

Submission by



GROWING PROSPERITY AND POTENTIAL

to the

Ministry of Education

on the

Reform of Vocational Education

5 April 2019

Rachel Simpson
Mob: 027 222 7234

BusinessNZ welcomes the opportunity for vocational education. An effective and efficient vocational education system is critical for New Zealand's thriving economy and the well-being of its people.

This submission focuses on a systems approach to vocational education, as well as commenting on the three specific recommendations contained in the consultation document.

Vocational education in New Zealand

There is broad agreement globally on the features of a high performing vocational education system. A systems view of vocational education and the key components of success, as noted by the detailed 14 features of a healthy vocational education system in Appendix One includes considerations such as attraction to different industries, effective transitions from secondary school, responsiveness of the system to industry skill needs, authenticity and quality of learning experiences and the strength of partnerships between business, educators and Government.

Internationally, the vocational education systems of Austria, Germany and Switzerland are well recognised for driving productivity. Taking lessons from international best practice, the RoVE review presents a significant opportunity to design a globally leading vocational education sector that ensures a well-skilled workforce to support New Zealand businesses. The system needs to be designed for the current New Zealand economic and social context, with an eye on its ability to adapt to a rapidly changing global environment and the nature of the Future of Work in New Zealand.

The scope of the RoVE consultation review proposes a structural solution to a systems problem.

There is a broader system failure in the existing fractured vocational education sector, ranging from a lack of systemic careers guidance and too many young people failing to transition effectively in to training and employment and a skills mis-match between the graduates produced by the education system and the skills and attributes needed by New Zealand businesses.

The review focuses on the Industry Training and Polytechnic sector however education and training are occurring in the workplace and through the informal training sector at a high rate and are a critical part of the vocational education system.

New Zealand businesses are investing at a high rate in upskilling its workers. The current measures applied to measure the industry investment in the education sector is measured by the number of participants and the 30% cash contribution mandated for the ITOs. 10% of businesses delivering training has been cited as an indicator of poor business engagement in training, however this figure ignores the high number of businesses investing in training that is fit-for-purpose and can be interpreted as a resounding majority of businesses who are choosing not to engage with the formal industry training sector. Reasons for this lack of engagement are various, but often cited reasons are poor customer service and training products and services that are not fit-for-purpose or aligned to business objectives, and lack of connection to industry.

Industry investment is significantly above and beyond the 30% cash contribution used currently to test industry value of its on-job training systems.

In addition to payments for training services that businesses make in the formal education and training sector, business contribution to the vocational education system includes provision of scholarships and professional development opportunities, work experience opportunities and the jobs that facilitate workplace training, high levels of investment in informal training driven to solve skills problems related to business productivity or effectiveness, capital investment in new technologies and subsequent upskilling opportunities for their workers. Businesses also engage in workforce planning and industry co-ordination to inform labour market information and signals, creating internal training systems and resources and providing the necessary industry and technical expertise to the education system for qualification and course development. A huge component of the industry contribution is captured within the 'good will' approach to training. Many business

owners offer apprenticeships and training as a way of passing forward opportunities that they were offered at the start of their careers.

System redesign needs to take in to account all players in the system and apply the right outcome measures to drive success.

A thorough systems review will take a broad view of all players in the system and look at the features of the high performing parts of the current system. In addition to the ITOs, ITPs, and other education providers, industry association representatives, companies of all sizes, manufacturers and suppliers and Government agencies all have a high interest in the vocational education system. In order to build confidence and integrity in the vocational education and qualifications system, the roles and responsibilities of all parts of the system need to be considered and built in to a unified model. Although outside the formal scope of the consultation document, the key Government agencies (Ministry of Education, NZQA and TEC) also need to examine their roles as funders, quality assurers and stewards of the system.

There is currently a breakdown of feedback loops in the system to effectively measure the health of the vocational education system. In line with the Government's focus on the well-being of all New Zealanders, BusinessNZ proposes a suite of high level, long-term key performance indicators to act as a benchmark and strategic driver for change in the vocational education sector, attached as Appendix Two.

The right structure for a high-performing vocational education sector

Part of the current complexity of the existing system is players in both the ITO and ITP sector have been operating outside their legislated mandate. In some instances, this has resulted in innovation within the sector to deliver results given the constraints in the system. The flip side of this approach is that the incentives for financial profit and the need to achieve economies of scale have driven a number of perverse incentives in the sectors also, namely failing to provide the skills that industry need, particularly in niche and small industries. High volume, low cost programmes have become embedded within the operating models of both ITOs and ITPs.

Gearing the system from a business lens and re-orientating a unified system towards high performance will require a systems solution.

