building a more skilled and resilient workforce.

Shifting the split in resourcing: realigning the balance of contributions

We think that the best way to improve access to learning support services and help fund a people-centred approach is to:

- Increase course fees for work-based learning per full-time learner.
- Allow providers to charge a compulsory student services fee of $2,000 per full time learner.
- Make compulsory course and student services fees for work-based learning eligible for the student loan scheme.

We have reached these conclusions in part because if we are to increase the resource available for learner support (broadly defined to include employer capability development), we need to find a source of additional revenue. But, in a very tightly constrained fiscal environment, we know that government is unlikely to spend more.

We have seen, from the literature review, that learners, employers and the government (both in the interests of its own strategies and as a proxy for the public), all contribute to the costs of the system and that they all gain benefit from it.

But the weaknesses in the training advisory system, industry dissatisfaction with the training system and the weak accountability of the system to industry interests (see below) raise questions about the balance of contributions of each.

At present, the government pays a tuition subsidy to the provider for arranging tertiary education and training which is then complemented by a training fee paid by the learner (or, in some cases, by the employer on behalf of the learner).

But, given the clear longer-term benefit that the learner receives from the training and the persistently high levels of attrition and disparities between different groups of learners, there is a case for increasing and

formalising the student contribution to their programme costs – and in particular, the training arrangement and advisory service. This is especially the case given the issues with the importance of, but the variability in the quality of, on-site mentoring and of training advice discussed above.

With the proposal in the government's current consultation paper to absorb training advice and (presumably) arranging training placements in polytechnics, PTEs and wānanga, there is an opportunity to bring workplace-based training in the Student Loan Scheme and create a different fee structure that better reflects the returns to learners and their needs. While that carries a cost to government, that could be partly offset by a small reduction in the government's subsidy[8].

The modest direct learner investment in workplace-based training means that support structures remain underfunded and inconsistently delivered. Introducing a structured learner contribution, such as a modest fee increase of up to $2,000 per annum, could help fund additional mentoring and advisory services while ensuring that trainees receive the support they need to complete their qualifications. This would also align vocational education funding more closely with the approach taken in other parts of the tertiary education sector where learners fund a range of student services directly.

The actual size of the fee is obviously a matter of debate, but we think there is a case for work-based learners to pay a higher fee than on-campus learners. Some of the reasons include the complexity of working across many thousands of workplaces often at considerable distances from main campuses, the need for relatively extensive screening tools to identify undiagnosed or underdiagnosed support needs and the impact of issues like digital poverty on some learner groups.

We think there should be a standalone fee for apprentices and trainees that is used to increase the supply of support services. This fee should be eligible for support through the student loans scheme. This requirement is in line with proposed changes to work-based learning. By making all fees payable by work-based learners eligible for Student Loan Scheme support will allow learners to defray the costs over their working lives and make sure that the fees are subject to the Annual Maximum Free Movement regime.

With roughly 40,000 students enrolled in workplace-based construction and infrastructure tertiary education, increasing fees by $2,000 per learner could generate up to $80 million per annum. Examples of the kind of additional support we envisage this funding could include:

- expanding access to literacy and numeracy assistance,
- initiatives relating to specific population groups like Women in Trades, and
- development of employer capability, such as lifting their expertise in undertaking workplace training.

The funding that is made available should reduce pressure on training advisors to step into complex pastoral roles that are not a realistic expectation of their role and reduce the rationing of more specialist support.

One potential concern with introducing higher learner fees is the possibility of suppressing demand for vocational education, particularly among those from lower-income backgrounds. If apprentices and trainees are required to contribute more financially, some prospective learners may be deterred from enrolling, reducing overall participation rates.

However, this is not necessarily a negative outcome if it results in a system that delivers better overall performance, particularly in terms of higher completion rates. A well-structured fee system could act as a

[8] In a course in which the government subsidy is 70 per cent and the fee 30 per cent of the full-cost, then a 40 per cent fee rise for the learner, coupled with a 28 per cent subsidy drop for the government would mean that neither the off-job provider nor the government would be worse off, while the learner has almost no loss of liquidity.

commitment mechanism, ensuring that those who enter apprenticeships are more motivated and prepared to complete their training.

Additionally, if the revenue generated from fees is reinvested into learner support services—such as additional training advisors, pastoral care, and improved learning resources—the quality of education would improve, leading to stronger outcomes for those who do participate. A slightly lower enrolment rate but with significantly higher completion and employment success would ultimately be a more efficient use of resources, benefiting both learners and employers by ensuring that those who enter the system are well-supported and able to succeed.

