

ITF submission: New models of tertiary education

ITF Submission: New Zealand Productivity Commission: New models of tertiary education – Issues Paper February 2016 (Issues paper)

The Industry Training Federation (ITF) appreciates the opportunity to provide feedback on the Issues paper produced by the New Zealand Productivity Commission.

Any inquiry into new and future models for tertiary education must first look at the existing models, and systems that support it. The existing tertiary education system is complex, and the Issues paper has done an excellent job of summarising the system and identifying the key players and issues in terms of education supply.

We agree with many of the issues you have identified, particularly in terms of the lack of security for students of the saleability of their education ‘purchase; the investment in tertiary education as typically a ‘one-shot investment’; and the lack of evidence to show a strong link between the education system and productivity. We contend that increasing the *proximity* of the education supply to the labour market can mitigate these issues, and that the industry training model has a lot to offer in this respect. Our take on those three issues is included in this submission.

We were pleased to see that the definition of tertiary education was a comprehensive one that included workplace training. We would like to provide you with further information about the industry training model that may be of use to you, and directly answer a few of the questions from the Issues Paper.

We have, in addition, provided three case studies where employers have identified productivity gain as one of the benefits of workplace training.

Our take

Saleability of your education purchase

The workplace is changing at a rapid rate, often as a result of new technology. New technologies can increase the output and efficiency of a firm, and affect staff in terms of the nature and availability of the work. In order to use new technologies to drive productivity and innovation, students and firms need access to the technology in a real workplace environment. It can be costly for education institutions to invest in new technologies, therefore difficult for educational institutions to keep up with new technology and produce graduates with the right skills.

Workplaces, on the other hand keep up with technological advances simply to keep their business competitive. It therefore is logical and efficient for training on how to use these new technologies to take place in the workplace itself. It gives students greater certainty that their education purchase will pay off.

Lifelong Learning

A very high proportion of the taxpayers' investment in tertiary education currently supports institution-based delivery, mostly to younger people. A much smaller proportion - just seven per cent - is directed towards developing and deploying the skills of the working population, through workplace-based education and training.

Having strong tertiary institutions, and quality education pathways for young people straight out of school is vitally important. Adequately preparing new entrants for the labour market is an important job for tertiary education, but it is not the only job. Changing demographics, technological developments, and the realities of modern careers and employment structures mean there is a need to look at how our systems for developing and deploying skills and knowledge support people throughout their working lives.

More than ever, the modern workforce requires resilience and adaptability. People are going to change careers, and need to learn new things throughout their working lives. Given this, we need to question the extent to which "frontloading" skills into young people at the start of their careers is the best way to ensure we have the right skills at the right time, and to be sure that our investment in skills delivers the productive benefit that secures individual and collective success.

As identified in the Issues paper, 'new graduates, while important, are a smaller source of skilled recruits than are immigrants and current workers'. Productivity gains should thus be sought from the existing workforce, through workplace training. We need to look at current settings that may be creating barriers or disincentives to training people throughout their working life.

One such barrier is that the basis of the funding model is on the completion of full qualifications. We agree that for new entrants, this first qualification can be very important as a means to gain employment. However, this value becomes less clear for mid- and late-career workers, particularly those who already hold an entry-level qualification. In some industries completion of a qualification is linked to licences to practice, but many employers and students want the portability and flexibility of short, targeted training. This would allow for greater variety of response to changing markets and workplaces, and ensure that the training is relevant – a just-in-time response. It is also in the workplace where innovation is most likely to take place in a meaningful way – improvements and change typically take place incrementally at the site of production – and this can be supported by industry training.

Increasingly, more industries are able to measure the value-add for workplace training to their productivity or bottom line. This value is directly traceable to improvements in literacy and numeracy, and work-specific skills, but for employers the link is weaker for completion of a full qualification, in terms of return on investment.