Employer choice must be built in to the vocational education system.

BusinessNZ supports the concept of a diverse vocational education system with employer and learner need and choices at the heart. The current ITO system, that provides a monopoly over industries and requires written permission from the TEC for an employer to work with an organisation outside of the mandated coverage areas, reduces employer choice and perpetuates a lack of responsiveness to businesses often found in monopoly and duopoly systems.

The proposal put forward relies heavily on the current 'push' factors – pushing companies towards ITOs through the mandated coverage settings and pushing companies towards the polytechnics for regional needs. In order to shift the dial towards a demand rather than supply led model, employer choice - who they work with for training, what training is needed and the way that training is delivered - needs to be central to the system.

A unified vocational education system can be achieved without full centralisation of the system.

There is significant risk of a fully centralised polytechnic sector, the most significant one being a single point of failure. A survey of the current polytechnic sector and those organisations considered to have the 'right conditions' for success (e.g high industry demand, large potential student cohort in urban areas, large capital asset bases and robust educational performance) have still suffered

financial hardship and have mixed feedback from stakeholders on their ability to effectively link to and service industry and businesses. The main way for businesses and learners to provide feedback on a lack of satisfaction with training providers is to vote with their feet. The risk of a single institution, anchored in the traditional polytechnic model, failing to deliver on a centralised model is high, as noted in the analysis of a similar approach that has been implemented in New South Wales, and contrary to the characteristics of high performing vocational education models internationally. The ability of a single institution to drive better outcomes from vocational education without changing the underlying policy drivers is low.

An effective vocational system blurs the lines between levels and sectors.

A persistent system failure currently is the rigid separation of levels and sectors and detachment from the education sector in mirroring the structure and priorities of industries and business. The education sector has shifted towards focussing on the micro-components of the sector, to the detriment of the system as a whole. Businesses have a range of different needs to meet skill challenges from front-line workers through to executive levels, and across a range of different skill groups. The system needs to be able to respond both vertically in terms of development for all skill levels in a business, and horizontally in terms of different skill groupings. As noted with regard to the features of a high performing vocational education sector, blurring the lines between lower and higher levels of training is a critical success factor. Supporting the workforce to shift and reskill as the nature of work changes, which is a key pillar of the Future of Work work programme, necessitates that the current underlying premise that individuals progress through NZQF levels achieving full qualifications at each level is not fit-for-purpose for a future-proofed vocational education system. Individuals move through different levels, through different types of training, through different skill groupings according to personal and professional aspirations. Businesses train across all levels and skill groupings to drive stronger organisational culture linked to their values, gaining greater efficiencies and productivity.

Alternative solution to reform of the vocational education

BusinessNZ acknowledges the strength of some of the alternative proposals put forward by those in the ITO and ITP sector. Of note however is that the alternative proposals put forward address the narrow scope of the current consultation document, for example focussing the possible structural implementation of a single ITP or retention of the existing functions of the ITO sector. The proposals are still predicated on key aspects of the system such as volume-based funding. While there is merit in this approach, BusinessNZ is putting forward an alternative model that seeks to address the current system failings, with an eye towards an achievable implementation plans.

The key outcomes sought from the reform of vocational education are:

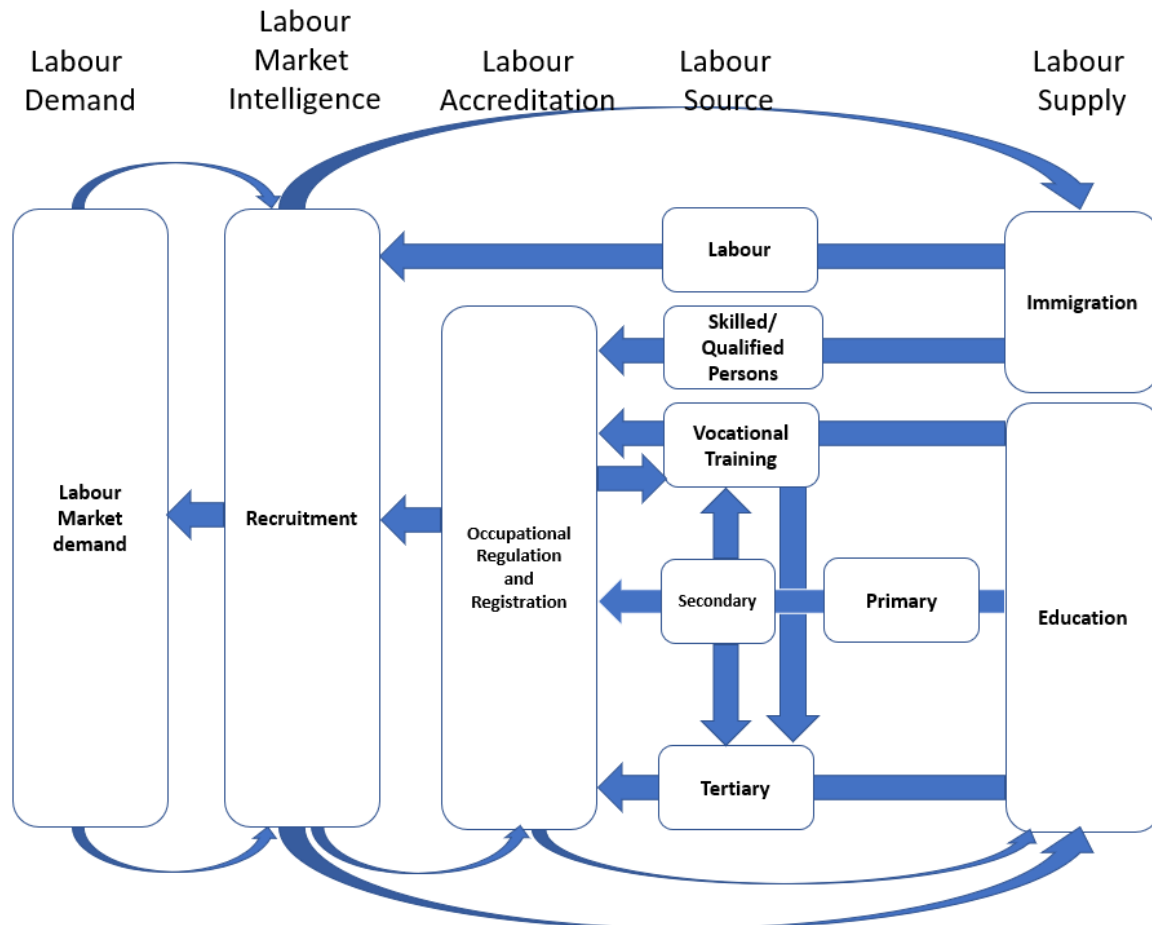
- A globally leading and unified vocational education system;
- Ensuring minimal disruption to learners and businesses during any transition period;
- Clear articulation of roles, responsibilities and expectations for those in the sector;
- Improving the quality and consistency of vocational education by being anchored in industry need;
- Improving attraction to vocational education and addressing long-standing inequities in the vocational education system, such as low female participation in trade professions;
- A system that is easy to navigate for the key customers – businesses and learners.

High level overview of the system – workforce supply and development

BusinessNZ is suggesting an alternative way of resolving the many issues in the vocational education system. In vocational education, what is good for business is good for learners. For New Zealand, it is critical that the system is more responsive and that progress is made on addressing the flow-on effects of the current poor performing parts of the system – namely

persistent skill shortages, skill mis-matches, not future-proofing businesses and workers with the right skill sets to encourage life-long learning and adaptation to the changing nature of work.

In addition, BusinessNZ supplements its alternative model with supporting evidence of the parts of the system that are working well. Giving visibility to the whole system, and particularly the drivers for business engagement in training and influencing the associated policy levers to re-orientate the system towards meeting the needs for businesses and learners based on existing good practice models that are already working in the New Zealand context.



From a structural level, the Foundation for Young Australians Future of Work series of reports provides useful learnings on considering how to structure the industry connections based on occupations geared to people’s interests and related industries. Analysis of labour market data shows that for a particular job trained for, individuals gain the skills to perform in 13 other occupations.

The currently policy constraints on the industry training sector, and the subsequent results of the sector consolidation undertaken in 2013 have provided some useful insights in to thinking about a new system.

One of the key value propositions from the ITO sector is filling the gap between companies describing skills and workforce development needs, and translating these needs in to the formal education sector and reporting requirements.

The NZQA and TEC systems for accreditation and reporting against funding are complex. The policy settings seeking full qualification outcomes and incentivising providers to maximise funding

opportunities has resulted in qualifications which articulate a suite of skills, however the qualifications are often focussed on maximising time and content, rather than delivering competencies and providing a skilled workforce to companies in the most expedient way possible.

In addition, there are regulatory, professional and industry associations which feed in to the industry training system that are not visible in the current system. For example, for those industries that have a qualification requirements and an additional licencing exam, there are no checks and balances in the system to assess how well the system as a whole is working for individuals to progress successfully through the phases of professional accreditation.

There is a broader challenge in New Zealand with weak labour market information and how this information is fed back through the system to learners, industry and the broader education system.

While many industries are undertaking workforce planning, skill shortages in particular industries are well known.

