Reform of Vocational Education

Competenz submission to the Ministry of Education



Introduction

This document presents Competenz's detailed response to the Minster of Education's proposed reform of New Zealand's vocational education sector and system announced on 13 February 2019.

The document includes:

Executive summary: We provide a summary of our overarching response to the proposal and what we believe an effective system should look like.

Section 1: Transforming the system: We provide an alternative recommendation to address the reform's objectives, while enabling continuity in the system at a critical time in the labour market and New Zealand's economy.

Section 2: Proposal evaluation: We present an objective evaluation of the reform proposal with the lens of "what's best for New Zealand".

Section 3: The risks of a poorly executed reform: We identify a number of critical risks that we urge the minister to consider and respond to before proceeding futher.

We welcome the opportunity to be an integral participant in the co-design and co-creation of New Zealand's future vocational education system.

About Competenz

Competenz is a multi-sector Industry Training Organisation (ITO) that supports 3,500 New Zealand businesses and 20,000 apprentices and trainees. We support 37 sectors including engineering, manufacturing, forestry, food and beverage, printing, transport, laundry and dry-cleaning, and textiles. Our 190 staff set the skills standards for these sectors, arrange on-the-job training, broker off-job training as required, and design workforce development solutions to help businesses grow their workforce capability. In 2018, the New Zealand Qualifications Authority (NZQA) rated Competenz as a Category 1 organisation – highly confident in our educational performance and self-assessment capability¹. Refer to appendix 1 for more detail.

¹ For more detail on the External Evaluation and Review (EER) process and categories, please visit https://www.nzqa.govt.nz/provider-categories-partners/approval-accreditation-and-registration/provider-categories/provider-categories-eer/. Competenz's report can be found here: https://www.nzqa.govt.nz/providers/details.do?providerld=810491001&site=1

Executive summary

A strong vocational education sector and system is vital to New Zealand and its future economic and social prosperity. We value the opportunity to 'have our say' on the proposed reform.

We welcome the Minister of Education's desire to improve vocational education in New Zealand. There is much about the current system that needs to change to meet the needs of our learners, employers, industry stakeholders and partners in the rapidly changing world of work.

The aspects of the proposal we support are:

- » Strengthened standard setting and skills leadership, as well as ensuring consistency in standards and programmes across the system
- » Financial stabilisation of publicly funded vocational education providers, including rationalisation
- » Unifying the funding system to eliminate ineffective competition, and more targeted funding to better support learner, industry and regional needs.

We **do not support** the disbanding of ITOs and transferring the responsibility of arranging training for apprentices and trainees to providers.

Proposal risks disruption and expense

We agree the current system is complex and difficult to navigate, and that it can be challenging and expensive for employers and learners to engage with. We agree the current financial position of the polytechnic sector is unsustainable and that this needs to be urgently addressed. We agree that more needs to be done to support Māori and Pasifika learners and accelerate achievement rates.

However, the proposal involves considerable change and disruption to a system that is largely working well for industry and employers. It also carries high risk and high cost, with little clarity of the impact on learners, employers and industry at a time of significant skills and labour shortages and industrial change.

We are unclear how the proposed structural reform of ITOs and Institutes of Technology and Polytechnics (ITPs) will result in a more integrated and coherent vocational education system. We believe the reform's objectives can be fully realised within the current system without the massive disruption the proposal implies.

Key issues:

- » Merging the ITP and ITO sectors will not solve the financial difficulties of the ITP sector.
- » The proposal does not address the competitive challenges between ITPs and other Tertiary Education Organisations (TEOs), including universities, which must be addressed to ensure a simplified and effective system. The competition between ITPs and ITOs accounts for a mere 0.5% of all EFTs. The real competition is between other TEOs.
- » The proposed changes will not benefit the entire system as the following parties are absent from the proposal: Schools, NZQA, Tertiary Education Comission (TEC), qualifications beyond level 6, other TEOs and universities.
- Merging industry training into ITPs entails significant risk and could result in major disruption to work-based learning and general business performance over several years. ITOs and ITPs have inherently different cultures and ways of delivering vocational education.
- » The reform is a significant change, and as it stands there is not enough evidence to support an informed decision. No detailed analysis or evaluation, financial modelling or transition arrangements have been provided.
- » The timeline for a change of this magnitude is far too short, and this is not in the interests of learners or employers.

The voice of employers, learners, iwi and communities has not underpinned the current proposal.

The proposal lacks detail on how the system will work and be implemented, and what the economic and social costs of transition will be.

We are expressly concerned about disbanding the ITO structure – especially at a time of strong educational and financial performance (particularly as it relates to the taxpayers' return on investment²).

Fundamentally, we are unclear on how the proposed reform will genuinely:

- » Address the skills and labour shortages impacting the majority of New Zealand industries and businesses
- » Improve New Zealand's productivity and social and economic prosperity
- » Encourage more employers and learners to participate
- » Benefit learners, in particular our Māori and Pasifika learners and their communities
- » Stabilise, simplify and unite the public vocational education sector
- » Improve the outcomes for workplace-based learners and their employers.

System transformation needs to be staged and prioritised

We believe the system does need to transform. This transformation can be achieved through a whole-of-system approach rather than the structural reform proposed. Our approach could deliver the desired outcomes for the system in a more cost effective and efficient way, while avoiding significant disruption to industry, employers and learners at a time of critical change.

There are issues in the current system that must be addressed in a staged and prioritised way:

1. Creating a more coherent system

- » Consolidating the ITP sector so it is financially sustainable and supports regional needs
- » Strategically aligning ITO sector coverage
- » Enabling ITOs and providers to collaborate while retaining their current functions
- » Creating more integrated governance between ITOs and ITPs.

2. Enabling consistent standard setting and implementation

- » Enhancing the roles of ITOs by recognising them for strategic skills leadership
- » Mandating a level of prescription in standard setting (especially in qualifications) to ensure all programmes achieve the required industry competencies.

3. Implementing a unified funding system

- » Implementing a unified, transparent funding system that enables more employers and learners to take up industry training and workplace learning, at rates that support quality education and training
- Funding strategically important delivery at higher rates, for example learners with high needs or learners in isolated regions
- » Funding standard setting and quality assurance functions separate to training arrangement and delivery.

4. Strengthening connections across the system, specifically into schools

- » Raising the profile and value of vocational education
- » Increasing investment in professional development for teachers and careers advisors to develop a strong understanding of vocational education and how to pathway students
- » Enabling ITOs to lead engagement with schools and collaboration with providers and employers to expose more students to vocational careers.

To achieve the above, a roadmap of transformation needs to be developed. Milestones need to be clearly articulated and evaluated to ensure the transformation is given time to embed and has had the desired impact on New Zealand's vocational education system. We believe this will be the most cost-effective and least disruptive way to transform the system and meet all stakeholders' needs. We outline a suggested roadmap in Section 1: Transforming the system: An alternative.

What our stakeholders need

We must emphasise our considerable disappointment in the limited amount of time allowed to consult on such a significant reform of New Zealand's vocational education system. While we accept the minister's personal assurance that this is a genuine consultation process, broad perception across industry is that this is not the case.

During the past six weeks we have received direct feedback from more than 1,000 employers, industry leaders and other impacted stakeholders through an online survey, workshops and individual meetings (see appendix 3). The voice of our stakeholders underpins our submission.

² https://www.itf.org.nz/news-and-publications/news-and-media/do-not-dismantle-industry-led-training-and-apprenticeships

As acknowledged by the ministry, vocational education "has a special emphasis of the skills, knowledge and attributes required to perform a specific role or work in a specific industry". Therefore, the majority of stakeholders impacted by this reform are industry.

Our stakeholders have clearly articulated the value a functional vocational education system provides, for them and for New Zealand. For this country to have a strong, well-functioning vocational education system it **must**:

- » Be industry and employer-led, with Māori engaged as the Treaty partner
- » Incentivise and support more employers (especially SMEs) to engage in formal vocational education and training
- » Proactively and actively engage with schools to ensure a continuous talent pipeline and life-long learning
- » Be responsive, flexible and agile to meet the changing needs of industry, their workforce and the range of employers' workplace needs
- » Include strong and accessible regional provision and mandate national consistency to enable learners to move seamlessly through the system
- » Provide the right level of support to ensure all learners can succeed.

The risks of a poorly executed reform

There is considerable social and economic risk if the proposal is adopted in its entirety and implementation is not effective (for example, undue haste leads to a poorly constructed outcome, the process takes much longer than anticipated, the change doesn't account for all stakeholders/sectors/forms of vocational education and causes significant disruption to workplace training).

We have identified a number of critical risks that we urge the minister to consider and respond to before proceeding further.

Incorrect implementation could:

- » Undermine the value and integrity of the vocational education system and its public perception
- » Cause employers to disengage with the system at a critical time when they urgently need to train and re-train existing staff and attract new people to the workforce

- » Further reduce the number of learners engaged in the entire vocational education system
- » Have negative social impacts if learners drop out of formal education this will have negative flow-on affects for families and communities, potentially risking social isolation as the world of work advances
- » Make the system even less responsive to the fast-changing nature of work, which could weaken New Zealand's ability to innovate and compete
- » Lose critical knowledge and experience from the vocational education sector (for example ITO field staff uncertain about the future system might look for employment elsewhere)
- » Impact adversely on New Zealand's productivity and economy.

Conclusion

We see Competenz as integral to the co-creation of the 'new' system, and welcome the opportunity to co-design an effective, industry-centric vocational education system.

We acknowledge the current system is not working effectively, and we believe that through addressing funding issues, clarifying the roles of ITOs and ITPs, increasing standard setting, using common standards, and better enabling school transitions, the minister can transform New Zealand's vocational education system. In doing this he will raise the profile and integral value of vocational education and the careers it pathways into. Through this transformation we are confident that New Zealand will have a strong performing, seamless and highly valued vocational education system that addresses industrial, social, regional and community needs.

https://conversation.education.govt.nz/assets/RoVE/Reform-of-Vocational-Education-Consultation-Discussion-Document.pdf,

Section 1: Transforming the system: An alternative

There is much in the current system that needs to be strengthened, tested and evaluated before embarking on such major reform. Most of the challenges can be addressed and corrected in a staged and prioritised way without radical structural change.

An effective vocational education system is industry and employer-led, with Māori engaged as the Treaty partner. Any change needs to be made with these groups at the centre. The system is not a single organisation – it is a well-functioning 'ecosystem' where providers, ITOs, iwi, community groups and central and local government agencies actively collaborate for the benefit of New Zealand and its economy. Its purpose is to deliver on the vision and mission of vocational education for New Zealand.

In developing our alternative response, we have recommended that the **functions** of ITOs and ITPs are strengthened to enable more collaboration and best meet stakeholders needs. For the purposes of discussion, we have retained the names of the existing entities, but their titles should best reflect the function they are performing. ITOs and ITPs have distinct roles in workplace-based training or institutional training. The system should leverage their core strengths to meet employer and learner outcomes.

We strongly urge the minister to:

- » Create a more coherent system through consolidating the ITP sector; better aligning ITO sector coverage (including consolidation as necessary); replicating strong performance currently present across the entire system; clarifying roles and responsibilities; and creating a collaborative governance structure
- » Enable consistent standard setting, implementation and quality assurance across the system, and fund this appropriately
- » Implement a unified funding system to support training delivery or arrangement, as well as better support learners with high needs, regional isolation and/or specific training interventions
- » Strengthen connections across the system, especially into schools.

We have summarised the above into two graphics. **Figure 1** presents the value chain of the vocational education system. Our proposed structure acknowledges that all parts of the system are interdependent, and that any system reform should enable a more coherent, agile and collaborative system, while making it easier for learners and employers to navigate and understand.

