

## **Submission on the Productivity Commission Issues Paper *Technological Change and the Future of Work* June 2019**

### **About Us**

The Industry Training Federation (ITF) is the national body for New Zealand's eleven Industry Training Organisations (ITOs). We are the collective voice for the industry training and apprenticeships sector. In 2017, 145,000 trainees and apprentices achieved over 50,000 industry-recognised qualifications on the New Zealand Qualifications Framework.

ITOs' legislative role is to develop and maintain skills standards for industries, and to make arrangements for people working in those industries to achieve industry standards and qualifications. Technological changes occurring in workplaces across New Zealand are one of the key drivers of these activities.

If you have any questions, or would like to discuss elements of this submission further, please contact Josh Williams, Chief Executive, on 04 894 3190 or at [josh@itf.org.nz](mailto:josh@itf.org.nz).

### **Technological Change and the Future of Work**

The ever-increasing pace of technological change presents a very real set of challenges for industries, employers, educators and Government. These are well-captured throughout the document, and our response will primarily focus on the issues addressed in *Section 5: Education and skills supply*.

We believe that a strong, nimble, formal workplace-based training system must be a core component of any strategy to help the New Zealand workforce and economy respond to the challenges and opportunities presented by technological change.

We also note that challenges of technological change are being experienced concurrently with a number of other pressures which drive a similar need for a responsive education and training system capable of upskilling New Zealand's workforce as, when, and where required. Whether it is the challenges associated with addressing skills shortages, responding to the housing crisis, delivering Just Transitions, satisfying swiftly changing global consumer preferences, or accommodating substantial demographic shifts in New Zealand's workforce and consumer base, we need a training system that can keep pace with the needs of industry and employers.

Finally, this investigation is taking place at a point of both considerable uncertainty and substantial anticipated change for the New Zealand vocational education and training system, as a result of the Government's Reform of Vocational Education (RoVE) proposals. The Government's decisions with regard to these proposals, which will be made prior to the completion of this Productivity Commission investigation, will have a significant impact on the ways in which New Zealand's Vocational Education and Training (VET) system is able to support employers and industries to meet the skills challenges associated with technological change. We are particularly concerned that one of the current proposals, to shift responsibility for arrangement of training from industry-led ITOs to tertiary education providers, could have particularly negative consequences with regard to the timeliness and relevance of training for industry.

## Responses to the Issues Paper

### Skills shortages are a challenge in any scenario

As noted, our response to the paper is primarily focussed on the issues raised in *Section 5: Education and skills supply*, but before addressing the specific issues raised, we would also like to briefly comment on the four future scenarios presented in the paper. How technological change impacts the workforce in New Zealand will obviously have substantial impacts on how Government and other actors should frame their responses to it.

That said, whether technology drives an employment boom, an employment bust, or a steady change in line with past experience, an efficient, responsive workplace training system will be vital for ensuring the fourth possible scenario (stagnation) is avoided. In any case, the reality is that the pressures of technological change are already a factor in what is an increasingly tight 'skills market'. While there is concern that technological change will drive skills shortages, in reality skill shortages aren't simply a future forecast – they are a current problem. Our response therefore speaks to both current known and future anticipated challenges, largely agnostic of which of the mooted scenarios eventuates.

### We must make better use of New Zealanders' desire to learn

Both New Zealand's high tertiary participation and high desire to participate in more learning activities detailed in the issues paper speak to a willingness of New Zealanders to learn, upskill and reskill. In one regard, this is a strength of the New Zealand education system, but it also speaks to the reality that New Zealand is making a significant 'front-end' investment in tertiary education that is not necessarily well connected to needs of industry, employers or, ultimately, the learner. This in turn results in a significant need for later life upskilling, not just to meet the needs of a swiftly changing world of work, but more fundamentally to secure the skills needed to sustain meaningful employment.

We know, for example, that in 2017 44.5% of new entrants to the apprenticeship system already had a tertiary qualification, with 10.8% holding a degree or post-graduate qualification. In some cases, this may be the result of a planned progression – from a degree in business to an apprenticeship in a trade in which that business learning may ultimately be applied, for example. In other cases, it may simply capture a desire to change pathways. However, we believe it also speaks to a number of fundamental problems with the approach to investment in VET in New Zealand, the failure of much current tertiary provision to effectively prepare New Zealanders for the workforce, the esteem with which vocational pathways are held in schools and the community, and the lack of quality career and education advice available to young New Zealanders.

### We must bridge the gaps between education and employment

The issues paper correctly notes that New Zealand's education and training system is not as well-aligned to the world of work as it could be. Nor are employers as well connected to the education system as we might hope in a perfect system. This disjunct between the tertiary education system and employers is an already a substantial problem, which will only be exacerbated by the demands of increasing technological change in the workplace.

#### *Making the education system more responsive to demand*

At its heart, the problem is one of focus. With tertiary education providers incentivised through funding to focus on the interests of learners, programmes are developed on the supply-side of the skills system, with too little consideration of the needs of employers and industry on the demand-side. By comparison, ITOs are industry-owned organisations arranging training that can be delivered in the workplace, placing much greater focus to the demand-side. This is to the

benefit of industry and employers, and ultimately the learners looking to progress in those industries.