A risk of the proposed ISB model is that there will be a return to the proliferation of industry standard bodies, increasing the risk of greater duplication in the system. When there were 42 ITOs operating, efforts focused on differentiation of skill sets to a micro-level for occupations. When consolidation of the sector occurred, mergers were driven by individual agreements being made between organisations rather than a high level view of a sensible industry structure. The merger process can be seen as having mixed success. Larger organisations are able to achieve economies of scale, however some ITOs still lack high rates of penetration in to industries for which they have coverage (with the exception of occupations with qualifications as part of regulatory requirements), as evidenced by skills training not increasing at the same rate as job growth.

The system needs to recognise that each industry and company have particular needs and a broad-brushed ‘one size fits all’ model is not fit-for-purpose to ensure responsiveness.

The proposed reform does not go far enough in trying to move the sector away from a ‘push’ and provider led model. The proposal is still reliant upon the concept of the existing functions and constraints in the system but shifting these around the sector. In reality, successful educational outcomes for learners and productivity gains from business are anchored in a co-operative relationship where training is focussed on customised and bespoke training that integrates credentialing as a value-add component. What may work for a large corporate company in Auckland with a large number of providers or internal systems to deliver training won’t necessarily work for a small business on the West Coast.

BusinessNZ suggests that the following educational approaches and services needs to be built in to the funding and reporting model to reflect the value of a multi-tiered approach to education and training, including:

Services for small businesses – approach to working with SMEs to ensure a low barrier to entry of engaging in industry training

- **Industry training for small business owners** – currently small business owners are excluded from funded industry training support. As part of supporting a life-long learning approach to the workforce, industry training provision that also upskills and builds business capability for small business owners should be built into the system. It is envisaged this support could be structured around the German Masters model, of industry leaders and successful business people that work with clusters of like businesses to support training and the overall health of the business. This also provides opportunities to utilise the skills and knowledge of the aging workforce and ‘grey wave’ faced by many industries.

- **Intensive service and delivery for industry training** – small business owners often perform the full suite of back office functions, and their capacity to deliver training, together with the expense of paying service fees for industry training with little capability to deliver or ease of engagement and perception of support offered, all act as barriers to entry for small businesses. Often, small businesses that offer Apprenticeships do it as a way of paying forward the opportunities they were provided with. The service levels for supporting industry training in small businesses needs to recognise that an industry training model needs to provide levels of support based on the unique business needs, rather than the current prescriptive model of industry training (such as requiring at least one visit per quarter).
- **Capturing the mix of formal and informal training that adds value to small businesses** – as part of the informal network of training that isn't currently captured in the vocational education system, small businesses need support to adapt and change to different policy settings and the changing business environment. This function is currently often provided by industry and business associations. For example, changes to employment relations legislation is conveyed with industry groups providing advice, resources and training to ensure small businesses understand and meet their compliance requirements. Given the pace of change is expected to accelerate, this type of informal training will become even more important in the future and does not require credentialising, but in a unified system, could be captured as part of the broader suite of measures on understanding the education and training needs from a business and industry perspective.

Corporates and companies with inhouse training capabilities require lighter touch interventions from the education sector, with the value-add being credentialising and moderation of training being undertaken.

- **Mapping services and recognition services could be funded activity undertaken by ISBs.** Currently, mapping services are offered by ITOs to credentialise internal training systems through a contract for service arrangement. In order to unify and harmonise the vocational education system, making this service accessible to companies could help achieve the stated objective to bring more companies in to the formal education sector. In addition, recognising the training being undertaken will develop the picture of the full vocational education system. The micro-credential accreditation was intended to do this, however the requirements on micro-credentials are not fit for purpose for this activity. The rules applied, such as 20 credit requirement to be classified as a micro-credential means that 200 hours of learning much be undertaken. This is not fit for purpose for short, sharp skill development and continues to measure education and training on hours rather than outcomes. Undertaking this as a funded activity with ISBs, without the view of enrolments generating revenue as a result fits in to the proposed independent model of ISBs. This will also help develop a data and information source on how companies are responding to the changing environment through skills and training adaptations.
- **Capability building is delivered as needed.** The focus for corporates with some in-house capability for training should be focussed on how to strengthen capabilities and meet their needs for future planning and skills development under a partnership model, rather than as a 'customer / supplier' relationship that exists and is driven by the underlying volume requirements. This will require any vocational education system in the future to be focussed on high quality service delivery levels to businesses and learners that result in skill development and business gains, rather than the existing system of selling education products and services which can quickly become obsolete.
- **Fund Recognition of Current Competency and Recognition of Prior Learning models to ensure that the skills base of the workforce is developed and the system as a whole is more efficient.**
The process of recognising the uncredentialed skills of an individual is captured within a user pays system to recognise current competencies that may have been learned through work experience, or that may have been developed through education and training overseas that isn't recognised in New Zealand. Utilising this approach builds on an individual's existing skills base and steps away from over-training individuals, increasing the ability for education

and training to be tailored to learner needs. There are existing capabilities and models across both ITPs and ITOs to undertake this service, and it is suggested these services should be built into the funded approach to vocational education to increase the rate of qualification achievement based on a competencies' approach, and increase the responsiveness and efficiency of vocational education.