Figure 1: Creating a coherent vocational education system

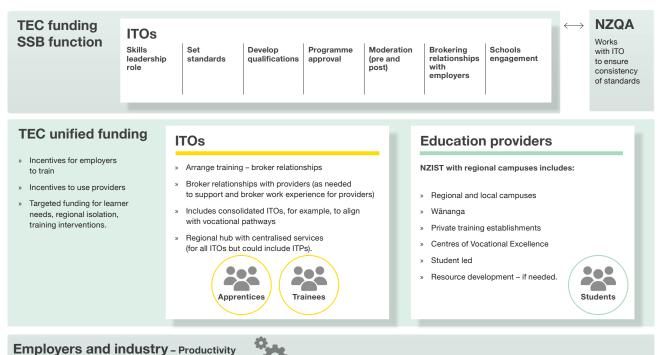
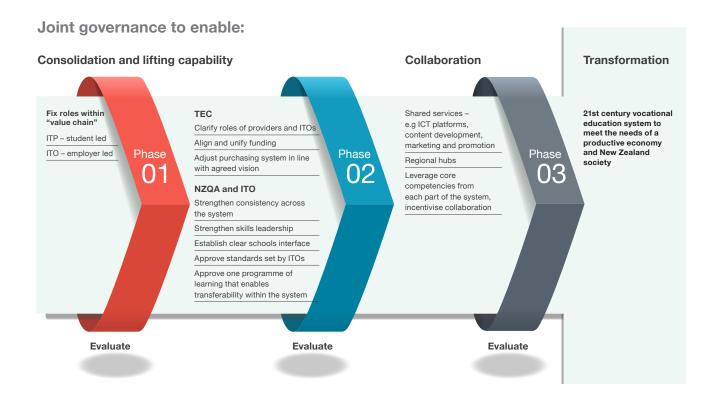


Figure 2 below provides a schematic of the transformation roadmap, with illustrative timeframes. Please note that the timeline is purely illustrative to help identify the specific activities that need to happen to transform the system. Our expectation is that we would be an integral participant in the formal co-design and co-creation of any transformation plan.

Figure 2: Roadmap to transforming New Zealand's vocational education system



Roadmap to transformation: Illustrative timeline for implementation

O Jan 2020	O Jan 2021	O Jan 2022	O Jan 2023	O Jan 2024	O Jan 2025	
Establish NZIST	Rationalise regional campuses and build capability					
Further cons	olidation of ITOs, ft capability					
	Skills leadership					
Establish joint council – ITO/ITP	Develop NZ vocational education, vision and strategy)				
	Develop and oversee joint workplan across VE sector					
	Shared services – IT platforms, specialised education/capability, schools marketing and promotion, regional hubs					
	Establish clear schools interface	е				
	Leverage core co - incentivise coll	Leverage core competencies from each part of the system – incentivise collaboration				
TEC – clarify roles of providers and ITOs		New investment punder unified fund				
	Develop unified funding model					
NZQA/ITO – strengthen consistency across the system and design the rules		Phasing of new st across VE sector	tandards (including qualifications	and programmes)		

1. Creating a coherent system

Sector and system reform can be achieved by retaining and strengthening existing ITO and ITP functions and without dismantling the current structure.

Consolidating ITPs and ITOs

We support the objective to address the financial instability of the ITP sector through rationalisation or consolidation, including infrastructure and campuses. A regional focus is paramount to the success of this. We also recommend that ITPs and other TEOs retain responsibility for supporting their students (local and/or international) and remove the competition between these entities.

We see an opportunity to consolidate the ITO sector and ensure ITO gazetted coverage is more strategically aligned (for example to the six vocational pathways). Our stakeholders have reinforced frustration at having to engage with more than one ITO, and more strategic coverage alignment should address this. We have no fixed view on a specific number of ITOs.

We recommend that ITOs:

- » Continue to be industry-owned and retain the fiveyearly re-recognition process
- » Continue to work with industry (including employers and learners) and TEOs to set the appropriate skills standards, develop qualifications and have a more active role in approving programmes
- » Develop training programmes and learning and assessment resources to support
- » Be recognised and funded for the skills leadership role they already perform, but extend it to include more in-depth research and investigation into employment forecasts, sector growth, international trends and best practice (including industrial trends and learning approaches), workforce development strategies, and cross-agency and TEO collaboration
- » Be more closely involved in approving all programmes to ensure they meet consistent standards
- » Continue to arrange training and broker provision as needed by an employer, learner or broader industry
- » Have a stronger connection to schools, iwi, Pasifika communities and other groups to help attract and recruit people into the sectors they support and ensure there are culturally appropriate and responsive approaches to vocational education.

Some of this will require change to legislation (adding in the skills leadership function), NZQA standard development and approval rules (qualification, programme and unit standard/assessment standard), and TEC funding rules (see appendix 2). This is a necessary change to ensure the system is seamless and learners can move around it easily.

Collaborative governance

The governance structures of the rationalised ITPs and ITOs could generate and strengthen more seamless collaboration across the system and address some of the current challenges.

Each ITP and ITO would have its own governance structure that would include industry, iwi and other stakeholder representation as needed.

While consolidating ITOs would reduce the ability for all industry sectors to be represented at the governance level, industry advisory boards could be established to ensure each sector had strategic input into the direction of the ITO (regional and industry advisory groups exist today, so could be reformed and refocused to align to the new composition of ITOs and ITPs).

Competenz is a current example of how this effectively operates. Our skills-based Board provides overarching governance and strategic direction, while our senior leadership team, management and staff engage with industry. This ensures all sectors have a voice at all levels of the organisation and we can respond quickly to workforce development needs.

Vocational Education Council

We recommend a Vocational Education Council is formed to oversee the sector's performance and the strategic transformation programme, and be the government's primary advisor. The council would comprise all ITO chairs and meet periodically each year with the New Zealand Institute of Skills and Technology Council.

All council representatives would be bound by a collaborative governance charter. In addition to its responsibility to oversee the vision, performance and transformation of the vocational education sector, the council would also determine an agreed set of collaborative initiatives to strengthen sector visibility, viability and performance.

Regional hubs and shared services

We agree that efficiencies can be made to how ITOs and ITPs (and other TEOs) operate. We see value in sharing some services at a national level (for example ICT platforms, learning management systems, marketing and promotion functions, some content development) and regional level (for example shared ITO office space in the regions). We would expect to see a detailed cost analysis, with expected returns on investment, before any services are centralised.

Regional hubs could be established and physically house all regional ITO staff to become the one-stop-shop for vocational education. Regional hubs could also be the main contact point for schools and providers, and offer recruitment and job brokerage services.

They could also be the primary links to local and regional economic development agencies, iwi and community groups, and other relevant organisations as needed by that region.

Supporting learners

Industry training is employer-led. An employer determines whether or not they want their employees to be formally trained and recognised to national standards. ITOs are best placed to continue to support those in employment with workplace-based training to obtain formal qualifications, partnering or brokering relationships with relevant providers as needed. ITOs already have the skills, capability and expertise to work with New Zealand businesses and retaining this function would ensure critical continuity in the system at a time of rapid industrial change and labour shortages.

ITPs and other providers have a special set of expertise to support students on campus, but highly variable expertise in supporting and integrating workplace learning into their delivery. It is critical that ITP-based vocational education is aligned to employer requirements. Therefore, we would encourage ITPs to broker ITO services to arrange work placements and work experience.

2. Enabling consistent standard setting

Enabling consistent standard setting, implementation and quality assurance across the system will ensure learners can move seamlessly across all vocational TEOs.

To achieve this, we recommend that standard setting and related activities are funded separately to training arrangement and delivery (see figure 1). This will ensure there is no conflict of interest in setting the skills standards and arranging training.

This approach builds on the success of the status quo, which is supported by industry. It also ensures graduates will be fit-for-purpose and meet the needs of industry and employers, regardless of where they were enrolled. All TEOs, stakeholders and the government would have confidence that all vocational training is valued and aligned to industry needs.

Mandate consistent standards across programmes

Following the Targeted Review of Qualifications (TRoQ) process, two forms of programmes leading to a qualification were established:

- Programmes of Industry Training developed by ITOs that use unit standards to meet industry needs and funding rules
- 2. Programmes of Study developed by providers that could use unit standards or develop separate standards to meet the qualification outcomes.

The intent was that any inconsistency in programme outcomes would be addressed through NZQA-mandated 'consistency reviews' to ensure all programmes met the qualification outcomes.

However, it has become confusing for learners needing to move around the system, and for employers seeking to employ people that have achieved non-unit standardbased programmes.

More prescription of the programme detail in the qualification document would work to address the issues of inconsistency and confusion.

The same standards provide a consistent platform

It is essential that all learners, regardless of their learning environment, are learning and achieving to consistent standards. Unit standards could provide that platform and be a relatively clear transition for the sector. Having standards in the same 'currency' enables transparency and transferability in learning.

Moving to a single consistent standard is a significant reform of a relatively new system, and would take years to embed (see figure 2).

Cost of transition needs to be considered

The government needs to be mindful of any changes to the form and processes for standard development and the sector's transition to these. As with the TRoQ process, it will be a significantly expensive exercise, with an expectation the government would bear most of the cost, to ensure the system is using a consistent set of standards.

3. Unified funding and how it could work

We support the intention to unify funding for all learners, regardless of whether they engage with an ITO or ITP. The funding needs to incentivise the use of ITPs (or other providers) where necessary and appropriate, but not disadvantage those sectors that have no need to engage with a provider.

ITOs should be able to purchase effective off-job training at the right price, and ITPs should broker services from ITOs to support work placements and work experience. In removing the conflict within the funding, ITOs and ITPs can be incentivised to work together, leveraging each other's strengths to best meet learner, employer and industry needs.

The funding also needs to incentivise more employers to engage in the formal vocational education system. There are many reasons why employers do not engage in the system. Some cannot engage in the system due to budget constraints, or limited infrastructure/personnel to support learners due to their micro size. Business cycles can make it difficult to integrate formal training due to TEC rules, and low staff turnover means that formal training is not always needed until new staff come on board.

Principles of unified funding

We have developed a comprehensive set of principles that a unified funding system should recognise. These are:

- Incentivise more employers to engage: Incentives could be used to encourage more employers to engage in the formal vocational education system. Incentives could include industry training levies, extra tax deductions for approved training expenses and employer subsidies.
- 2. Recognise the investment employers already make to industry training: Most of the training provided in the industry training model is delivered by employers. There is a significant cost to employers in providing this, through direct training and supervision costs, industry cash contributions and lost productivity. This must be recognised in the funding.
- 3. The level of funding must be sufficient to support quality education and training, and reflect the true and genuine cost of training: Training costs vary significantly depending on the levels of technology and equipment required and the staff to learner ratio required to ensure health and safety and to provide effective training. It is critical that the funding to support or deliver training reflects the true cost.

- 4. Fund strategically important delivery to meet all learner needs: Any unified funding model should recognise the increased training and support costs required to enable all learners to succeed, regardless of learning ability, location or demographic background.
- Base funding needs to reflect the fixed cost of ITO and ITP operation.
- 6. Funding for standard setting must be separate to training funding: Funding for standard setting and quality assurance must be separate to funding for delivering or supporting training. This component should recognise the development and maintenance of standards, involvement in assessment, moderation, programme approval and any future consistency assurance model. This will ensure there is no conflict of interest between standard setting and arranging training.

4. Strengthening connections across the system, especially into schools

One of the current challenges in the system that has not been mentioned in the proposal is the transition from school to further education or employment. Vocational education is generally held in lower esteem relative to university pathways, and there is a perception from industry stakeholders that schools, especially, generally overlook vocational education promotion.

Extending existing initiatives and collaboration

A number of ITO-led initiatives have been implemented in recent years to raise the value and profile of vocational careers. The most notable and successful is the annual *Got a Trade? Got it Made!* campaign, a collaboration across ITOs.

Research commissioned by Ako Aotearoa in 2017 sought to better understand women in trades, explore how trades should be promoted to women, and what sort of support employers and women might need. It was a genuinely collaborative and effective initiative between a range of ITOs, ITPs, Māori and Pasifika Trades Training (MPTT) and other TEOs.

These two examples have been done within the existing funding mechanisms. Greater impact could be achieved through more targeted funding, perhaps via the TEC's Careers New Zealand function.

Strengthening professional development for educators

We recommend substantially increasing investment in teachers' professional development to help them understand the range of vocational careers that could be promoted within the school curriculum. Gateway funding could be strengthened and focused to give schools more guidance on and exposure to vocational pathways. Parents and teachers will always be the primary influencers on a school student's direction. Our stakeholders, especially employers, are highly committed to providing support to help promote their trade and the varied careers within it.

ITOs can lead schools engagement

There is an opportunity to strengthen ITO engagement with schools, whereby ITOs lead schools' engagement on behalf of their industries. This could be achieved through regional hubs, where they take the lead on promoting vocational careers and brokering employment.

There is also an opportunity for greater flexibility for work integrated programmes from school, with ITOs brokering relationships with employers. Linked to the skills leadership role within this model, ITOs could work with schools to directly contribute to the skills pipelines required by industries. TEOs could join forces and combine resources to promote vocational education as a pathway to a range of respected and viable careers.