Some of these issues could be mitigated by other changes we suggest. For example, a portion of the learner fee will be used to support the whanau and people-centred approaches and the personalised, flexible budgets (see Change 1), and to complement the uses to which the funding generated by the employer levy is put (see Change 5) which would tend to benefit Māori, Pacific peoples and disabled learners who tend to be drawn from lower socioeconomic backgrounds.

The benefits of a higher contribution to the costs of learning

A more structured and well-supported approach to vocational education would lead to higher completion rates by addressing the challenges that many apprentices face, such as inconsistent access to mentoring, varying employer training capacity, and limited structured learning support.

By introducing additional advisory services, standardised training benchmarks, and mechanisms for learner assistance—such as targeted financial support and proactive monitoring—trainees would have a more stable and supportive learning environment. This would particularly benefit those who struggle with self-directed study or who face barriers such as literacy challenges, financial constraints, or limited employer engagement in training. Ensuring that every learner has access to consistent, high-quality support would reduce attrition rates and create a more resilient workforce.

Improving workforce readiness is another critical outcome of a more structured approach to vocational education. Currently, training quality and learner experiences vary widely depending on employer capability, with some businesses able to provide structured and well-supervised learning, while others struggle to offer adequate support.

By reducing reliance on employer capacity alone and integrating more standardised training support mechanisms—such as industry-aligned skills frameworks and increased training advisor engagement—the system would ensure that all apprentices receive the necessary theoretical and practical skills to meet industry needs. This would help address concerns from employers who feel that graduates are not sufficiently prepared for the demands of the workplace.

Achieving greater parity between vocational education and professional qualifications is essential for increasing the credibility and attractiveness of apprenticeships. Historically, apprenticeships and vocational pathways have been perceived as less prestigious compared to university degrees, despite their strong employment outcomes and alignment with industry needs.

By strengthening the structure and quality of vocational training, including clearer progression pathways into advanced roles and leadership positions, apprenticeships could gain higher recognition and status. This shift would encourage more learners—particularly those who may otherwise pursue university study without a clear career pathway—to consider vocational education as a valuable and legitimate alternative.

Enhancing the credibility of apprenticeships would also yield significant benefits for employers. A more robust and standardised training system would produce graduates who are more skilled, adaptable, and job-ready, reducing the time and cost required for on-the-job skill development.

Employers would have greater confidence that apprentices have met industry-aligned competency benchmarks, reducing skills mismatches and improving overall productivity. Additionally, higher completion rates would mean a larger pool of well-trained workers entering the industry, helping to alleviate persistent skill shortages in sectors such as construction and infrastructure.

Overall, a strengthened vocational education system that prioritises learner support, structured training, and industry alignment would create a more equitable and effective training model. By ensuring that all trainees receive high-quality education regardless of employer capacity, the system would enhance workforce readiness, increase completion rates, and elevate the status of apprenticeships as a valuable educational and career pathway.

These changes would not only benefit individual learners but also contribute to a more productive and resilient workforce, ultimately strengthening New Zealand’s construction and infrastructure sectors.

Change 5: Introduce industry training levies

The issue

While the construction and infrastructure training system produces around 9,800 graduates each year from all forms of TVET, the system suffers from shortages of trained and skilled staff. Part of the shortfall is down to poor retention in the workforce, a problem that the industry must address. But addressing retention problems is a long-term project. In the short-to-medium term, there can be relief through expanding training.

But the construction and infrastructure industries face a classic "free-rider" problem when it comes to training. Many employers benefit from a skilled workforce without directly contributing to training costs, instead hiring workers who have been trained by other companies or through public funding.

But there are weak incentives on employers to take on trainees; trainees lower a firm's productivity. Some of our key informants report that one of the ways some firms contribute to the health of the industry is through training above their own needs, adding to a pool of trained people available across the sector. But, as our key informants told us, there are incentives for employers to free-load on the training undertaken by others and disincentives to take on trainees.

This creates an unequal distribution of training investment, where a small number of firms bear the cost of apprenticeships and workforce development, while others simply recruit already-trained workers without investing in skills development themselves.

As a result, too few firms participate in apprenticeship and other kinds of workplace-based or integrated training schemes, leading to persistent talent shortages across the sector. This underinvestment is particularly damaging for high-skill or niche training programmes, such as advanced technical skills, which are critical to the industry's future but are not financially viable under the current funding model.

The misalignment of incentives means that employers who do invest in training bear all the costs, while those who do not train still gain access to skilled workers. Without intervention, this market failure will continue to widen skill gaps, reduce training capacity, and undermine workforce development.