Recognise the demand-led nature of the model by lowering barriers to access for businesses in taking on unskilled workers and providing training.

- Pending the overall outcome of the review, it is suggested that barriers to access are lowered for businesses enabling them to take on low or unskilled workers. Given the direct business cost of taking on workers with lower levels of productivity, there are a number of overseas models that the Government could examine (such as the Australian Apprenticeships system) that both supports business and lifts the proportion taking on unskilled workers. Further work is required in the design of an industry training support package for businesses to rebuild confidence in the vocational education system.

Structure of the sector – unifying the vocational education system

In response to the specific proposals in the document, BusinessNZ suggests an alternative approach in designing a fit for purpose vocational education system.

Much of the proposals put forward rely on the existing funding policies and approaches to vocational education, and a myopic view of vocational education as existing within the accredited ITO and ITP sector.

There are many external players to the vocational education sector. Currently the way that mechanisms enable these players to connect easily with education players and qualification content is limited. For example, international regulators (for example, international maritime requirements), domestic regulatory bodies (for example, MBIE is the regulator for 350 occupations), and industry associations (within BusinessNZ, 70 Affiliated Industry Groups are members) are all important players in the system.

A strong vocational education system connects the many players and provides for skills leadership to be responsive to industry needs. It also provides support for industries to adapt as skill needs change. The rate of technological impact on businesses is accelerating, for example a mechanic's job on vehicle repair will shift more towards an electrician's role as electric vehicles gain critical mass.

The importance of designing a fit-for-purpose vocational education system cannot be underestimated. As a nation, people are our greatest asset and global competitive advantage.

A challenge in the existing system has been the interpretation of the current role and scope of each part of the sector. ITOs are recognised for arranging training, however the way this is undertaken is interpreted and variable. At a base level, this is a transactional arrangement to manage the enrolment, progress of achieving unit standards against the prescribed course duration and reporting to the TEC. ITPs already have a regional focus, however this has, in many cases, not translated in to close industry and community links that result in jobs for graduates. The radical reform needed in vocational education is to shift the sector towards a customer focus rather than a government and compliance focus.

A single ITP entity carries too great of a risk of a single point of failure.

Consolidation of the sector is warranted, with a high number of institutions for the population base of New Zealand, and efficiencies and cost-savings could be easily envisaged from consolidation of back office functions. However, the risk of a single point of failure during the implementation of the proposed changes is high. BusinessNZ suggests there needs to be at least two entities in any structural solution for the ITP sector. The model is essentially a large hub and spoke model. Many ITPs have attempted to deliver a hub and spoke model within their regions, with varying levels of

success. The risk of putting the sector in to a single hub and spoke model when there has not been the ability to deliver effectively through this model either within New Zealand or in Australia.

Part of the risk identified through the process is to consolidate back office functions while separating these functions geographically (for example, a region may pick up a back office function like payroll for the whole network). In order for a consolidated model to function, geographical closeness and work needs to be undertaken to not just create a single legal structure, but also to invest in a refreshed organisational culture. Given the likelihood of redundancies through the consolidation exercise, the challenge of creating a positive, co-operative and customer focussed organisational culture will be far more complex than creating the legal structures to enable a single entity and the disestablishment of the current organisations.

The ITP sector should have a single capital asset management structure and plan, and this asset base is used to shift towards facilitation of vocational education outcomes.

Part of the financial hardship of ITPs is caused by an inefficient capital asset base that is expensive to maintain, and not fit-for-purpose. The history of Crown allocation of land for educational purposes has been wrought with issues across the whole education sector.

It is suggested that a full capital asset management stocktake is undertaken and a plan developed to right-size and make fit-for-purpose the ITP asset base. Further exploration of the best way to do this is needed, however options to be investigated should be the use of the Infrastructure Commission to lead this work and ensure that the vocational education asset base is considered as vital infrastructure for the economy as other major infrastructure like roads and energy networks.

It would be anticipated that accelerated processes to sell Crown land that is surplus to requirements could assist in funding the investment needed to ensure the asset base is fit-for-purpose.