A major part of the solution to this problem must be a refocussing of tertiary education in general, and VET in particular, towards the skills needed by workplaces. This could be achieved both by a greater investment in on-job training, and stronger funding incentives and quality assurance expectations around the demand-side focus of qualifications offered in off-job settings. By increasing this demand-side focus, the tertiary education and training system will become more responsive to the changing needs of the workplace, and better able to provide training to meet evolving demand-side needs driven by technological change.

Elements of the Government's RoVE proposals enabling industry skills bodies to set standards across the whole of the VET system may help address this. However, the concurrent proposal to pass responsibility for arranging workplace training from industry-led ITOs to tertiary education providers, principally the new New Zealand Institute of Skills and Technology, could have a hugely detrimental impact.

Separating responsibility for industry standard-setting and the arrangement of industry training and apprenticeships would weaken the delivery of both roles by disconnecting the feedback loop that currently exists within ITOs, linking standard setters to the 'boots on the ground' training advisors who see on a daily basis the challenges being faced by employers and effectiveness of qualifications and training programmes in meeting these challenges. Put more fundamentally, it would further distance standard-setters from the workplace, making it even more challenging to develop responsive education products in a time of technological change.

#### *Supporting employer engagement in the formal training system*

As well as ensuring the education system is meeting the needs of employers, it is also vital that we encourage more employers to actively participate in the formal training of their workforces. In part, a more responsive system should facilitate this, but for many employers the costs and complexity of engaging in the formal education system will remain prohibitive. This is likely to be exacerbated in scenarios where employers are facing the challenges of major sector changes, be they driven by technology, consumer choice, or government regulation.

To address this, consideration needs to be given to how to support employers in upskilling through the formal education system. This should include incentive schemes to help meet the costs of training in the first 12-18 months of an apprenticeship, as is done in a number of countries, alongside efforts to better ensure the relevance of all tertiary provision.

#### *Making 'lifelong learning' a guiding principle*

An effective system for retraining and re-skilling New Zealand's workforce will require a commitment to lifelong learning beyond that which consecutive governments have been prepared to make. Indeed, our aspiration should be to normalise lifelong learning in the workplace to the extent that 'ongoing training' (an expectation of continual upskilling) replaces 'retraining' (an expectation of retraining in the face of redundancies or role change) in the lexicon.

We need more support for industry focussed, practically applied learning that provides skills as and when required, to build resiliency in both our workforce and amongst our employers and industries as they grapple with the impacts and opportunities of technological change. The recent introduction of micro-credentials as recognised (and fundable) educational products is a good start in this regard, but it remains a prescriptive system that should be seen as a starting point, rather than a full solution.

Unfortunately, investment remains focussed on a linear pathway from school into tertiary and then into the workforce, with approximately 93% of tertiary investment focussed on institution-based learning, the preponderance of which funds a university system promoted as the premier post-

school destination for learners. In effect, our education investment is front-end loaded, and despite lifelong learning becoming a catch-phrase amongst policy-makers, as recently as late 2017 we saw the introduction of a substantial fees-free subsidy which simply reinforced current patterns of investment. This must change if we are to meet the needs of a world which is changing so quickly that what is learnt at 20 years old cannot possibly sustain an individual through their working life.

### On-job training is a key tool for meeting the needs of the low-skilled

As noted in the issues paper, New Zealand has a significant tail of low skilled individuals. Those adults with low skills, particularly low literacy, numeracy and digital competency, are most at risk in a swiftly changing world of work. They are less able to adapt to change within the workplace, more likely to hold jobs that are more easily outsourced or automated, and less likely to rebound into new employment.

While education is the obvious solution to these challenges, the reality is these people are among those most likely to have had negative experiences with classroom learning, making them less willing to engage in formal education. This is exacerbated as people grow older and take on greater family and financial commitments, which make up-skilling in the class room even less viable.

Ideally these issues will be addressed through changes in the compulsory education system, but until such time as that is achieved, and for those that will be left behind no matter how effective our education system is, on-job training will remain a vital avenue for 'second-chance' learning. Stepping stone on-job qualifications achieved at level two on the New Zealand Qualifications Framework provide a vital introduction to educational success for many low-skilled workers. Similarly, contextualised approaches to literacy and numeracy, such as those supported through the Skills Highway programme, provide a vital opportunity to build core foundational skills in a way institutional learning cannot. If this most vulnerable group in the workforce is to build its resilience to the impacts of technological change, programmes such as this will need to be amplified.

### We must provide better, and timelier, careers advice

We have previously noted that one of the challenges faced in matching supply to demand in the education system is an education provider focus on programmes delivering skills that learners want, rather than that industry needs. As well as being a comment on the incentives placed on education providers, this also speaks to the poor quality of careers advice in schools. Students pursuing anything outside a traditional university pathway far too often struggle to get good advice about career options, pathways and educational opportunities. This leaves them ill-prepared to make important post-school choices, and leaves them at risk of having to enter industries on the lowest rung, with little resiliency in the face of change, be it technological or otherwise.

As the issues paper notes, the Tertiary Education Commission has taken on the responsibilities of Careers New Zealand. On paper this move should have ensured an alignment between the advice and guidance provided to school leavers and job seekers, and decisions around the funding of tertiary education. In reality, a long-promised Careers System Strategy has yet to materialise, and we remain frustrated by the lack of tangible action in this regard.