Past attempts to introduce a training levy in construction and infrastructure have failed due to administrative complexity and concerns that training firms would effectively pay twice—once for training their own apprentices and again through a sector-wide levy.

To succeed, a new industry levy must be structured to ensure that costs are fairly distributed and that firms investing in training are not disadvantaged.

Implementing industry levies

We think that industry training levies should be introduced to support employer capacity to train and employer-directed innovation with rebates for employers who actively contribute to education and training.

To address these issues, mandatory industry levies should be introduced to distribute training costs more evenly across all employers while also funding essential workforce development initiatives. This approach would create a sustainable funding mechanism for skills development, ensuring that all employers contribute to the long-term health of the industry.

The proposed levies would be drawn from three key funding sources:

- An increase in the existing Building Levy paid to MBIE from NZ$1.75 to NZ$2.60 per $1,000 of project value for consented projects over NZ$65,000. This would generate an estimated NZ$13 million annually, specifically earmarked for workforce development[9].
- A levy on foreign worker permits, set at NZ$2,000 per approved visa, which would raise approximately NZ$40 million annually. This mechanism would ensure that firms opting to recruit overseas workers contribute to the development of local training capacity.
- An education and training levy should be introduced as part of the reforms of the resource planning system, with a levy linked to the value of infrastructure projects, potentially in the range of 0.1%-0.25% of the project's value.

A rebate mechanism would be introduced to reward companies that actively support education and training. Firms that hire apprentices, offer work-integrated learning placements, or invest in internal training capability would be eligible for levy offsets, ensuring that employers who already train are not penalised. Instead, companies that do not invest in training or rely on overseas recruitment would bear the costs, shifting the funding burden towards those who benefit from, but do not contribute to, workforce development.

Levy revenue would be strategically allocated through the ISBs for the construction and infrastructure industry, ensuring that funding decisions are made by industry, for industry. The funds could be directed toward:

- Strengthening Recognition of Prior Learning (RPL) processes, making it easier for workers to gain formal qualifications based on existing skills.
- Investing in degree-level apprenticeships and innovative training models, ensuring that vocational education evolves alongside industry needs.
- Supporting pathways for underrepresented learner groups, such as Māori, Pacific peoples, and women, to address equity gaps in construction and infrastructure careers.
- Supporting industry leadership and research.

This co-investment model would reduce reliance on government funding, build industry ownership of workforce development, and create a more sustainable, employer-driven skills pipeline.

The positive response of the employers we interviewed to the idea of a levy suggests that they would see value in an additional contribution *provided that* the system became more responsive to their need for skills and more flexible in its operation, and *provided that* the collection of the levy doesn't impose a high compliance cost.

Like its predecessor, the Education and Training Act 2020 has provision for an industry-based training levy, subject to an industry poll. The government has now indicated that it plans to reduce the barriers to introducing a levy, which it sees as a possible revenue source for the new industry standards bodies it is creating (Ministry of Education, 2025).

Levies are not simple. They are not easy to design. As noted above, most of our employer informants agree

[9] While the levy – administered as an increase in the rate of the current Building Levy – would add to the cost of major construction project costs, that increase would be marginal. Our modelling suggests an increase of 0.086% or less that $900 (including GST) on a million-dollar building project.

that there is sense in introducing a levy *as long as the administration is efficient and avoids creating perverse incentives,* even though it may be a cost to employers.

They are best administered when the collection can be attached to an existing transaction (such as the building levy, which is collected through the building consenting process[10] (see this information) or fees for processing visa applications or integrated into the consent process for infrastructure works).

The benefits

An industry levy would create a co-investment model where all employers share responsibility for workforce development, rather than leaving it to a small subset of firms. By broadening the funding pool, the sector would gain the financial stability needed to sustain and expand training efforts, ensuring that skills shortages do not hinder economic growth and infrastructure development.

The levy would expand funding for specialised training, supporting future-focused skills development that would otherwise be unaffordable under current funding models. This would be particularly beneficial for emerging fields such as digital construction, green building technologies, and advanced engineering specialisations, ensuring the workforce remains competitive and adaptable.

Employers who already train would receive direct financial benefits, reducing their burden and encouraging more firms to engage in apprenticeships and trainee programmes. The rebate system would ensure that training investments are recognised and rewarded, preventing firms from paying double and incentivising further participation in workforce development.

From a government perspective, a sustainable levy-based funding model would reduce reliance on public funding while increasing training capacity across the sector. By shifting the responsibility for skills investment onto the industry, the government could focus its resources on strategic workforce development priorities, such as improving training infrastructure, expanding tertiary education pathways, and addressing equity issues in vocational education.