To drive greater efficiency from the physical assets in the sector, it is suggested the asset base is used for, and a function of the new entity, is to be 'landing pads' for all education. Anybody that can deliver either informal or formal training and needs facilities to do so would be able to use the ITPs assets. For example, businesses rolling out national training initiatives with a single provider could utilise the ITP facilities. University researchers could use ITP spaces for office use or to hold community talks about their research subjects. ITOs / ISBs could utilise these facilities to house its staff where strategically relevant to be close to industry within particular regions.

This changes the focus of ITPs from being 'all things to all people' and continued behaviour of lack of cooperation and ownership of training solutions by individual entities towards a genuine regional focus on delivering outcomes, regardless of who and how this is being delivered. It is envisaged this would need to be considered in line with changes to the funding system which would put in place an organisational component to ensure that these assets can be maintained.

In addition to increasing the utilisation of the asset base, this approach considers how do you move education provision to the places it is needed rather than moving people to where the provision exists. While there will always be some student mobility, attracting high quality vocational education to a region outside the existing dividing lines of tertiary sub-sectors will be good for businesses and learners. This would increase responsiveness to business needs, as high-quality training solutions could be attracted to regions where there may be a limited number of jobs arising, rather than the existing model that requires ITPs to continue to deliver courses regardless of labour market opportunities in an attempt to recover the sunk cost of course development.

Structure of the proposed ISBs

The proposal to shift ITOs in to ISBs and remove the arranging training function does not have a strong evidence base to support improved vocational education. Of note, the ITO restructure that

occurred in 2013 caused significant disruption in some industries in terms of the servicing levels offered by the new ITO sector structure, and gaps in industry servicing, such as ICT still exists.

It is proposed that an ISB structure that clusters around job family structures, as put forward by the Foundation for Young Australians is created with an eye towards not perpetuating a fractured industry system and return to a proliferation of ISBs, with a broader range of functions.

A small number of larger organisations are able to work more effectively and efficiently, and BusinessNZ proposes that the following job families shape the structure of the ITO sector and act as a funnel for the many players in the system to create a strong network of connection. Based on big data analysis of 2.7 million job advertisements in the Australian market, the following job families were created:



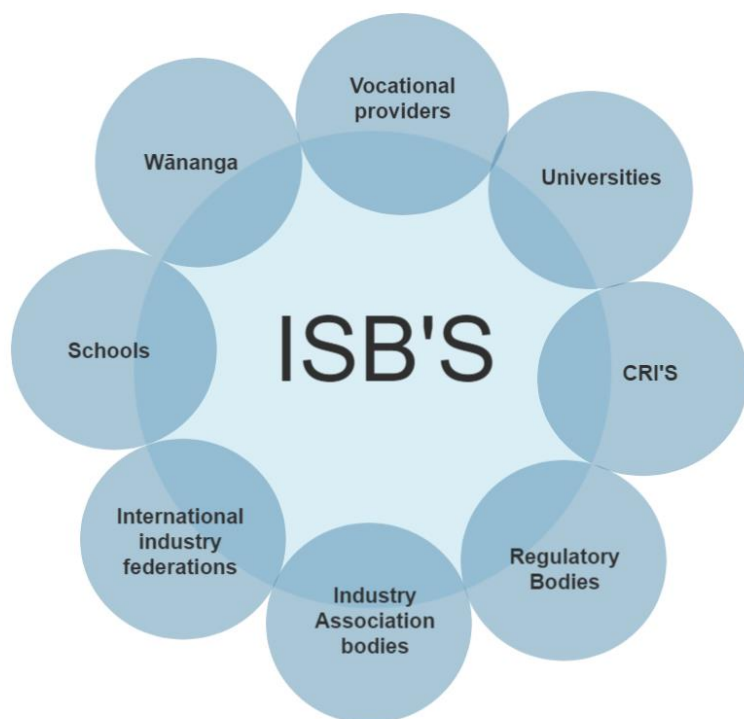
This proposed structure would require further consolidation and cost efficiencies in the ITO sector, and also remedy the gaps. It would be suggested that industry and ITOs could decide to organise in to these groupings, and that businesses could choose which organisation they would like to work with. The full report articulating the job families is available at: <https://www.fya.org.au/report/the-new-work-mindset-report/> This approach also lines up with the careers guidance strategy of focussing on an individual's strengths and preferences and connection to the labour market opportunities, rather than a singular focus on an occupation. There is potential for the job families that the Tertiary Education Commission has recently put forward as part of the careers system strategy to be utilised for this purpose.