Section 2: Proposal evaluation

In preparing our response, we have objectively analysed the proposal in a number of forums with a range of stakeholders. Our Board, senior leadership team, staff and, most critically, more than 1,000 industry stakeholders have all reviewed the proposal to identify its strengths, weaknesses, risks, opportunities and areas of ambiguity. Our lens has been "to ensure that the vocational education system enables New Zealand to maximise its productivity, and strengthen social and economic prosperity".

Reform proposal 1: Redefining the roles of ITOs

To address the challenges outlined on pages 16 and 17 of the consultation document, the minister has proposed to **Redefine the roles of education providers and ITOs**, and extend the leadership role of industry and employers across all vocational education through new Industry Skills Bodies.

Overall, we **do not support** separating core ITO functions into two different organisations through the creation of Industry Skills Bodies (ISBs) and the New Zealand Institute of Skills and Technology (NZIST). Standard setting relies on access to industry experts – including industry specialists as well as current users of the system – to ensure the standards meet current and future needs.

Designing effective standards relies on a critical understanding of how and where training will be delivered and assessed. We do this through close collaboration with relevant providers (including ITPs and PTEs), industry experts, regulators, employers and (prospective) learners. This ensures there is clarity and alignment with education and career pathways.

Extending the skills leadership function is supported

We support formally recognising and funding the industry skills standards setting bodies for skills leadership.

Setting consistent standards is supported

Our strong links between working with industry stakeholders to set the skills standards and our detailed understanding of workplace requirements enables us to ensure the standards meet current and future needs.

The "feedback loops" of having industry bodies arrange training, as seen in the New Zealand ITO model, succeed where the skills councils of Canada, Australia and UK have been less effective. We believe that arranging training and setting the skills standards is integral to understanding industry needs.

NZIST may add an additional layer of complexity to setting standards

The disconnect between determining industry requirements and setting suitable standards, and what is potentially delivered through an ITP structure and a myriad of other tertiary education providers, would add an additional level of bureaucracy for industry and employers to navigate.

Industry stakeholders felt their ability to influence training would be lost, and that there would be a loss of specialisation and support for niche industries that don't currently use an ITP. In addition, stakeholders see a risk that this system with split functions would become too slow to respond to employers' needs.

Consistent programmes could address confusion and complexity

We support consistency of qualifications and programmes for vocational education regardless of where delivery happens. The advantage to the learner is clear: a common currency of learning allows learners to transfer employers, regions or providers with a seamless system for transferring credits. This could be implemented now with changes to the qualification development and programme approval rules, and would not need to result in dismantling the ITO sector.

Removing arranging training functions not supported

We do not support the removal of the arranging training function from ITOs to the NZIST. Arranging training is a critical and essential function to ensuring learner success. For Competenz arranging training includes:

- » Undertaking comprehensive needs analyses to understand a business's 'whole of workforce' development needs (no matter what the business size) to determine and advise on the most effective educational pathways for their employees
- Working with employers and new learners to understand their readiness to engage in formal education as well as outlining expectations – this includes ensuring the learner understands what is expected of them to complete their training programme; ensuring employers and workplace supervisors understand their commitment and role in ensuring their learner succeeds, and outlining the role of the ITO (and other TEOs and industry specialists that might need to support training)
- » Ensuring the learner has access to the right tools and equipment to complete their programme (this includes ensuring they have the literacy and numeracy skills, and if not, providing pathways to develop them)
- » Arranging any external training relevant to the learner's programme and workplace
- » Using considerable knowledge of the various approaches applied in other workplaces to ensure the training solution is tailored to meet specific business needs
- Pastoral care and support, which includes: providing advice and guidance for learners; on-job evidence collection; providing advice to employers on work requirements to enable learners to complete their learning; upskilling employers to provide the right support for their learners; partnering with other employers to help learners complete qualifications if their workplace is not able to meet the full requirements of the qualification; developing and maintaining networks of contract assessors; providing assessment services where required; and promoting and recruiting apprentices
- » Supporting workplace assessors, registration and development/refresher programmes.

The ITO structure is working, so let's strengthen that

Industry is central to our current operation and is best placed to determine its own needs. We firmly believe that ITOs – being industry led and owned – are best placed to work with employers on the training arrangements that suit their needs (refer to appendix 1 for a summary of the range of models we have developed to support employer and industry needs).

Most fundamentally, our field staff and support staff have strong industry experience, knowledge and relationships. They intricately understand New Zealand workplaces and how to best support, coach and mentor learners and employers through their training programme. Dismantling the ITO system would significantly disrupt this.

Employer-led and campus-based learning are two very different things

Industry training is employer-led. The current ITO system is flexible and ensures the right support and training model is applied to best meet an employer's and their learners' needs. Employers also make the decision for when their staff are ready for formal training via the ITO, and the ITO can immediately respond.

Philosophically and culturally on-the-job training is very different to campus-based learning, and our stakeholders believe that it is dangerous and untested to combine them.

Employers are nervous that apprentice and workplace-based training will become academic-led rather than industry-led, and that valued relationships will be lost. They are concerned the ITP sector would offer programmes that meet its own needs rather than the needs of industry, which are paramount. There is also concern that the NZIST would be run by a semester timetable rather than be responsive like the ITO model.

In addition, most sectors supported by Competenz do not currently work with an ITP, and many complete their training entirely on-the-job. Would these sectors be 'forced' to engage with an ITP? How would this be responsive to their needs?

Sectors such as engineering that have a long history of working with ITPs feel that the proposed arrangement may increase the time away from work, increasing the cost and reducing productivity for employers.

"At present our apprentices are learning while they make the company money. If they are learning offsite whilst being employed by the company, the employer will ultimately lose out as they are paying the trainee's wage without making any recovery for that wage being paid."

Engineering employer, Auckland

Crucially, industry and employers want learning to happen on-the-job in real workplaces so that learners gain skills directly relevant to employment and productivity. Small employers with varying scope of work need tailored arrangements, including all on-the-job options.

"Polytechs don't have the resources to deliver to smaller trades like retail meat, boat building and carpet laying. [They] also don't have the resources to deliver to large industries like meat processing and poultry. You can't teach meat workers, carpet layers and retail butchers to do their jobs in a classroom, they need a real workplace to learn their trade. Polytechs do not have the skill to deliver this."

Industry association

Changing the culture and capability of the vocational education system will take years to implement, adding to the potential disruption already inferred by other facets of this proposal. This will risk overall engagement with the system and how responsive the system will truly be to meeting industry, employer and learner needs.

Pastoral care by an expert is essential

Workplace and learner support is critical to maximise learner success. Our stakeholders feel that is well provided for through the ITO sector.

There is widespread concern that the pastoral care of workplace-based learners will suffer if the responsibility for their training and support falls under the ITP system that does not have a relationship management culture or infrastructure. Polytechnics do not have a culture of working with employers. It is also incorrect for the minister to assume that current ITO staff will transfer to the NZIST. Our staff are not currently employed by the public system so will not automatically be transferred to the NZIST. A number of our staff have already indicated that they do not see working within this new structure as an attractive option for employment.

Reform proposal 2: Creating a central institution to oversee all training

Overall we see merit in rationalising the polytechnic sector to strengthen financial performance and regional focus, however, it is unclear how centralising all 16 ITPs into a single entity will ensure the long-term viability of the vocational education sector. We are also not convinced that adding the (approximately) 145,000 learners currently supported by ITOs into the polytechnic system will address the financial sustainability.

ITOs receive approximately a tenth of the funding that is invested in the ITP sector, operate with a tenth of the staff, and support at least 30,000 more learners than other vocational providers – learners that are already in work and directly contributing to the New Zealand economy.

The polytechnic sector clearly serves a valued purpose, especially for those outside of the workforce, but it has significant infrastructure overheads, with only 13% utilisation⁴, and other operational complexities (such as management structures) that need to be financially maintained. These challenges clearly demonstrate the need to rationalise campuses and ITP infrastructure.

Centralising could be too 'one-size-fits-all'

The minister's proposal states that the NZIST would have a national office and governing council (appointed by the minister) that would drive regional performance and support a strong regional voice. We would like to further understand how this model will work to truly respond to regional imperatives and local employers' needs, as well as create genuine efficiencies in the sector.

Regardless of where national office functions might be located, employers are concerned that centralisation will result in a "one-size-fits-all" approach across the ITP sector, and that the voice and influence of industry will be lost. A central body would be less nimble, less agile and therefore less responsive to employers and industry.

Clarity needed on how the proposed Regional Leadership Groups will work

While we acknowledge the need for stronger regional connections, we are not clear how the proposed Regional Leadership Groups will work and how they would interact with the proposed ISBs. We see a risk of duplicating national and regional standard setting. There is also a risk of duplicating the involvement of industry subject matter experts, especially when most industries operate across the country.

Industry stakeholders' time is both highly valuable and limited, and there is a risk of burdening industry experts for little gain, especially for those that have low to no involvement with ITPs currently. In addition, industry needs are largely national needs, with some regional nuances. Our industry association stakeholders especially see these groups as duplicating effort and consuming valuable time and resource for little benefit.

Stakeholders also identified that the voice of the proposed Regional Leadership Groups would not be heard by the NZIST national office, and so the required regional focus would not be effective.

Niche sectors could be overlooked

Competenz supports a range of industries, all of which have similar yet unique characteristics. The overwhelming majority of our industries do not engage with the ITP sector. There is simply no need to or no appetite from the ITP sector due to the niche characteristics of the sectors, and comparatively smaller learner numbers.

It is not clear how the niche sectors would be supported by the NZIST, especially for those sectors that complete all training on-the-job and do not use an ITP currently. Similarly, we have a range of large, national employers that we have created tailored solutions for, and it is not clear how these organisations would engage with the NZIST at either a regional or national level.

⁴ This was stated by TEC at our official consultation engagement on 20 March 2019.

We also support forestry, one of the most diverse and regionally isolated sectors. The training needs to be tailored to support learners one-to-one, strengthen literacy and numeracy, and contend with various sociodemographic factors. Managing training and the specific pastoral care through a single ITP will be challenging to ensure it meets all learners' needs (appendix 4).

Stakeholders note that the shift to a single TAFE system in Australia has not worked for industry or employers as niche industries have been side-lined in favour of a revenue-earning, big-business focus. Four years ago the ten publicly-funded TAFEs in New South Wales were similarly merged into one. Enrolment and attendance records were lost. Last year, that TAFE lost AUD\$240 million, and \$55 million the year before that.

Apprenticeship completions have halved in New South Wales, from 55,000 to 25,000 since 2014. One of our multinational customers working in the wood manufacturing and engineering sectors is significantly troubled by this proposal. They perceive it to be similar to what has occurred in Australia, and it is not working for their Australian business. In fact, they are currently exploring how they could implement in Australia what Competenz does for them in New Zealand. They fear this proposal will halt valuable workplace-based training in both countries.

Vocational education must keep pace with industrial change

There is concern that a centralised institution would not have the ability to anticipate or respond to the rapidly changing nature of industry. The sectors we support are at the forefront of industrial change, and ITOs can react quickly to changes and advances in technology. Our industry partnerships also enable us to align training to workplaces where the technology is being implemented. It is unrealistic to assume that an institution would be able to invest in the required equipment to sufficiently teach learners.

Lifelong learning and reskilling across entire sectors is a central principle of vocational education and the system and structural design needs to reflect that. Local and international research all notes that the majority of employers believe the most effective way of learning new skills and responding to the current industrial revolution (Industry 4.0) is through on-job and workplace learning.⁵ ITOs with their current capability are best placed to support this and ensure continuity.

In addition, the system needs to be flexible and responsive to anticipate the rapid advancement in technologies. NZQA systems, processes and policies need to be considerably reviewed and streamlined to enable and support a responsive vocational education sector and system. For example, it can take at least 18 months to two years to have qualifications and training programmes approved by NZQA due to its development criteria and approval processes.

CoVEs sound interesting, but more information is needed

In principle we support the notion and creation of specialist Centres of Vocational Excellence (CoVEs). CoVEs might have the ability to invest in specialist technology or equipment to enable specialist training in a particular vocation or industry, or develop specialist training capability. We see that CoVEs could be existing PTEs that have specialist areas of focus, and we would encourage that CoVEs are 'mobile' rather than bricks-and-mortar to meet the in-work demands of industry. However, there is very little detail provided in the consultation document to be able to fully respond.

Role of PTEs and ATNZ unclear

Currently, we contract a variety of PTEs to deliver specialist training for apprentices and workplace-based learners. Our stakeholders note that there is no clarity within the consultation documentation regarding the role of PTEs. Stakeholders would not want to see the valuable role of PTEs lost or purchasing decisions favouring the NZIST over PTEs.