The link between education and productivity gain

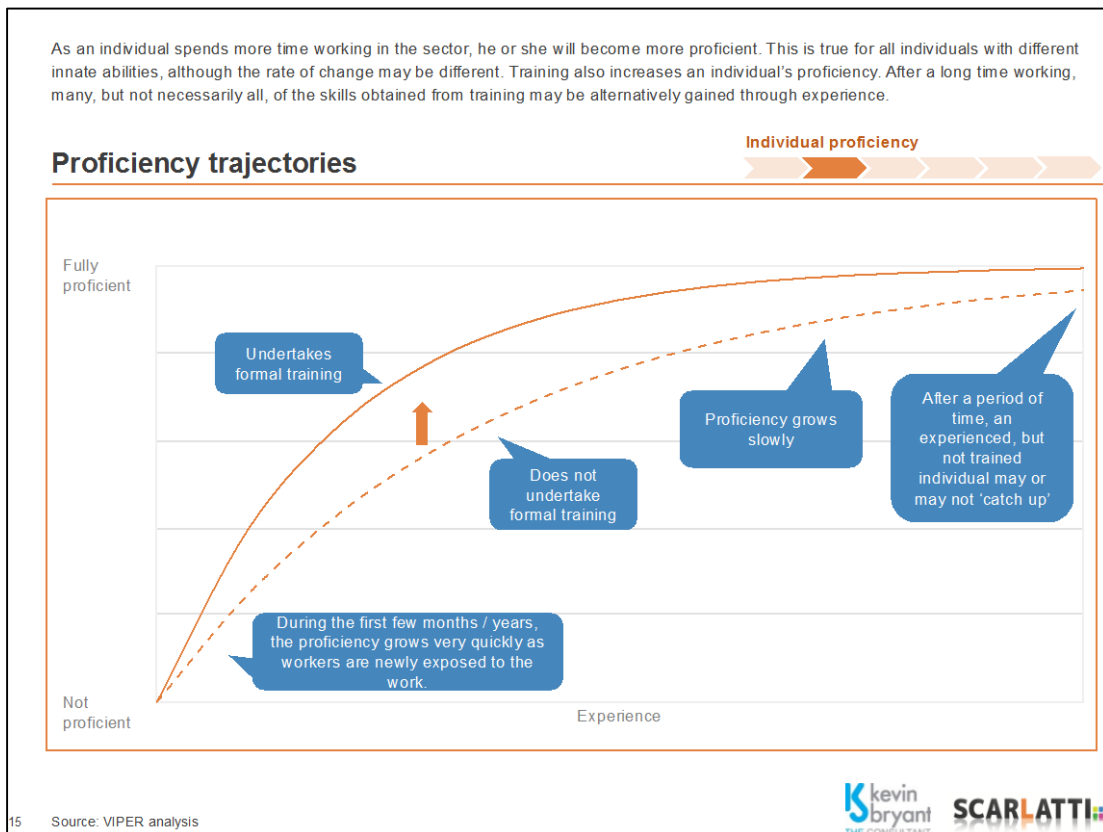
We believe that for the link between education and productivity to be demonstrable rather than theoretical, the following key aspects need to be present:

- Industry involvement in content development to ensure that the training is current, relevant, flexible and valuable - for both employers and students;
- Leveraging of workplace infrastructure and technology to drive change and innovation through training
- Growing productivity by up-skilling the existing workforce.

The ITF and its members are working with employers to identify baseline metrics for productivity, in order to show progress following (and during) workplace training.

One such project has used an approach that works backward from a measure of economic return such as cumulative firm profits over time. The drivers of profitability are broken down to identify individual attributes of a firm's performance and evaluate the relative importance of these. The impact of a team's technical and management proficiencies on these attributes is then considered. Finally the contribution of training to an individual's proficiency is weighted relative to the contribution from experience.

Below is a graphical representation¹ of the average projected proficiency trajectories for people in the workforce with, and without, training. We consider the space between proficiency with and without training to show a link between training and productivity growth - the productivity gap. To date we have information across a small number of occupations, some of which show a gap that is even more marked than the graph below. The ITF is working on gathering this information across all sectors represented by ITOs, and we will share this with the Productivity Commission as soon as sector analyses are available.



We welcome the next stage of the Productivity Commission Inquiry into new models of tertiary education. The Issues paper touches on a few technological advances that impact on the delivery of education content (e.g. MOOCs, online learning and assessment) but has not yet delved into any new models for tertiary education in New Zealand or abroad. We look forward to working with the Productivity Commission on what these new models might look like and how the industry training sector can

¹ This is from return on investment research work undertaken by Scarlatti and Kevin Bryant The Consultant.

contribute. In particular, we would like to see a model that better supports firms to be the site of training delivery, and employers as more active participants in the tertiary education system.