The ISBs would have a wider mandate, and organisational funding to reflect this. The proposal to keep functions of an ITO at lower levels will not support the blurring of lines and the transportability of skills across industries. To support Government priority work programmes like Just Transitions and the Future of Work, there is a need to bring together education and industry in a different way.

It is proposed that the ISB would inform, facilitate and lead continuous improvements and iterations across all levels of education and industry. Driven by clear service levels geared towards industry needs, including meeting the needs of all industry players in the cluster (not just the ones with large scale), the ISBs would have responsibilities across the key functions where gaps exist currently – school transitions and vocational pathways, support for guidance, employment outcomes and transitions, skill and industry leadership, future thinking of changing industry needs, the credentialing of industry training, workforce development and planning, and support for up-stream and down-stream connections in training. New functions would be added, including providing

a strong industry and employer feedback loop to inform the measuring of high-level objectives to measure the success of the vocational education system.

The stakeholder base for the ISBs would bring together the many player based on the driving force of skill needs from industry and businesses. The ISBs would be responsible for the stewardship of the vocational education system.



Any unified vocational education system will require closer alignment and unity of Government agencies with touch-points on vocational education.

Part of the fracturing of the vocational education system is also the split between Government agencies on vocational education. In addition to the main education agencies, the Ministry of Social Development and Ministry of Business, Innovation and Employment are purchasers of vocational education, and have organisational objectives linked to employment outcomes and meeting labour market demand. The agencies need to link up more closely and have an agreed vocational education approach across Government, reflective of an industry and demand-led system. For example, currently MSD recognises employment outcomes as a positive outcome for an MSD client, where undertaking a longer duration course could be of great benefit to an individual and have a greater long-term return on investment. There are significant opportunities in the Provincial Growth Fund projects to undertake skills training, and yet a joined-up Government approach is not apparent. Reprioritising existing funding mechanisms such as Mana to Mahi in to Apprenticeship subsidies and connecting initiatives like social procurement is needed to create greater coherence across the Government partners.

Similarly, the vocational education review needs to be considered within the scope of the broader educational reviews (e.g NCEA, Tomorrow's schools review) that are underway, with the focus on a joined-up education system that is seamless for the learner, and easy for businesses to engage with.

Funding should follow function and form.

As noted in the change of approach to vocational education, it is suggested that funding needs to follow the function and form of the sectors. The spend of the tertiary investment is the main lever being utilised to achieve change, however this relies on the existing funding structures. Volume based funding has driven perverse behaviour in the sector, and a fit-for-purpose funding model needs to be established that follows the form and function, and after a more thorough view of all the players and delivery in the system is understood.

To assist in this, BusinessNZ has collated case studies of vocational education success stories from across a range of industries and providers. To achieve a healthy vocational education system, the ability to allow for a range of different models that reflect the industries and learners they serve, and expand the thinking on how the existing successful models can be retained through any structural change.

Case study 1: Industry training model - Transpower demonstrates the power of business leading training to ensure New Zealand's transmission infrastructure is maintained – the risk of infrastructure failure is exponentially bigger than the cost of training.

The business challenge: Transpower owns and operates the National Grid. Given the importance of maintaining the nation's energy infrastructure, it is critical that skilled transmission specialists undertake maintenance and build activities to a high standard. The risk and potential impact of New Zealand's energy infrastructure failing is too great to not invest in the workforce having the relevant skills and competencies to build and maintain this critical infrastructure.

The learning solution: Transpower has a Category One registered private training establishment 'Grid Skills' that is training 4,000 learners annually in compliance, electricity supply, substation and line management. It does not claim TEC funding for this activity.

Transpower is providing 'down-stream' training, providing courses and refreshers for the workers of its contracted Service Provider companies. Transpower is a state owned entity and created this model of training in recognition of its criticality to New Zealand's infrastructure. It also utilises Connexis to create and manage learning contracts with each trainee and their employer undertaking Electricity Supply Industry transmission qualifications plus provide pastoral care support. This service provided by Connexis is valued as a mechanism to place an independent party between Transpower and the direct employees of Transpower's contracted Service Providers.

The model works well and its success is notable in the reliability of the transmission infrastructure. Transpower invests \$4.5 million annually to undertake this training and operates a lean model with 8 core staff and a network of industry experienced trainers.

NZQA noted in its 2015 External Evaluation and Review that... "The competency framework developed by Grid Skills, in consultation with stakeholders, maps out requirements for individual jobs and identifies clear pathways for workers to develop skills, qualifications and experience that can improve the quality and safety of industry performance and enable them to carry out project and maintenance work. It also, working with service providers to identify training needs and address skill gaps. The success of the framework is measured through key performance indicators, such as the number of competency pathways introduced and/or the proportion of the workforce who are competent to build, commission and maintain new equipment".