The impact on group training schemes is unclear. Apprentice Training New Zealand (ATNZ) – employer of close to 400 apprentices in a group scheme – appears to have been overlooked in the government's proposal. We see group schemes as a valuable part of the system that should be strengthened.

⁵ See <u>Getting ready of the future of work</u> and the <u>skills shift needed</u> as examples.

Centralising online learning through the Open Polytechnic

The proposal suggests that online learning across the system will be centralised into the Open Polytechnic. We are unclear of the benefits of this, and see a key risk of stifling innovation.

Effective online learning is typically a blended learning solution that incorporates on-job and/or off-job training to create a seamless, coherent and relevant learning experience. We know TEOs have greater experience and capability in this area and are currently delivering highly effective vocational education outcomes.

ITOs and ITPs currently deliver online learning successfully and the purpose of removing autonomy and flexibility around this provision has not been articulated in the consultation documentation. Industry has also raised questions about intellectual property rights over current learning and assessment materials, and how these would be recognised in a shift of 'ownership'.

Learning Management System (LMS)

We have invested in our own LMS to support our learners – Canvas, an internationally recognised platform. The proposal suggests that I-Qualify may be selected as an LMS to be used across the vocational education system (or at least across the NZIST). Some rationalisation in LMSs may achieve financial savings and reduce some duplication in administration, but the extent of this will depend on the ongoing development and licensing costs.

More importantly, whatever system is adopted must support effective learning, have robust security and stability, and offer intuitive functionality that can readily be adopted by learners, tutors, assessors and administrators.

The transition to a single system will be expensive, time consuming and problematic. The ministry will need to carefully plan and sufficiently resource any transition, and ensure it provides genuine benefit to users.

Reform proposal 3: Create a unified funding system

We entirely support the proposal to *Create a unified vocational education funding system*, *removing barriers to collaboration and flexibility, and ensuring a sustainable network of provision*. Refer to Section 1: 3. Unified funding and how it could work on page 11.

Support for targeted funding

We are in complete support of specialist and/or targeted funding to best support those learners who need it. We work with a range of learners and being able to access targeted funding would be of huge benefit to them, their workplace, their broader family and community. Access to additional funding to support literacy and numeracy development, specialist support (such as whanau-based support), and account for remote or regionally isolated training (for example in the forestry sector) would further benefit industry training and strengthen learner outcomes.

Section 3: The risk of a poorly executed reform

Given the uncertainty surrounding the reform – specifically what the reform is trying to achieve; how the proposed 'restructure' of the system will achieve this; when this reform will be implemented and over what time period; and how much this will cost in terms of taxpayer dollars, time, loss of productivity and GDP – we have identified a number of critical risks that we urge the minister to consider and respond to before proceeding further.

High level risk analysis

There is considerable social and economic risk if the proposal is adopted in its entirety and implementation is ineffective (for example, undue haste leads to a poorly constructed outcome, the process takes much longer than anticipated, the change doesn't account for all stakeholders/sectors/forms of vocational educational and causes significant disruption to workplace training, and loses focus on vulnerable, targeted learners).

With no genuine co-design of this proposal with industry and other impacted stakeholders, no modelling or suggestion of alternatives in the consultation documentation, no financial modelling, no clear problem definition⁶ or measures of success, no comprehensive risk assessment and analysis by the government, there is considerable risk to getting the system structure, design and operation wrong.

Incorrect implementation is highly likely to undermine the vocational education system and its public perception – something officials highlighted as critical to addressing. Employers have unanimously advised that they are uncertain of the changes and how the changes will impact their business. They have also told us of the risk of disengaging from a system that is largely working well at a critical time when they urgently need to upskill and reskill existing staff and attract new labour.

The proposed reform risks the system becoming unresponsive to the fast-changing nature of work, which in turn could impact on New Zealand's ability to innovate and compete globally. The social consequences of getting this wrong are also high. Vocational education develops technical and transferrable skills. These transferrable skills not only transfer vocations, but to all facets of daily life. Low engagement in formal education can impact effective community participation and overall social and economic wellbeing.

We risk losing highly experienced people during this period of uncertainty

Our staff and their retention will be critical to ensuring a smooth transition, whatever the new vocational education system looks like. The lack of detailed information in the proposal, specifically as it relates to implementation and transition timeframes, has been of specific concern to our 190 staff.

More than half of our staff have expressed specific concerns around job security and, therefore, family security – the ambiguity of the proposal and presumption that field staff, in particular, can transfer across to the new institute is not endorsed by many of our staff. Our stakeholders have also emphasised that a critical risk is loss of relationships and knowledge from the ITO sector, while clarity of the new system is being confirmed.

We request that the minister and his officials provide an indicative timeline for when he expects to reach his decision and then a detailed implementation plan. Our people need assurance that any changes will be considered and not 'sprung' on them with limited time to prepare, respond and, if appropriate, seek alternative work.

In addition, should this proposal be implemented in its current form, we request the government funds appropriate retention strategies to encourage staff to continue in employment through the period of transition and budget accordingly, to mitigate the specific risk of losing critical staff and continuity for our learners and employers. All other transitional and termination costs imposed on the ITO sector also need to be covered by the government.

⁶ Note this is despite a promise made by MOE and TEC officials at an MOE/TEC-led ITO consultation session on 7 March 2019 to provide a succinct 'one-pager' of the problem the minister was trying to solve. A commitment was made to provide this as soon after the engagement session as possible. Disappointingly, this was received on 2 April 2019.

Appendices

Appendix 1 - About Competenz

Competenz is a multi-sector industry training organisation (ITO). Our industries include engineering, manufacturing, forestry, food and beverage, printing, transport, laundry and dry-cleaning, and textiles. Our 190 staff set the skills standards for these sectors, arrange on-the-job training, broker off-job training as required, and design workforce development solutions to help businesses grow their workforce capability.

Owned by our industries, we are responsible for setting the standards for qualifications in 37 sectors, and support more than 20,000 apprentices and trainees and 3,500 businesses nationwide.

We have Standard Setting Body (SSB) responsibility for 128 qualifications and 3,330 unit standards, are accredited for over 120 Programmes of Industry Training, have 6,686 physical learning and/or assessment resource items and 1,242 online unit standards or course material available to support training and assessment.

Collectively, across all of our industries7:

- » 235,055 people are employed (10% of the New Zealand workforce).
- » Of the approximately 138,000 people employed in the occupations aligned to the qualifications we support (i.e. those most likely to engage in vocational education), 18% are engaged with Competenz. Employee engagement varies depending on the occupation, prior educational experience, and business size, etc.
- » Compared to New Zealand's workforce overall, our sectors are slightly older, male, more ethnically diverse – 12% Māori and 8% Pasifika, and less likely to have a post-school qualification (this does not conform with the notion in the proposal that New Zealand's workforce is generally over-qualified).
- » The overwhelming majority of businesses across Competenz's sectors are micro to small sized, with fewer than ten employees. When looking at sector business size composition, we generally find that engagement in formal vocational education tends to be stronger in larger companies, whereby they have the internal infrastructure and dedicated personnel to integrate and invest in training.

- » Our employers and learners work in some of the most urban and some of the most regionally isolated areas in the country.
- » The majority of workers in the sectors we support are classified as low skilled – those most likely to be impacted by the current industrial revolution (Industry 4.0) and those most likely to have literacy and numeracy and/or socio-demographic challenges.
- » Earning potentials vary those that have completed an engineering or related apprenticeship tend to out-earn those that complete an academic degree. Those that work in processing roles tend to be on a lower wage.
- » Our sectors contribute 10% to New Zealand's GDP and are considered "productive" contributing over \$100,000 per FTE.
- » Our sectors are growing and needing to find new people for new roles, as well as replace those leaving the workforce (mostly due to retirement) – there is a projected 5-6% growth forecast annually for the next six years.
- » Māori and Pasifika learners achieve at similar rates compared to non-Māori and non-Pasifika learners, with educational performance increasing over the last four years.

The considerable diversity across and within our sectors means that we tailor our training solutions and pastoral care to a sector's, employer's and/or learner's needs. There is no single solution, but broadly four different support options to ensure our learners and employers have the greatest chance of success (Table 1).

⁷ Infometrics, 2019. Business demographic data are from 2018; social demographic data are based on 2013 census.

Detailed gazetted

Broader sector	Detailed coverage			
Engineering	» Mechanical engineering, including fitting and machining, general engineering, metal casting, and tool making			
	» Engineering fabrication, including heavy and light fabrication and steel construction, and excluding boat building			
	» Locksmithing and gunsmithing			
	» Lift and escalator servicing			
	» Mechanical building services (formerly known as heating, ventilation and air conditioning services)			
	» Refrigeration and air conditioning			
	» Fire protection systems, including fire detection and protection systems and equipment.			
Biosecurity	» Biosecurity industry, including border quarantine activities			
Journalism	» Journalism, including print, publishing (newspaper, periodical, book, directory), radio, television and digital media			
Print, packaging and	» Printing production, including printing and printing support services			
signmaking	» Graphic design, marketing and digital communications			
	» Signmaking, including signwriting and sign erection.			
Protective coatings	» Protective coatings, industrial coatings, abrasive blasting, sand blasting.			
Forklift	» Forklift.			
Transport	» Rail operations and infrastructure, including rail passenger and freight transport, but excluding dairy operations			
	» Maritime, including the operation of all civilian and Defence Force vessels, but excl. vessels whose primary purpose is commercial fishing.			
Forestry and wood manufacturing	» Forest industries, including forest establishment, forest nursery operation, silviculture and harvesting			
	» Wood manufacturing, including solid wood processing, wood panel manufacturing, pulp, paper, paperboard and fibreboard packaging manufacturing, and tissue converting			
	» Furniture manufacturing, including wooden, metal and upholstered furniture and bedding, and furniture (polishing).			
Food and beverage	» Food and beverage processing, including general food processing, poultry processing, alcoholic and non-alcoholic beverage processing (including wine production), and cigarette and tobacco product manufacturing, but excl. meat, seafood and dairy product manufacturing			
	» Baking, including craft and plant baking of bread, cake, pastry and biscuit products			
	» Retail meat, including butchery, cured meat and small goods manufacturing but excluding meat processing.			
Manufacturing	» General manufacturing, including steel manufacturing, chemical product manufacturing, cosmetics and toiletry preparation manufacturing, soap and other detergent manufacturing, paint, ink, resin and adhesives manufacturing, pharmaceutical manufacturing (excluding compounding of medicines in community and hospital pharmacies)			
	» Plastics processing, including basic polymer manufacturing and polymer manufacturing, but excluding tyre and adhesive products			
	» Glass and glass product manufacturing, including glass processing and engineering for glass blowing and bottle manufacturing			
	» Apparel and textile manufacturing, including clothing and footwear manufacturing, wool scouring, natural and synthetic textile manufacturing, textile product manufacturing (floor covering, cut and sewn products, and finishing) and knitted product manufacturing.			
Laundry and drycleaning	» Laundry and drycleaning services.			

Provider

- » For employers who don't have capacity or capability required to train staff
- » For employers who don't have a workplace assessor
- » Competenz pays the provider to complete training and assessment. Providers may also require employers to contribute towards costs associated with training and assessment or employers pay an external training provider to provide training and assessment
- » We assist with securing an appropriate training provider to deliver tailored on-the-job and off-the-job training programmes
- » Through our agreements we manage; the ongoing performance of learners, provide access to Competenz resources, and award the New Zealand Certificates upon successful completion
- » The provider ensures all trainees complete the programme within the required duration
- » We work with at least 23 different PTEs or industry training providers.

Elev8 (apprenticeship)

- » Employers hire, train and develop their own apprentices
- » A Competenz training advisor visits the workplace four times a year to support the apprentice's learning and ensure they complete their qualifications on time
- » Training advisors work with the apprentice to set targets and match jobs they have completed to unit standards
- » Training advisors check in with employers to check on progress and identify any areas that need improvement and co-ordinate block courses
- » Competenz charges companies an annual service fee for each apprentice, plus an amount towards the cost of off-job learning (like block courses) and learning resources
- » Competenz's training advisors complete assessment for learners in this model
- » Higher funding rate (\$5,200 per STM)
- » We also offer an option to use ATNZ where, e.g., an employer may not be able to employ an apprentice, or the apprentice needs a higher level of pastoral care and support.