The Industry Training Model – a Summary

We applaud the Inquiry team for taking a comprehensive definition of tertiary education, inclusive of workplace training. In this section we would like to set out key elements of New Zealand’s industry training and apprenticeships model, which was not described in detail in your Issues Paper.

Industry training is the part of the tertiary education system with the closest link to the labour market. Industry training happens in the workplace, with existing employees. The majority of the training is delivered on-job by knowledgeable and experienced staff members and managers, in real rather than simulated situations. Where off-job provision is needed, industry training organisations make arrangements with tertiary education providers for its delivery. Students can see first-hand the value of what they are learning as they are applying it in their work. They are also able to learn from their colleagues and work more effectively with others in their workplace with the resources and technology used by firms now. Firms are intimately involved in both the creation of the content for the training, and the training itself. This enables them to evaluate and influence the ‘education supply’ first-hand, rather than being a passive recipient of this supply.

Industry training organisations (ITOs) are the connectors in this system – connecting employers, students, tertiary education providers and government to ensure that the training is relevant, meaningful, high quality, and offers value for money. They also perform an aggregation function; providing support to firms who lack the infrastructure to manage formalised education and training for their staff. In an economy where 95% of businesses are small to medium-sized enterprises (SMEs), this aggregation and added capacity and capability is a critical role.

Industry training organisations have a standard setting function on behalf of the industries that they represent. Through this function ITOs develop skills standards and qualifications in consultation with employers, industry associations and education providers. This process ensures that the training that is then arranged by ITOs is relevant to the employer as they have been directly involved in the development.

Strengthening the link between skills and productivity requires a high level of integration between education and industry. ITOs’ roles as connectors in the tertiary education system improves educational outcomes across the entire system; by bringing employers and education providers closer together, thus improving the currency and immediacy of the educational offering. Initiatives like Maori and Pasifika Trades Training work well where ITOs bring an employer-led approach to designing pathways into sustainable employment.

Data

Frustratingly, industry training data is collected and reported separately from tertiary provider data, and is therefore absent in some of the information included in the Issues Paper. We include some of these relevant data below:

Figure 3 Main participants of the tertiary education system

We would like to have industry training organisations recognised as a main participant in this graph. The number of learners alone justifies this. The figure below represents a tweaking of the diagram by ServicelQ, a large ITO, and is included for consideration by the NZPC in its next paper. The compulsory school sector is included in this diagram to show the increasing links with transitions and pathways from school to training and tertiary education.

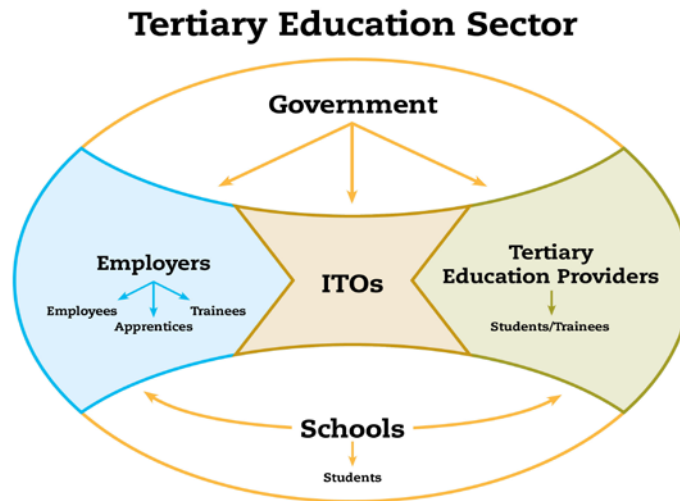


Figure 6 Characteristics of New Zealand’s tertiary providers

We suggest that this be changed to say ‘Characteristics of New Zealand’s tertiary education organisations’ so that ITO information can be included. The ITO section would be as below:

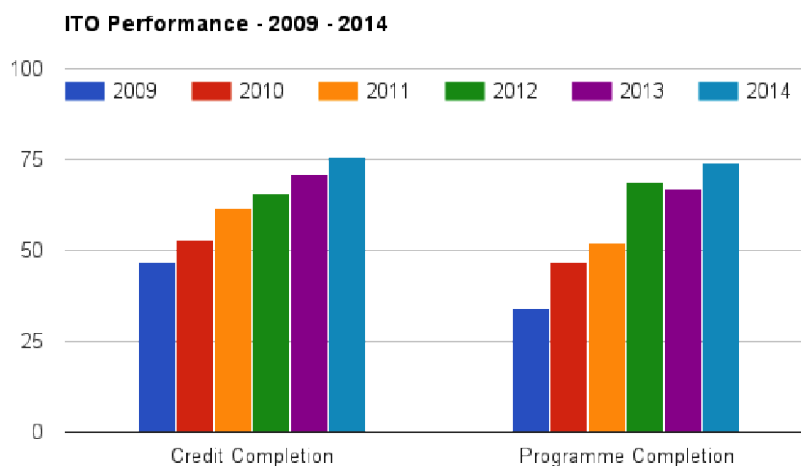
Industry training organisations

Develop assessment standards and qualifications on behalf of gazetted areas of industry, and arrange workplace vocational training for employed adults.

- 11 industry training organisations
- 131,000 students, 40,721 STMs
- 7% of total TEC funding
- 90% of provision is at certificate level 1-4

Figure 15 Completion rates by subsector, 2009-2014

We would like to see industry training data added to this graph, as below. TEC’s Education Performance Indicators for ITOs use credit completion in place of course completion, and programme completion in place of qualification completions.



Questions from the Issues Paper

Q2 Do prospective students have good enough information to enable them to make informed choices about providers and courses? What additional information should be provided? Who should provide it?

The issue of information asymmetry in tertiary education is well canvassed. The 'choice' for potential industry trainees occurs at two levels; first their choice of occupation and second the means of training for that occupation – via workplace learning or (where available) a tertiary institution. Careers advice tends to focus on higher level qualifications and the 'professions', reinforcing the parity of esteem issue between academic and vocational tertiary education. Using Vocational Pathways as a basis, the full suite of occupational choices, training options within those occupations, and likely career pathways and earning potential should be made available to all young people.

Q17 In what ways and to what extent do employers interact with tertiary providers in New Zealand? Are there practical ways to encourage employers to have greater or more productive involvement in the tertiary education system?

The interaction between the industry training organisations and employers is a key pillar of the industry training system. The standards and qualification development function of ITOs is dependent on industry/employer input and approval. Likewise, all training agreements are a tripartite agreement between the ITO, the trainee and the employer.

Employers do not always see a role for themselves in the tertiary education system, but through ITOs can determine the skills and training needs, and be the site and supplier of training. For this to be expanded to a greater proportion of employers in New Zealand, a wider range of incentives needs to be in place. We would like to see more employers supported to develop their capability as training suppliers, as well as to take on extra trainees where there is an identified sector-wide labour shortage.

Q18 What are the similarities and differences among ITOs, or between ITOs and other tertiary subsectors, in how they operate?

There are more similarities than differences among ITOs in terms of qualification and standard development. There are, however, significant differences in business models and drivers among the industries they serve, so the models for arranging training and assessment can vary greatly.

The key differences between ITOs and other tertiary subsectors are as follows:

- ITOs have a standard setting function on behalf of the industries they represent
- ITOs do not deliver training, but provide training capability development to employers
- ITOs receive more than one-third of their funding from industry.

Q19 What makes for a successful ITO in terms of meeting the needs of firms for skilled staff?

We think that the elements necessary for success are:

- Strong connection with industry and employers to ensure that the standards and qualifications developed are relevant to the workplace
- Good pedagogical practices to ensure best practice in resource and qualification development, assessment, and student support.

Q20 How effective is the ITO model in meeting the needs of learners and firms?

We think the model is very effective, particularly in the following ways:

- It is very cost effective for Government (about one-third of the cost per student to the taxpayer, when compared with tertiary education providers)
- It is very cost effective for students – low to no fees, they are earning a wage, paying tax, and do not require student loans
- Students are in the workforce so are contributing to workplace productivity even while undertaking training
- Involves industry directly in the training, and in the development of standards and qualifications
- Provides support to small firms who don't have a training infrastructure
- Training is provided in the context of the workplace, so students can see the benefit of their training directly, and the workplace experiences the immediate benefit of the deployment of skill.