The result: Transpower through the Grid Skills business unit delivers an effective and efficient model of vocational training and provides leadership to its network of companies in providing wrap-around training. The richness of the learning experience is supported well by the experienced trainers, with learners noting that stories of challenges and solutions are as valuable as the technical skills in addressing issues that arise on the job.

Case study 2: Institute of Technology - Industry and ITP partnership leading the industry skills development and matching training to job opportunities and labour market demand

The business challenge: Energy Skills was established by the oil and gas industry in Taranaki in response to the companies recognising that poaching staff from each other and not increasing the pool of potential workers in the industry was unproductive.

The learning solution: Energy Skills has partnered with WITT for the last 9 years to articulate the industry skill needs for process operators. It provided the course design, competency and skill needs to WITT, who provided the credentialing and delivery. The companies provide scholarships to learners, who then undertake work experience in those companies. The programme results in 92% employment outcomes in to the industry within 4 months of completions.

The result: Energy Skills provides parameters on the number of people to be trained based on the number of jobs coming up in any given year. This labour market demand matching is unique, and ensures that the market is not flooded with qualified people where jobs are not available. Peaks and troughs of labour market demand can be effectively managed and being geographically located in Taranaki ensures that the training is close to industry and jobs.

Due to the limited opportunities in the industry, Energy Skills works across the network of companies nationwide to link them to the training opportunities, with learners shifting to Taranaki for the course, and completing their work experience in their home regions.

Appendix One:

Features of a high performing vocational education sector:

1. Provides students with a broad education designed to prepare them to easily gain additional skills and knowledge needed as their career goals, technology and work organization change over their employed lifetime
2. Provides opportunities for students to learn and to practice necessary cognitive and non-cognitive skills in an authentic industry setting
3. Provides opportunities for students to learn the theory behind the practice
4. Creates learning environments in which students can learn and practice on state of the art equipment
5. Provides opportunities for students to move from vocational track to academic, university track and vice versa
6. Provides opportunities for students to move up from the lowest levels of occupational preparation to the highest levels of academic and professional preparation with career guidance along the way
7. Provides standards and qualifications widely recognized in the labor market and continually adjusted to the leading edge of industries, including the increasingly global nature of occupations
8. Is adapted to the level of economic development of the economy in which the student will work and to the level of technological advancement and work organization characteristic of that economy
9. Provides a distribution of training slots that is reasonably related to the demands of the economy, in terms of occupations and levels of qualifications needed to operate the economy
10. Provides instructors who have industry experience and whose knowledge of the industry is fully current with state of the art practice
11. Provides incentives adequate to attract the necessary number and quality of instructors for each occupational group and qualification level
12. Provides incentives adequate to attract qualified students to each level of the skills training system
13. Builds on a basic education system that provides students entering the vocational education system with the skills and knowledge needed to engage productively with the vocational education system
14. Creates a brand that makes vocational education an attractive opportunity to young people who have options

Source: Centre on International Education Benchmarking

Appendix Two

Outcome	KPI	Measured by	Monitored by	Govt strategic link	Business strategic link	Owner
Young people have the right skills and capabilities to successfully transition to employment and further training.	NEETs rate is in line with broader unemployment rates and/or <5%.	TBC	TBC	Improve educational parity for Maori, Pacific and young people.	Security and attraction of skilled workforce supply.	TBC
	Transition rates from course-based training in to jobs or industries trained for >70%					
New Zealand businesses have an accessible and skilled labour market supply.	Jobs filled within 30 days.			Employment transitions improved.		
New Zealand workers have the right skills and training to be safe and healthy at work, navigate a changing job market and reach their professional potential.	Overall trend of workplace accidents and deaths decreases.			Safe and healthy workplaces.	Safe and healthy workplaces.	
New Zealand businesses are more productive due to a skilled workforce.	Productivity statistics show improving trends.			New Zealand has a thriving economy.	New Zealand businesses and industries continue to grow.	
	Mix of corporate and SME participants in the system					
	PMI and PSI shows consistent growth in major private sector industries.					
There is high trust and integrity in the vocational education system	At least 30% of businesses are engaged in formal education and training.			The vocational education system meets industry need.	Businesses get the right staff, right training in the right way and at the right time.	
	Net Promoter Scores of education providers and ISBs increases					

	and is published annually.					
The vocational education system is responsive to business needs.	Service levels and expectations across the sector are exceptional.			New Zealand has a world leading education system.	The education system is responsive to industry need.	
New Zealanders are adaptable and successfully navigate jobs throughout their working lives.	Continual development and well-being measures.			Well-being of New Zealanders is high.	Transferable skills utilised by businesses.	