Corporate

- » This model can be used for "Mapping Solutions"
- » Or workplace assessors can use our assessment guides and training material if mapping is not appropriate.
- » Where evidence of existing workplace training and assessment is aligned to a New Zealand Qualification
- » Training and Assessment is offered and delivered by employers and is mapped to the relevant qualification
- » The resulting gap analysis highlights opportunities where Competenz can work with employers to build a model that will allow for the full qualification requirements to be met.
- » Possible solutions can be from existing Competenz resource library of customised learning material
- » Where employers have appropriate technical skills and knowledge to deliver workplace training, we help appoint an appropriately expert staff member to an assessor role
- » We help employers determine the most appropriate mix of unit standards, and provide support and guidance for rolling out training programmes.
- » One of the ways Competenz is committed to supporting 'Corporate' employers is through funding allocated by the Tertiary Education Commission. A completion subsidy applies.

Contract assessor

- » Used where the employer has the appropriate technical skills and knowledge to deliver training but not the desire or capability to assess
- » Competenz source a contract assessor to confirm the competencies that the employer's in-house training delivers.
- » We work with approximately 160 contracted and workplace assessors across New Zealand.

Appendix 2 – NZQA and TEC changes that could enable transformation

The following table outlines a series of suggested changes that could be made to NZQA and TEC policies and procedures to enable system transformation, while limiting disruption to training and broader industry productivity.

Table 2: NZQA and TEC changes that could enable system transformation

Challenge	Underlying cause(s)	Proposed solution	
 Variability in learner competency ensuring qualifications develop the competency (knowledge, skills and behaviours) sought by employers. Employers not having clarity as to the competencies evidenced by a qualification. 	 » NZQA's requirements for post-TRoQ Qualification Outcome Statements do not allow sufficient prescription within qualifications to ensure that key competencies required by industry/employers are adequately defined. » Although relatively new, our experience with Consistency Reviews suggests that these will not be solely effective in providing assurance to employers/industry that specific competence standards have been achieved. 	 » NZQA redefine Qualification Listing requirements to ensure an appropriate level of prescription, so that the standards of competency expected by industry/employers are clearly stated in Qualifications. » The Standard Setting Body could approve programmes either under delegated authority from or in conjunction with NZQA (depending on whether they have industry skill expertise only or also broader expertise in programme/learning design). 	
» Learners not being able to readily transition between providers/delivery models and into/out of industry training	 Lack of clarity as to what a learner has previously achieved, necessitating complex and costly assessment to determine this. Current NZQA requirements mandating that the organisation receiving the learner undertake RPL but no funding being available to cover the cost of this. The cost then being prohibitive to learners/employers. Providers/ITOs wishing to optimise their funding/revenue by 'holding' learners. Current TEC performance metric methodology effectively penalising TEOs who manage successful transitions prior to qualification completion. 	 See above. Mandate/encourage the use of unit standards or perhaps a new form of competency standard (but as assessment and not curriculum tools) Evaluate organisational performance and self-assessment capability in RPL as mandatory within EERs and TEC audits. Provide a funding component to cover RPL assessment costs (perhaps within a base grant) Introduce an independent review function within NZQA where provider RPL decisions can be appealed (at TEO cost where decisions are not upheld). Adapt the funding/performance monitoring frameworks to recognise the desired transitions and remove the disincentives. 	
» Industry Training Organisations and Providers working competitively and not collaboratively	 Funding levels in Industry Training are insufficient to purchase quality off-job provision where needed, particularly in disciplines with high equipment and low student: tutor rates. TEC have consistently rejected proposed cooperative arrangements between providers and ITOs in SAC funded delivery. TEC not using their current ability through purchasing decisions (including Investment Planning) to manage overlapping/competitive provision. Off-job provision that may not be up to date with industry practice, technology or industry performance expectations, engaging for learners or delivered in modes or days/times to meet the needs of learners and their employers. Prescriptive approaches to assessment and moderation that have driven 'atomistic' approaches and inadequately recognised the validity/value of integrated and holistic assessment. 	 A funding system that adequately reflects the varying cost of effective education and training by discipline (something like existing SAC funding differentials) Modifying purchasing/investment planning so approaches so that they are more informed by data/evidence, more supportive of collaborative arrangements and more discerning in the quality of provision being purchased. Cross sector initiatives to develop assessment and moderation capability in the system along with focussed work to develop best practice models that can be aligned across the sector. 	
» Not enough employers engaging in industry training or supporting provider-led work integrated learning	 Inadequate recognition of the direct and indirect costs to the employer in providing training and/or training opportunities Inadequate recognition of the capability gap in many businesses to support workplace training 	 Funding model needs to better recognise the cost of training to employers and the inequity created by those who choose to free load. Funding model needs to better recognise the investment needed to build business capability 	

» No disincentives for those that avoid engaging in the

» Learning that is not designed to include work place elements or that is poorly designed/inadequately

supported.

system (and instead relying on freeloading off those

investment decisions.

» Incentivise delivery that includes work place elements

through the funding system and through purchasing/

Appendix 3 - Competenz consultation

Consultation

We must emphasise our disappointment in the limited amount of time allowed to consult on such a significant reform of New Zealand's vocational education system. While we accept the minister's personal assurance that this is a genuine consultation process, broad perception across industry is that this is not the case.

In order to ensure our submission represents the views of all of our stakeholders, we:

- » Initiated face-to-face meetings with industry associations, employers, training provider partners, schools and assessors
- » Facilitated two face-to-face workshops with industry stakeholders and employers (one in Dunedin and one in Auckland)
- » Jointly facilitated a face-to-face workshop with stakeholders from the Forest Industry Contractors Association (FICA)
- » Initiated a concise survey to all stakeholders and their networks with 781 responses
- » Facilitated workshops with our board, senior leadership team, and staff
- » Sent out communications to all learners and employers, encouraging them to 'have their say'
- » Sought feedback from learners as part of our regular pastoral care engagement.

We also:

- » Attended iwi and fono events, including those facilitated by the Ministry of Education
- » Attended community consultation events facilitated by the ministry
- » Participated in formal consultation events with the minister and ministry, including the Competenz-specific event on 20 March 2019.

We have directly engaged with over 1,000 stakeholders during the last six weeks, and regularly communicated to our extensive stakeholder network.

Proposal is too vague and consultation period too short

Industry and employer stakeholders have voiced their concern that the consultation process is being rushed through with a troublesome lack of industry voice. The proposals are too conceptual and without sufficient detail to engage stakeholders in meaningful dialogue. It is also clear that the role and function of ITOs is not well understood.

Stakeholders question why there was minimal and insufficient consultation with industry and employers to enable their input into drafting the proposals for reform. They are anxious that no-one is listening to their needs and priorities.

"Clearly the ministry has no intention of listening to industry's needs and wants. The six-week consultation period is completely insulting and purely to tick a box saying industry was consulted, but we don't have time to explore what options would support industry rather than risk it further."

CE, Industry Association

Of equal concern to industry and employers is that there is no learner voice to be found within the proposals. They question whether iwi, Pasifika communities and learners were asked what they want from a vocational education sector.

The reform needs to address industry needs

The overarching sentiment in the feedback from our stakeholders is one of concern. They are concerned that the proposed reform will result in significant change that won't actually address their needs, especially those of industry, employers and learners (current and prospective), at a critical time.

They are confused as to why ITOs have been included in the reform when they are performing well and meeting the needs of stakeholders. They are confused by the complexity of the reform and how each part of the proposed reform is meant to interact.

Most critically, they are perplexed as to why the fundamental reasons for the reform cannot be addressed through correcting failures within the current system. Any change to the vocational system needs to be industry-led to ensure it aligns to employers' current and future needs.

Stakeholder consultation summaries

Feedback from all of our stakeholder engagement is summarised below. It is important to note that this feedback reflects our stakeholders' perceptions and understanding of the proposal.

Competenz survey results

- » More than 780 people participated in our concise survey to understand stakeholder views on the proposed reform.
- » 79% do NOT support disbanding ITOs.
- » 78% do NOT support workplace training being managed by a centralised institution.
- » 68% disagree with the statement 'a new centralised polytechnic is good for the industry'.
- » 66% disagree with the statement 'dealing with a new centralised polytechnic will make it easier for employers to access workplace training'.
- » 70% agree with the statement 'the proposed changes will weaken industry-led training'.
- » 72% agree with the statement 'the proposed changes will bring uncertainty for employers on how training will work'.
- » 60% agree that the changes will make the skills shortage worse for industry.
- » 57% said they were unlikely to enrol staff into industry training (or would enrol fewer staff) under the proposed system.

The consultation process

- » The government has not consulted with industry and employers prior to 13 February 2019, there was no opportunity for Competenz stakeholders to voice their needs; the process has felt rushed.
- » The proposal is too conceptual and lacks detail.
- » What about the voice of apprentices and trainees have they been asked for feedback?

How the reform could affect their business

- » The proposal risks disrupting a system that is currently working.
- » It could result in a loss of knowledge and capability by disengaging industry (and employers) and losing highly experienced and regarded ITO staff due to uncertainly with their own employment.
- » In uncertain times there is a risk that employers will stop training, which will further exacerbate the skills shortage.
- » Whatever happens next, there needs to be a smooth implementation process or employers will lose confidence in the system.

Overall response to the proposal

- » There is no guarantee the proposed new Industry Skills Bodies will be industry experts.
- » There is no guarantee the reform will result in an increase in recruitment/attraction in the sectors most needing people.
- » There is lack of detail around the Centres for Vocational Education and how quality will be ensured.
- » Our stakeholders support a regional focus with equity for isolated regions.
- » The role of Private Training Establishments (PTEs) is unclear, but they are critical to delivery.
- » Any reform must leverage the strength of ITOs and polytechnics.
- » Any reform must be integrated with secondary school education to create a seamless pathway into trades and employment.
- » There is an opportunity to better align ITOs' sector coverage.

Unified funding

- » Employers should be incentivised to train.
- » Funding methods must be equitable no bias towards one route of learning.
- » There is concern centralisation will actually cost more, especially as regards engaging and navigating the proposed system.
- » What is the cost of change to the employer?

Merging 27 organisations into one new entity poses more risk than opportunity

- » The proposed changes require a significant (or entirely new) culture change, something that will take years to do and in the meantime time cause disruption and upheaval to a part of the system working well.
- » On-the-job training is culturally and philosophically different to campus-based learning; employers are concerned that it is untested to combine them in such a short timeframe.
- » There is a concern that apprentice and workplace-based training will become academic-led rather than industry-led.
- » ITO provision is working why merge it with a failing system?
- » Employers are concerned that learners will spend more time in the classroom, rather than in the workplace where they are integral to its daily operation. Our employers can't afford for learners to be away from the workplace

Industry Skills Bodies setting the standards

- » Employers need transferable qualifications and national consistency
- » Input to standards and material by industry is vital this must increase.

What industry and employers want

- » Any reform must be designed to deliver more qualified people to meet current and future skills demands.
- » Any reform needs to remove destructive competition between polytechnics and ITOs, and other TEOs.
- » The system must be flexible to meet learner and employer needs.
- » The system must be agile and respond quickly to industry innovation and workplaces.
- » The system must be easier for industry, especially SMEs, to participate.
- » There must be equity for isolated regions and/or workplaces, as well as learners with additional and/or higher needs.
- » Young people need effective careers advice and clear pathways to vocational education.

Competenz consultation survey report (March 2019)

Overview

On 13 February 2019, Minster of Education Chris Hipkins announced a proposal to reform New Zealand's vocational education sector. The reform is in response to the financial viability (and sustainability) of New Zealand's polytechnic sector as well as an opportunity to strengthen the vocational education system "so that school leavers get high quality training opportunities, employers get the skills they need and New Zealanders are better equipped for the changing nature of work".8

The proposal outlines significant change to the vocational education sector:

- Redefined roles for education providers and industry bodies (industry training organisations/ITOs) to extend the leadership role of industry and employers
- Bringing together the 16 polytechnics as one entity (the New Zealand Institute of Skills and Technology/NZIST) with a robust regional network of provision
- 3. A unified vocational education funding system.

The minister initiated a six-week consultation with all stakeholders impacted by the reform, with responses due back on 27 March 2019.

To gather the views of our stakeholders and ensure their feedback was represented in Competenz's submission to the minister, we undertook a concise survey on the proposed changes. We sought to understand stakeholders' views on the proposed changes and how the reform would impact them, their broader industry and New Zealand's workforce.

We surveyed:

- » All employers who currently work with us to support their apprentices and trainees
- » All employers we have worked with in the past
- » All industry association partners, and encouraged them to forward the survey to their networks
- » All of our partners that help to support learners (for example our large assessor and trainer network)
- » All of the schools that we engage with.