Q21 What arrangements for arranging workplace training and apprenticeships in other countries could New Zealand usefully learn from?

The OECD has conducted several country studies of VET systems, and concludes that effectiveness is a function of the integration between the world of education and the world of work. UNESCO's recent strategy 'Unleashing the Potential' also sets out a framework for linking skill development to measures of wellbeing, including economic productivity.

We think that there are some aspects of the Korean and Scottish models for VET Education that New Zealand could learn from. We are bringing representatives from both countries to our ITF Conference in July, and we would be happy to arrange for the Productivity Commission Inquiry team to meet with them.

Case Studies

Case Study 1

Dominion Constructors

Part of the Russell Group of companies, Dominion Constructors introduced literacy and numeracy training as part of its initiative to improve health and safety. With rigorous health and safety compliance requirements and work in dangerous situations, the construction industry requires employees with well-developed literacy, numeracy and critical thinking skills.

Dominion Constructors General Manager, Robert Gibbes, says: “We’ve got hazards that change every day and if our people aren’t able to read and write, or have communication difficulties, then one they’re not as confident, but two they’re also at risk.”

Dominion found a large number of its employees had underlying literacy, language and numeracy skill gaps that needed to be addressed so that all employees could stay safe, genuinely engage in company growth and fully understand business initiatives. Dominion introduced an on-site training programme through provider Education Unlimited. The training encompassed a wide range of core skills including health and safety, money management, communication and numeracy. One project saw employees come up with a programme for how they could educate and encourage others to report near misses and try to remove hazards altogether.

“Reporting of near misses is critical on a construction site as it indicates a hazard that could stick around and cause something more serious,” says Robert. “The training was a big part of empowering our guys to solve this real problem. Our company is better off as result of the efforts of the teams that have been educated and empowered to get on and solve business problems”.

Case Study 2

Rodney Wayne Bethlehem

“I have a huge love for continued education,” says Ashley Sterrenburg, trainer at Rodney Wayne Bethlehem. “This drives my passion to teach others”.

Their dedication to training has paid off. Earlier in the year, Rodney Wayne Bethlehem took away the Rodney Wayne Salon of the Year Award, the top award at the Rodney Wayne awards. It was their commitment to training that secured their win.

Rodney Wayne Bethlehem has a “comprehensive training system”. It includes all team members at all levels. Ashley conducts regular appraisals with all team members to set goals for their training. Their achievements are monitored, and Ashley provides regular feedback to help staff meet their goals. For apprentices, the HITO units they have to achieve are fitted into their training plans.

Ashley’s biggest success has been seeing her apprentices grow. “Having apprentices is a win-win for everyone. They help the seniors by freeing them up to do more advanced tasks, which makes the salon more profitable and the team more productive. In return, the apprentices get paid for daily, hands-on experience. Being immersed in this ever-evolving learning environment offers them so much more. Continued apprentice training is how we keep our industry alive”.

Case Study 3

Z Energy

Five years ago, Z Energy saw a gap in the market; there was something missing from New Zealand’s service stations. Service. They set out to change that. In its attitude to customer service, the business thinks more like a hotel than a service station. Customers are greeted by a ‘forecourt concierge’ ready with squeegee bottle and windscreen cleaner.

On the job training plays a vital role. So far, 3,300 staff have completed ServiceIQ’s nationally recognised retail qualifications at either Level 2 or 3, and some are successfully working their way up through the organisation and into further education.

“For the business, there are three real benefits that flow from on-job training in customer experience”, says Mark.

“Firstly, our people really step-up to make sure our offer comes through and our customers love that. Secondly, there’s been a tangible improvement to our financial business results. And thirdly, for our people who have no formal skills and qualifications, we are right behind them, helping them to fulfil their potential.” Five years down the road, Z’s original vision has proven right. The nationwide business is pumping with over 60 million customers pulling into its 200 forecourts every year and almost 300,000 fans on Facebook.

“It’s not rocket science. We recruit great people and invest in them through training. No matter how well we perform yesterday, we take our customers’ feedback and work on being even better today,” says Mark.

About the Industry Training Federation

The Industry Training Federation (ITF) is a membership-based organisation, representing industry training organisations (ITOs) to improve the policy for delivery of industry skill development and workplace learning. It is the collective voice for the industry training and apprenticeships sector in New Zealand.