Ultimately, a well-designed industry levy would create a fairer, more sustainable training system, ensuring that all employers contribute to building a skilled, future-ready workforce for New Zealand's construction and infrastructure sectors.

[10] Note that using the Building Levy creates a proxy weighting for the size of the employer, is simple to administer as there is an existing, effective mechanism for collection and, because it is linked to *projects* (rather than to employer characteristics) it can be passed on to the project client (rather than being paid by the employer in cash). Those characteristics mean that it addresses most of the concerns expressed by employers we interviewed in this project.

9. Appendix A: Key Informants

These key informants comprise experts on and participants in TVET from firms in the construction and infrastructure sector, government agencies, industry peak bodies, Te Pūkenga, private training establishments active in TVET, individuals engaged in supervising and mentoring trainees and representatives of peak bodies in the construction and infrastructure sector.

- Mark Abbot, Chief Executive, New Zealand Institute of Architects
- Aionoa Matthew Aileono, Deputy CE, Registered Master Builders of NZ
- Mackenzie Ashby, Capability Manager, Learning and Programme Delivery, Northpower
- Pamela Bell, Chief Executive, New Zealand Institute of Building
- Sarah Benikowsky, Governance Associate, Hanga Aro Rau Workforce Development Council
- Scott Bitchener, Chief Financial Officer, Skills Group
- Graham Burke, Independent Consultant
- Professor Martin Carroll, Deputy Chief Executive Academic, Unitec and Manukau Institute of Technology, Te Pūkenga
- Grant Cleland, Managing Director, Creative Solutions
- Chris Collins, Independent Consultant
- Erica Cumming, General Manager, Engagement and Partnerships, Waihanga Ara Rau Workforce Development Council
- Hayley Devoy, Director, Strategy, Planning and Performance, Ara Institute of Canterbury
- Jane Duncan, Manager, Strategic Investment, Tertiary Education Commission
- Greg Durkin, Interim Operational Lead, BCITO
- Anne-Jane Edwards, Manukura General Manager, Amotai, The Southern Initiative
- David Fabish, retired builder and company director
- Rebecca Fox, Workforce Development Manager, Civil Contractors New Zealand
- Tamara Grant, CEO, Xabilities
- Chris Gray, President, Quarrying Institute
- David Hall, General Manager, Building System Performance, Ministry of Business, Innovation and Employment
- Nick Hill, Chief Executive, Building Officials Institute of New Zealand
- Professor Ali Ghaffarian Hoseini, Head of Department - Built Environment, School of Future Environment, Auckland University of Technology
- Ben Johnstone, Chief Executive, Vertical Horizonz

- Heather Kirkwood, Independent Consultant
- Charlotte Knowles, Senior Strategy and Advocacy Advisor, Registered Master Builders of NZ
- Stuart Lawrence, Member, Hanga Aro Rau Workforce Development Council
- Rachel MacKintosh, E tū National Secretary
- Pip Schollum Manase, General Manager – Schools, Manukau Institute of Technology
- Emmolina May, Academic Staff Member, Construction Technology, Toi Ohomai Institute of Technology
- Dr. James McKay, Engineering Degree Apprenticeship Pilot Manager, Otago Polytechnic
- Pamela Moss, Director, Planning, University of Auckland
- Bill Newson, Council Member, Waihanga Ara Rau Workforce Development Council
- Turi Ngatai, Chair, Kāhui Ahumahi, Ohu Mahi Workforce Development Councils
- Atarau Pouwhare-Ellis, Kaihautū / Leader – Māori and Pasifika Trades Training, The Southern Initiative
- Paula Rawiri, Deputy Secretary, Policy, Te Puni Kokiri
- Sam Sefuiva, MPTT Project Manager, Māori and Pasifika Trades Training Auckland
- Sarah Sinnott, Principal Advisor, Amotai, The Southern Initiative
- Jon Smith, General Manager, Academic Quality, Skills Group
- Eleonora Sparagna, Policy Manager, Ministry of Education
- Kylie Taffard, Lecturer, University of Canterbury
- David Thomson, Director, Strategy, Analytics and Reporting, University of Otago
- Travis Timoko, Lead, Vocational Education, Te Wānanga o Aotearoa
- Colleen Upton, President, National Association of Women in Construction
- Alexandra Vranyac-Wheeler, CEO, Master Electricians
- Greg Wallace, Chief Executive Officer, Master Plumbers
- Craig West, New Zealand Country Lead, Downer
- Chris Whelan, Executive Director, Universities New Zealand
- Tim Wilson, Chief Executive, ATNZ
- Associate Professor, Karsten Zegwaard, Director, Work-Integrated Learning Research, University of Waikato

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