More than 780 people participated in the survey. The strong response rate provided a great representation of our sectors, employers and partnerships we have in place to support learner success.

- » 45% of respondents were employers
- A good cross-section of industries were represented: 36% engineering; 26% manufacturing; 14% forestry;
 4% print, packaging and signmaking; 4% retail meat,
 3% food and beverage; 3% bakery, 1% transport.
- $\,{}_{\!\scriptscriptstyle \, \text{\tiny M}}\,$ Good regional representation and business size representation.

Despite the strong response rate and links to the proposal documentation, many respondents felt they did not have enough detail about the proposed changes to be able to respond confidently to the questions within the survey.

The proposed reform of ITOs and establishment of the NZIST is not supported by industry

Many respondents agreed that changes to the vocational education system were needed, but did not think disbanding ITOs was the solution. There are concerns about losing the support they currently receive from ITOs and are unsure how the proposed New Zealand Institute of Skills and Technology will be able to meet industry-specific and employer-specific needs (for example in specialised sectors like forestry, print and fire protection).

Respondents answered 'no' to the following statements:

- » Do you support disbanding ITOs, such as Competenz? (79%)
- » Do you support all workplace training being managed by the mega-polytechnic (78%)

Respondents either strongly disagreed or disagreed with the following statements:

- » A new centralised mega-polytechnic is good for the industry (68%)
- » Dealing with a new mega-polytechnic will make it easier for employers to access workplace training (66%)

Respondents also stated:

"A mega-polytech set-up will seriously disadvantage smaller regions and elevate costs for small businesses. On-the-job training is of far more benefit to the industry than theory based classroom formats."

Print, packaging or signmaking employer, Canterbury

"Why break something when it is not broken (ITOs)? And yet try and fix something beyond repair (polytechs). Disband the polytechs and strengthen the ITOs. Our industry is high-risk needing high-end training – if we don't have high-end training and support, there will be more fatalities in the workplace than present. We have worked hard over the last 15 years to clean up and reduce harm with ITOs and industry support."

Engineering employer, Bay of Plenty

"We receive great support from our ITO Competenz, it would be disappointing to lose this as our apprentices may suffer. Competenz know our organisation and our expectations, it would be a shame to lose this. We will still have apprentices as we are passionate about decreasing the skills shortage." Engineering employer, Waikato

^{8.} https://www.beehive.govt.nz/speech/new-future-work-skills-training-nz

The proposed changes won't meet the training needs of industry

Stakeholders from specialised, niche or highly technical industries that do not currently work with the polytechnic sector due to industry requirements or previous unsuccess – such as forestry, plastics and printing – rely entirely on on-the-job learning and specialist industry trainers. They were most likely to feel that the proposed changes will not meet their training and workforce development needs. These industries also need to train in an agile learning environment to be able to meet changing needs, and stakeholders expressed concerns that these needs will not be met by the proposed system.

Employers strongly believe in industry-led training. They believe that ITOs work to understand what skills they need and to adapt training to meet these needs. They feel very strongly that polytechnics cannot meet these needs. Some respondents commented that high-risk industries such as forestry and health and safety need to be taught on-the-job.

Respondents either strongly agreed or agreed with the following statements:

- » The proposed changes will weaken industry-led training (70%)
- » The proposed changes will bring uncertainty for employers on how training will work (72%)
- » The changes will mean training programmes will become more theory-based and out of touch with what skills employers need (62%).
- "...gone will be regional and specific industry focus. Had plenty to do with ITOs over the years and this will lead to just a bunch of bureaucrats creating qualifications irrelevant to industry. ITO training in many industries like ours has a strong focus on health and safety, if that training stops because the qualifications and standards are irrelevant the consequences could be catastrophic."

Manufacturing employer, Wellington

"This whole change will only confuse people, delay decisions by employers to take on apprentices due to uncertainty, and ultimately weaken our pool of current and future tradespeople."

Assessor, Canterbury

"Forestry training and assessment should be led by those with industry experience to produce candidates that meet current industry needs and standards. This is best achieved through ojob training and assessment. Polytechnics have largely failed in this regard for many years as evidenced by the quality of their graduates (I have personal experience of this over many years). I'm sure a polytech will increase the theory portion of qualifications over time which in our industry would be dangerous."

Forestry assessor, Taranaki

"Polytechs don't have the resources to deliver to smaller trades like retail meat, boat building and carpet laying. Polytechs also don't have the resources to deliver to large industries like meat processing and poultry. You can't teach ,eat workers, carpet layers and retail butchers to do their jobs in a classroom, they need a real workplace to learn their trade. Polytechs do not have the skill to deliver this."

Industry association, Retail Meat

"This is a step back to 1980 at best. It is backwards and nanny state in approach. It will not be flexible and agile to meet the rapidly changing needs to our business."

Manufacturing employer "As a small training provider we must have ITOs as our umbrella to act as the go-between for the industry. Large organisations do not work and the standard of training will drop dramatically."

Forklift industry assessor, Nelson

"I do not agree with the new proposal and believe the loss of the current system, where we have access to specific industry trained specialists who visit us regularly and we have a good rapport with, will be detrimental to the workplace. Employees will not have access to experienced trainers at their place of work. Necessary skills learnt at the workplace with the support of ITO will be lost... one can't compare workplace learning vs theoretical polytech learning."

School, Marlborough

"At present our apprentices are learning while they make the company money. If they are learning offsite whilst being employed by the company, the employer will ultimately lose out as they are paying the trainees wage without making any recovery for that wage being paid."

Engineering employer, Auckland

"How can one training center deal with all the forestry contractors' onsite training when they are scattered all over the North Island, and in the back blocks of farms with trees that need to be harvested. It's bad enough now trying to get assessors to all the logging crews because of where they are working. A new system being set up is going to be a nightmare for forest contractors."

Forestry, Waikato

Changes will make the skills shortage worse for industry

Many respondents believe that the changes could make the skills shortage worse and weaken employers' confidence in the proposed system. This is represented by the number of employers saying they would take on fewer or no apprentices under the new system. The comments suggest this comes from a historic lack of faith employers have in the polytechnic system.

- » 60% strongly agree or agree that the changes will make the skills shortage worse for industry
- » 57% said they are unlikely to enrol or will enrol fewer staff into industry training under the proposed system.

This would be detrimental to addressing the skills and labour shortages, negatively impacting New Zealand's productivity.

"There appears to be a lot of unknowns for the new industry training set-up and we have yet to see the full impact of how this will affect all involved. I suspect it would be less beneficial to employers, employees and the nation. I suspect less trainees will be taken on and national statistics for industry based training could well suffer along with perhaps the integrity of the training. I imagine the new system would not operate as efficiently as what we have had with current running ITOs. Hopefully this will not be a disaster for New Zealand industry training and the future of NZ trades."

Engineering assessor, Waikato

"As a self-employed full-time assessor involved in the forestry and ports environments where there is minimal availability of trained and skilled people to pass on very important skills, I believe that a lot of young employees will fade away and lose interest in the industry. It will become just a place to collect a wage with little opportunity for advancement and individual progression. Employers will not put staff into training at a polytech as this means time away from the job, therefore lost revenue and what will this in-class training entail with no practical skills or assessment of those skills? We already see a lot of people doing pre-employment courses only to be retrained once in the workforce proper. Much of the forestry industry requires actual on-job assessments often done gradually... using large and expensive machinery that won't be available in the polytech situation."

Forestry assessor, Otago

"Direct contact with our apprentices with the Competenz rep for example onsite is of great benefit, the personal touch especially for people learning any trade should always be a top priority, centralisation will turn everyone more so into just numbers."

Engineering employer, Waikato

Schools have concerns with how the changes will effect school-to-work transitions

We received a large amount of feedback from schools. Overall, they were very concerned about how school-to-work transition programmes would work. They value and rely on the work that ITOs do in pathwaying students into industry training and worry this will be lost in the proposed system.

Respondents also suggested that more time and attention should placed on promoting trades and apprenticeships in schools.

"As a school providing transitional work-based programmes for our senior students it is vital these programmes reflect what employers want/need in future employees. I'm not convinced this is doable with just one major force as it will be open to inequality across all industry sectors."

High school, Manawatu-Whanganui

"Concerned about the impact on the secondary education sector eg. Gateway students and that this hasn't been covered in the proposals. Schools haven't even been identified and appear to be being ignored as key stakeholders in the reform. Schools have a major impact on building the future pipeline of skilled human resource for employers and connecting our students to industries. Who will have oversight of and deliver support for the school-to-work transition for our students eg. Gateway, Trades Academy, pre-apprentices, including the classroom and on-the-job based Gateway unit standards that have been developed by industry? Who will be the direct connection for our students to link with local employers in our region when the ITOs are the experts in the field and have individual knowledge of every employer and where there are vacancies?"

Gateway co-ordinator, Wellington

"The present system works very well so why would you change something that works?? What needs changing is the schooling system so that more school leavers are steered towards the trades as we find it hard to get school leavers to fill apprenticeship positions."

Engineering employer, Southland

"As a Gateway co-ordinator I have formed strong relationships with the ITOs and I am concerned how this major restructuring will impact on Gateway and the pathway it provides into the workplace. Leave the ITOs alone!"

Secondary school, Taranaki

Competenz stakeholder research 2018

In 2018 we engaged with a range of stakeholders from across our sectors to understand their perceptions of, challenges with, and opportunities for New Zealand's vocational education and training (VET) sector. Our engagement approach was twofold:

- » We facilitated a workshop with a range of senior representatives from across the sectors that we support, including industry associations, employers and tertiary education organisations (TEOs)
- » Based on the outcomes of the above, we undertook a comprehensive online survey with industry stakeholders, our customers and support partners (including training providers and assessors).

The key findings from the consultation activity are summarised below.

On-the-job training for real skills valued and needed by New Zealand businesses

Stakeholders agreed that the VET system develops real skills for New Zealand businesses. These skills are transferable, and the pastoral care system to support and mentor learners is valued.

In addition, stakeholders acknowledged that apprenticeships can now be completed by anyone, at any stage of their career, recognising that learning can (and should) happen at any age (and continuously).

Workplace training provides value to the taxpayer, yet more investment is needed

Stakeholders also acknowledged the value (or Return on Investment) industry training, specifically, provides to the taxpayer compared to other tertiary education options. However, they also emphasised that the Government needs to invest more to support on-the-job training, especially that supported by small/micro/regionally isolated businesses that may not have the scale or the infrastructure to invest in in workforce development.

Investment in workforce developed is especially critical as New Zealand workforces prepare for, and respond to, the 'Future of Work' requirements and the need for continuous life-long learning, upskilling and reskilling.

Vocational education and training is not held in the same esteem as academic pathways

Generally, stakeholders perceived the current VET system is not as visible as other tertiary education options (i.e. university). They also perceived that 'trades' or vocational occupations are not held in the same regard as "professional" occupations by parents, school leavers, or schools. Some even went as far to say that "the trades are considered to be lower-level jobs" or "a second chance for those that are not smart enough to go to university".

Stakeholders also highlighted the current complexity in New Zealand's VET system and described the system as rigid, fragmented and not well understood. In addition, the system was not seen as collaborative, with TEOs operating in a competitive environment that is driven by multiple inequitable funding streams.

The system should be seamless, collaborative and driving prosperity

Current perceptions of New Zealand's VET system are that it is too complex and not well understood outside of the TEO sector.

VET subsectors (e.g. PTEs, ITOs, ITPS, and other non-university TEOs) are considered to operate in silos, forced into a competitive environment due to different, inequitable funding streams.

In addition, there is a perception that schools are not well equipped to promote vocational education. Careers advice is considered unbalanced and promoting academic pathways, despite the majority of school-leavers not proceeding to university. ITOs are an ideal entity to help facilitate and/or bridge the gaps between secondary school and industry, yet they are not adequately funded or supported to do so.

The broader qualifications framework (and system) is also considered complex and unresponsive to the rapidly changing nature of work. The entire system needs to be flexible and future focussed to meet the changing demands of industry, employers and the broader economy.

Another challenge is that small business lack the infrastructure to necessarily support learners through their entire programme and/or invest in workforce development. Larger companies should act as mentors to smaller business and advocate for whole of workforce development.

Industry Training Organisations perform a critical function

Industry Training Organisations, by nature, take a leadership role in collaborating across the TEO and industry sectors to ensure relevant, future-focussed skills standards are development and maintained (e.g. through the development of qualifications). This strategic and necessary function is performed alongside its training arrangement and facilitation mandate, yet funding is linked to individual learners.

Stakeholders emphasised that ITOs should have dual funding:

- » To work collaboratively and impartially with stakeholders to develop and maintain robust and future-focussed skills standards
- » Arrange and support on-job training to ensure New Zealand workplaces develop and have access to qualified and experienced labour.

A successful VET system is future focussed, flexible and on par with all forms of education

Stakeholders considered that a wildly successful VET system in New Zealand is:

- » Future focussed and responsive world-leading education that supports workforce development, improves productivity and economic prosperity at all levels.
- » The system is seamless and well integrated from secondary school with clear (and valued) pathways for continuous learning.
- » The system works as one with equitable funding and shared outcomes that align to a diverse range of needs including industry, regional, learner and educational needs
- » Valued by all in the economy and labour market similar to systems operating in Germany – whereby employers are incentivised and/or supported to train.
- » Outcomes of vocational education should be sustainable employment, low unemployment, strong labour-market and/ or educational participation (i.e. fewer people not otherwise engaged in employment, education or training).

Appendix 4 - Case studies

This section provides insight to the sectors that Competenz supports, and reinforces the need to have an industry-centric, agile and responsive vocational education sector and system to meet the needs of all participants. The case studies outlined below cover some of our most demographically diverse, regionally isolated and rapidly evolving sectors, all critical to New Zealand's economic and social wellbeing. These case studies also demonstrate how flexible our training support models are, to truly meet the needs of the customer and industry.

Engineering

The sector is made up of two main disciplines:

Mechanical Engineering

(including general engineering, machining, toolmaking, maintenance engineering and fitting and machining)

Engineering Fabrication

(including steel construction, light fabrication and heavy fabrication).

- » Also falling under the broader heading of Engineering within Competenz's coverage sit Locksmithing, Refrigeration and Air Conditioning, Mechanical Building Services and Dairy Systems. These make up a smaller proportion of the industry with approximately 8,900 filled jobs.
- » Both sectors are in a time of rapid growth with 37,521 filled jobs which is expected to increase at an average rate of 1.7% p.a. to 2024.
- » In response to the sectors' growth it is forecasted there will be 15,245 job openings to 2024 consisting of 3,089 new roles and 12,157 replacement roles. These replacement roles come from a large portion of people retiring from the sector.
- » There are 6,745 business units in the engineering sector with the majority of businesses having 0 to 5 employees.
- » There are two mechanical engineering occupations currently on skills shortage lists. Mechanical Engineers are listed on the long-term skills shortage list and Mechanical Engineering Technicians are on the immediate skills shortage list. It's estimated at least 865 mechanical engineering personnel (for the above occupations) are needed in 2019 (this assumes qualified and unqualified). It's estimated that this would equate to 500 new apprentices across the Level 4 mechanical engineering programmes.
- » The sectors contribute \$3,575 million to New Zealand's gross domestic product (GDP), and contribute \$96,757 per FTE.
- » A high percentage of the workforce have no post-school qualifications, however over 20% achieve a Level 4 qualification (compared to 11% of general workforce).
- » There are various industry associations that Competenz works with including HERA, Engineering NZ, Maintenance Engineering Society (MESNZ), Metals NZ, NZ Board for Engineering Diplomas, Master Locksmiths Association of Australasia (MLAA), IRHACE, Climate Control Companies Association (CCCANZ), NZ Milking and Pumping Trade Association (NZMPTA), Irrigation New Zealand, Cold Energy Technology Group, the Compressed Air Association of Australasia, NZ Home Heating Association.

» The wider mechanical engineering sector has a diverse stakeholder profile, including 17 associations, one industry body, one industry panel, one union, one ITO, and numerous training providers including polytechnics and PTEs.

Qualifications and assessment model

- » Competenz manages seven qualifications (six at level 4 and one at level 3) and 15 programmes across all engineering disciplines. All level 4 qualifications are apprenticeships under the 'Elev8' model.
- » The learning is done through a blended approach of on-the-job, online, and block course learning. Block courses are run through ITP partners across New Zealand, with the exception of Locksmithing, which is in the process of transitioning to Melbourne TAFE for block course delivery due to a lack of tutors in New Zealand.
- » Assessment is undertaken by workplace assessors, Competenz training advisors and eLearning assessors and involves online and observed performance.
- » As part of TROQ, Mechanical Engineering qualifications have undergone transformation to better meet the current and future needs of learners and the industry. This has resulted in a suite of New Zealand Certificates in Engineering made up of five qualifications.

Participation

- » Learner numbers have been consistent over the past few years, with around 3,800 active learners each year.
- » Those that complete a qualification through Competenz are more likely to still be employed in the industry compared to Competenz sectors overall. Five years after enrolling in a qualification, 32% of apprentices are likely to still be employed in the sector; 20% are engaged in industry training. Eight years after training with Competenz, 41% of people are likely to still be employed in the sector (compared to 39% across all of Competenz's sectors), 4% are self-employed, and 7% are engaged in further tertiary study; and 37% are employed in other industries.



Examples of partnership

Competenz and Manukau Institute of Technology (MIT) have jointly partnered to enable MIT to utilise Competenz developed content in MIT's pre-trade engineering delivery, MIT to deliver off-job block courses for Competenz apprentices, and for Competenz to support MIT's engineering provision at Level 5. This includes encouraging suitable former apprentices to progress to the Level 5 qualification, providing pastoral support to learners and their employers during study and to partnering in the development of content and support materials.

Skills for the future

The mechanical engineering sector, like all engineering sectors, is in growth mode – that means new jobs and business are being created to meet demand. There is significant demand for skilled labour to replace the exiting workforce as well as fulfil newly created roles.

Rapid technological advancement, automation and robotics are changing the nature of work and the workforce. The workforce needs to adapt, upskill and re-skill in response, as well as review its composition. Automation may not need staff number reductions, and it may enable people to stay in the workforce longer. Our qualifications and training solutions need to continue to be flexible to respond to these changes. Employers want onthe-job learning to continue and see their workplaces as the best place for young people to learn the skills they need for their sector to continue to thrive.

"At present our apprentices are learning while they make the company money. If they are learning offsite whilst being employed by the company, the employer will ultimately lose out as they are paying the trainees wage without making any recovery for that wage being paid."

Engineering employer

Apprenticeships are an integral and traditional part of the career pathway for the sector, and there is an increasing need to continuously upskill – both in response to technical changes as well as business skills.

Skills development requirements include:

- Technical skills to meet industry demand (apprenticeship training)
- Non-technical skills, especially those supporting succession planning (business and leadership skills)
- 3. Health and safety
- 4. Competitive Systems and Practices, especially in large, multi-faceted organisation such as manufacturers.

Increasing the talent pipeline

Increasing the talent pipeline of those entering the sector remains a continuous challenge, but has potential to help fill the need for more skilled workers. In the year prior to engaging with Competenz, learners are most likely to be at school (29%), employed in another sector (25%), or employed in the sector (19%). Only 18% engage with another TEO in the year prior to enrolling with Competenz.

The traditional focus on schools needs to be continued and improved upon. Competenz works closely with over 200 schools across New Zealand promoting engineering as a successful career. We do this by providing a clear pathway from school to vocational education whether it be via our Gateway programme or working directly with ATNZ to place students directly in a managed apprenticeship. One challenge we hear our employers mention is the quality of school leavers when entering the workforce, particularly around numeracy and literacy and "work readiness". In a recent survey, engineering employers mentioned:

"The problems start at High School Level with students encouraged to go to University, not Trades. Trades are portrayed as second class options."

"I think it is absolutely crucial that industry and ITOs are engaged with secondary schools. Most people I have met from ITO, have been involved in the industry from the ground level, and they also have a greater knowledge of our needs."

"The importance of literacy and numeracy at all levels, trades require strong communication skills and initiative."

"Funding should be based on an individual bases. there should be a screening process to identify what help a student may need then funding allocated to them. this will ensure those that need more support have it."

We've also heard many of our employers say that incentivising training would encourage them to take on more apprentices. We currently engage 51% of the employers in the sector. The employers we have high engagement with have between 10-49 employees. Incentivising training would not only encourage employers to take on more apprentices, it would also encourage employers who do not currently engage with vocational education, particularly SMEs.

"The employer needs financial assistance with the costs associated with training of apprentices and staff. Reimburse the employer on a % base of the total amount of credits issued to their staff. The employer makes the biggest commitment of all. I have trained up to four apprentices at any one time and was a registered assessor".

"Have direct funding to companies. This should provide a better ability to train on job as the cost would be offset."

"Recognise and reward the good employers who fully train the apprentices and they complete all the required certification. Have a system to stop the employers who use them as cheap labour."

What the sector needs

- » A system that incentivises more employers to engage, in training especially SMEs
- » Stronger links and promotion with schools
- » A flexible system that meets the rapidly changing world of work.

Fire protection

Fire protection is a niche yet integral sector supporting New Zealand's building and construction industry. Employees in this sector are engaged in identifying risks and designing safeguards that aid in preventing, controlling and mitigating the effects of fires.

An overview of the sector is presented below:

- » The sector has been experiencing steady growth since 2015. With approximately 4,427 filled jobs, it has been increasing at an average of 3.3% p.a.
- » Forecasts are for continued job growth of 3.5% through to 2024. Growth within the sector is largely due to an increase in building and construction demand, but also based on upcoming regulatory compliance around 'registration' of those working in the fire protection area.
- » The sector is only small with 704 business units in the sector in 2018. On average 31% of the sector engages in workplace training with Competenz. Engagement increases with companies with more than ten employees.
- » The fire protection sector contributed \$254 million to New Zealand's gross domestic product (GDP), and contributes \$59,615 per FTE.
- » The fire protection workforce has a good spread of workers from all age groups, although the majority hold no post-school qualifications (40%), with 24% holding a level 4 qualification.
- » Learner numbers have remained relatively steady at approximately 470 p.a.
- » Learners are supported through Competenz's Elev8 model and recently developed interactive and integrated online learning and assessment material.
- » The majority of learning is done on-the-job (with the exception of first aid certificates and fire extinguisher training) supported by Competenz online resources for theory components.
- » Online resources were developed in conjunction with FPA Australia and FPA New Zealand, and an MoU is in place covering content sharing and consistency in training across the two countries
- » There is one industry association, the Fire Protection Association of NZ. Competenz is a Board and Council member of the association. The Council has various special interest groups with Competenz most active in the training and passive fire special interest groups.

Development of new qualifications

Competenz launched the new Fire Protection qualifications in October 2017. Eight new qualifications were launched across levels 3 and 4. At the time of launch, this was one of our more innovative designed learning solutions (with use of augmented reality), and one of the first online-only resources that we had produced.

In anticipation of the growth, Competenz consulted with the sector as part of the Targeted Review of Qualifications (TRoQ) and identified a need for more accessible training to engage more people.

The Competenz 2018 External Evaluation Review report noted: "The review of the fire protection qualifications and the subsequent development of learning materials shows how well Competenz understands and supports the needs of this sector."

Training model

Under the Elev8 operating model employers hire, train and develop their own apprentices with support from a Competenz training advisor. This model is for business owners who have the capability and capacity to train their apprentices. Training advisors also complete assessment for learners. Fire protection employers prefer this model as they operate within a niche sector which is highly regulated and they rely on being able to teach their learners on-the-job.

The fire protection sector needs a system which is flexible and can adapt to their needs. The sector does not currently work with an ITP and forcing them to do so runs the risk that employers who currently engage with Competenz will completely disengage from training altogether.

"...we need industry based for trades and Competenz is best for the fire protection industry and other trades. The government needs to heed the advice from industry and leave the ITO model in place with minor changes as and when needed."



Forestry

The forestry sector is made up of two main groups:

Forest management: This includes companies involved in forest ownership, management, science and research. The majority of people working in this sector are university qualified.

Forest contracting: This includes companies contracted to forest managers to carry out the day-to-day operational tasks within the forest. These include:

- » Silviculture: Planting, pruning and thinning of young forests
- » Harvesting: Removal (logging) of the forests to produce logs.
- » The sector has over 11,000 filled jobs, with an increase of 1.5% p.a. over the past five years.
- » Strong job growth is forecasted at 2.4% p.a. to 2024. This consists of 6,852 job openings, 2,257 new roles and 4,295 replacement roles.
- » There are 6,190 business units in the forestry sector. Competenz engages with a large portion of the forestry sector, for example we engage with 88% of companies with more than six employees. Our engagement with SMEs is lower at 38%, this could reflect the difficulties of training for smaller companies in this sector.
- » The forestry sector contributed \$1,937 million to New Zealand's gross domestic product (GDP) and \$173,982 GDP per FTE. It is forecasted to continue to significantly contribute to the sector at 3.2% p.a. to 2024.
- » The forestry workforce is one of the most ethnically diverse workforces we engage with. More than a quarter of the workforce identifies as Māori, so we have ensured that our support model is tailored to their specific needs.
- » A high proportion of the workforce has no qualifications and literacy and numeracy challenges.
- » The sector has seen a shift from manual operations to mechanised operations over the past ten years, changing the type of employee and also the type of training required.
- » The sector has a higher than average cost to serve for training due to the remoteness of worksites and the need to train oneon-one on-the-job.

Sector engagement

Competenz engages with the sector through a number of established national associations and regional forums. These include:

- » Forest Industry Contractors Association (FICA)
- » New Zealand Forest Owners Association (NZFOA) Training and Careers Committee
- » Forest Industry Safety Council (FISC) Operation Advisory Group (OAG)
- » Farm Forestry Association
- » Forestry Ministerial Advisory Group

- » Regional Wood Councils
- » Government departments:
 - » Ministry for Primary Industries Te Uru Rākau, Forestry NZ
 - » Ministry of Social Development Skills for Industry and Mana in Mahi initiatives
 - » Immigration NZ.

Qualifications

- » Competenz manages 11 qualifications and apprenticeships across levels 2 to 6 each tailored to specific operations being carried out in the forestry sector.
- » Level 2 programmes are predominately delivered as preemployment programmes through providers.
- » The Level 6 programme is a forest management diploma delivered thought Toi Ohomai – an ITP based in the Bay of Plenty.
- » To meet the ongoing needs of the sector for smaller, taskspecific training, Competenz has introduced a number of smaller Limited Credit Programmes (LCPs), Supplementary Credit Programmes (SCPs) and micro-credential programmes.

Participation

- » Learner numbers have remained relatively steady at approximately 3,400 p.a. including 300 apprentices.
- » The majority of learners are involved in task-specific qualifications at levels 3 and 4.
- » The majority of learning is done on-job supported by Competenz learning and assessment material.
- » Assessment is carried out by either an in-house or contract assessor. All assessors are registered with Competenz and subject to a robust moderation process.
- » Māori (38%), Pasifika (4%) and under-25 (21%) participation in training exceeds the forestry sector workforce demographics (26%, 3% and 13% respectively).

Challenges within the sector

Forestry is the second largest sector covered by Competenz and one of the most complex. The sector faces many challenges including:

- » Significant pressure on the current workforce to remain safe and skilled
- » A relatively low profile as a sustainable career pathway
- » The workplace training model is currently underfunded, in particular when considering the dilution and geographical spread of learners and employers
- » Forestry is a challenging sector to achieve high academic outcomes due to the higher support required from often second chance learners
- » Competenz has significantly invested to optimise the current training model, however this is not sustainable going forward, nor is it the training mode that the industry is demanding.

Issues to be resolved

- » Labour supply and ensuring clear, sustainable career pathways are available
- » Ensuring learners also have the ability to develop transferable skills
- » Ensuring current workplace training delivery model is sustainable
- » Significant literacy issues that require one-on-one intervention and support
- » Retain our group of highly competent, industry-endorsed assessors through pay rates that are comparable to what they can achieve in other roles.

Training model

- » In recent years, we have been lobbying the government and TEC to consider a different funding rate for forestry. This has been declined, most recently due to the proposed reform of vocational education.
- » The current training model is not financially sustainable and does not maximise learning outcomes and achievement. Currently the training component of on-job learning is directly funded by the employer, which is variable and unmonitored. This often results in peer-to-peer training onsite versus independent, qualified and monitored forestry trainer.
- » The model is expensive for both the ITO and employers (who need to provide the training component). Competenz loses quality contractors to assess learners onsite and this is impacting our ability to ensure quality learning outcomes. Due to limited funding, our contract assessor fees are uncompetitive with market rates. We face significant competition to retain highly skilled, highly experienced industry assessors which is an integral part to the forestry sector's support model.
- » The cost to serve for this sector is significantly higher than other Competenz sectors and the current funding model restricts us from delivering the service the industry requires.
- » The following comments are from respondents to our consultation survey:
 - "I believe that Forestry should be funded in a different way as the logistics to support these learners is a nightmare."

"Forestry training and assessment should be led by those with industry experience to produce candidates that meet current industry needs and standards. This is best achieved through on job training and assessment. Polytechnics have largely failed in this regard for many years as evidenced by the quality of their graduates (I have personal experience of this over many years). I'm sure a polytech will increase the theory portion of qualifications over time which in our industry would be dangerous"

"The forestry sector is a unique work environment which I believe requires on-the-job training as well as theory, simply because reading about machinery and chainsaws is a far cry from operating one and getting to appreciate the dangers associated with this type of work. Hands on training with experienced trainers is a must if skills are to be taught and learnt adequately to firstly keep workers safe and skilled and to produce a great product and living for both worker and employer alike."

Forestry initiatives

There is an increased focus on the sector from government due to the One Billion Trees Programme as well as an ongoing focus on improving the health and safety performance of the sector.

One Billion Trees Programme

We have engaged extensively with the sector in relation to the One Billion Trees Programme. To achieve the government's goal of planting one billion trees by 2028, we identified a workforce capability shortfall within the forestry sector. Subsequently we submitted several ministerial papers recommending further investment in the sector to ensure it has the required labour and broader workforce capability to achieve the objectives set out in the programme. We met with a range of industry and government stakeholders to guide our recommendations including the Ministry for Primary Industries, forestry industry stakeholders (FICA, FOA, FISC and representatives of the sector's Training and Careers Committee) along with the TEC.

There are a number of industry organisations, ranging from associations, peak bodies and safety councils, to numerous government agencies, social agencies and tertiary education organisations. All of these stakeholders need to collaborate as part of the wider political support system to ensure the sector continues to strengthen and achieve the objectives of the One Billion Trees Programme.



General manufacturing

The general manufacturing sector is Competenz's largest sector. It is facing considerable skills and labour shortages, and is at the forefront of Industry 4.0 – the current industrial revolution.

A overview of the sector is presented below:

- » There were 58,931 people employed in the general manufacturing sector in 2018, equating to 2.4% of the total workforce in New Zealand.
- » The sector is currently in growth mode, needing more people than it can replace. Across all occupations 18,437 people are needed by 2024 (835 people for new roles and 17,602 to replace existing roles predominantly being vacated due to retirement).
- » There were 7,836 business units in the general manufacturing sector in 2018, up from 7,494 five years earlier, an average increase of 1.2% p.a. and 16% of businesses in the sector engage with Competenz.
- » The general manufacturing sector contributed \$5,923 million to New Zealand's gross domestic product (GDP), and contributes \$104,898 per FTE (it is classified as a productive sector).
- » A large portion of those employed in the manufacturing sector are aged 40-plus (63%), male and European.
- » The manufacturing sector has a high proportion of the workforce with no post-school qualifications (46%) and low literacy and numeracy, however 30% achieve a formal qualification while employed in the workforce.
- » The manufacturing sector has a high percentage of low to medium skilled workforce (68%) and are most likely to be impacted by the industrial revolution.
- » Approximately 40% of the workforce are either labourers or technicians and trades workers.
- » Competenz has a close and positive relationship with industry governance bodies, including The Manufacturers' Network and the Employers and Manufacturers Association, and we engage directly with many employers. We are represented on the board of The Manufacturers' Network Tertiary Advisory Board for the Future of Work Forum.

Our learners and their achievement

General manufacturing is the largest sector Competenz covers. We offer whole-of-workforce solutions, including four technical manufacturing qualifications ranging from level 2 to level 5, along with health and safety, competitive systems and practices, and other generic qualifications (such as first line management and business skills).

Learner numbers have doubled from 2,200 to 4,400 since 2014. The overall participation rate in training is low at approximately 8% but this largely reflects the experience profile in the sector with a significantly lower proportion of employees aged under 40 in comparison to the 63% of those aged over 40 in the sector.

Participation rates for Māori, Pasifika and under 25s greatly surpass the ITO sector profile (Māori 16% vs 6%, Pasifika 13% vs 4%, and under 25s 17% vs 9%). Overall achievement is very strong particularly for Māori, Pasifika and under 25s, as formally reported through TEC's Education Performance Indicators:

- » Credit completion for Māori (116%) and Pasifika (101%) now exceeding overall rates and under 25 (96%) in line with overall
- » Programme Completion for Māori (125%) and Pasifika (104%) are also above overall completion with under25 (91%) being slightly lower.

This success has been attributed to customer-centric training programmes offered to companies, with extensive support from Competenz account managers in terms of trainee management, health and safety training, and literacy and numeracy support.

"In our experience a number of our apprentices that are great with the tools are often not so good on the literacy and numeracy. So definitely funding needs to be available in this area and strongly recommend on-the-job training with support from ITO."

To meet the needs of an older workforce within manufacturing, our dedicated Workforce Development team works with employers to create holistic training needs analysis. From there they develop qualifications and training to help upskill older workers and shift workers towards qualifications that are relevant to their needs.

This sector relies heavily on the qualification mapping services we provide (see appendix 1) as well as access to highly specialist PTEs. They do not rely on or work with the public polytechnic sector.

Preparing for the future

The manufacturing sector is at the forefront of technological change through automation and evolution of industrial technology, and also the adoption of lean manufacturing approaches. The sector is entering the fourth industrial revolution or what is commonly known as 'Industry 4.0'.

There are already signs of a major paradigm shift of technology in the sector. Increased automation and technology is displacing some of the skills the workforce has traditionally been using, however that does not mean fewer people are needed, only that the skills and knowledge will be different in order to keep up with the evolving changes.

The key challenge this sector faces is change. As job skills change, the skillsets need to be transferable to meet new ways of manufacturing. They also need to be rapidly developed. We've identified the skills development requirement to meet these changes, which include:

- 5. Technical skills to meet industry demand
- Non-technical skills, especially those supporting succession planning (for example digital manufacturing knowledge, trouble shooting, leadership)
- 7. Health and safety and quality assurance.

While it is difficult to predict exactly what the changes will mean, Competenz is working very closely with the sector to ensure we can anticipate and respond to their needs quickly.

In terms of standards development, it means that qualifications must be developed in a timely manner to meet constant technological advancements within the sector. The qualification detail and programme specification needs to be flexible enough to account for rapid change. We work closely with the sector

to develop and refine qualifications. Our strategic sector and workplace connections enable us to triangulate feedback and ensure the standards are relevant at an industry level, yet practical for a workplace. This would not be achieved under the proposed reform, and is essential to meet the ever-changing needs of the sector.

The qualification development process requires extensive sector engagement to ensure the qualifications created meet industry requirements. For example, during the most recent TRoQ for manufacturing, we identified the need to streamline our qualifications to make it clearer for industry, employer, learner and provider stakeholders what the pathways are. This resulted in reducing our qualifications from 114 to just 33. This resulted in industry-specific qualifications which are more flexible to the changing needs of sector.

We are also participating in initiatives that specifically look at preparing the manufacturing sector for the future. We have partnered with University of Auckland, The Manufacturers' Network and the Ministry of Business, Innovation and Employment on "The Skills Shift" project looking at what a skills shift will look like and mean for manufacturers, tertiary organisations and training providers, and what measures will need to be taken to prevent the aggravation of what is already a serious skills shortage in manufacturing. This will include a sector survey to understand peoples' readiness for Industry 4.0. This aligns with the Productivity Commission's inquiry into the Future of Work which seeks to "identify how New Zealand can maximise the opportunities and manage the risks of disruptive technological change and its impact on the future of work and the workforce".

We are also undertaking international research to ensure that New Zealand's qualifications, standards and learning and assessment resources keep pace with the change. This will involve a visit to Australia and leveraging the connections through the Australian Skills Service Organisation (IBSA).

What the sector needs

New Zealand's manufacturing sector needs:

- » A vocational education system which is agile and flexible to meet its changing needs; one that employers have confidence in to ensure they can continue to training
- » Support for employers through a period of rapid change
- » Incentives to encourage more employers to train, especially at a time of significant skills and labour shortages – the last thing they need is disruption to a training system that is working for them.
- » Promotion at school level to attract more young people into the sector
- » Additional funding specifically for its high-needs learners to access literacy and numeracy support, and other specialist support, when needed.



Competenz is a multi-sector industry training organisation (ITO). We help Kiwi industry grow skills, careers and businesses.

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