

4 May 2016

Inquiry into New Models of Tertiary Education  
New Zealand Productivity Commission  
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Dear Sir/Madam

**Re: New Models of Tertiary Education Issues Paper**

**Background**

I am writing to you regarding the New Zealand Productivity Commission's (NZPC) recently released issues paper entitled New Models of Tertiary Education (referred to as 'the Paper'). BusinessNZ very much welcomes the NZPC's focus on tertiary education.

As the Commission has set out in its History of Reform in Tertiary Education paper, New Zealand has experienced a great deal of tertiary education reform over the last 30 years. Governments of all persuasions have recognised that people's skills, knowledge and capabilities are fundamental to the country's future economic prosperity and to social cohesion and individual wellbeing. Much of the reform has intended to address issues and challenges around how the tertiary education system needs to respond to efficiently meet these demands, to be more end user driven, more agile, and a system that enhances learning and a culture of learning.

People are fundamental to achieving growth. Without a talented workforce equipped with the skills and capabilities to maximise business opportunities, New Zealand will struggle to compete internationally and to improve communities' wellbeing. Access to talent is one element underpinning business and industry confidence to invest, compete with new products and services, and to grow.

By international standards New Zealand's population is highly qualified. New Zealand also has relatively high levels of labour force participation, an aging workforce, relatively low levels of unemployment (with the exception of youth), and a flexible labour market. New Zealand is highly reliant on migrants to meet short term skills needs. There is scope to strike a better balance between going to the international

market for short term talent needs and developing (and using) our own talent to support improved competitiveness and living standards.

Tertiary education has a number of important economic and social roles to play in society and the economy. It supports individuals in developing the skills needed to engage in employment and employers in accessing the skills and capabilities needed to be competitive and productive.

But a supply-side focus of increasing the proportion of the population with qualifications has not resulted in a commensurate improvement in productivity. We are encouraged to see that the Commission is to focus on both supply and demand side constraints and opportunities.

The Paper raises a number of issues relevant to the current tertiary education system and the macro environment in which tertiary education organisations, learners, industry and employers operate and make decisions. Funding and accountability policy currently provide limited incentives for improved performance, efficiency and responsiveness to priorities. Incentives, regulations, and accountability mechanisms are often misaligned. Regulations are not very flexible or durable; often lack transparency and predictability; and the capability of the regulators is mixed. All of this is compounded by the fragmented way the system and subsectors are administered. We encourage the Commission to balance its focus on system level settings with how incentives, regulations and accountability mechanism interface with the institutions, decision makers in tertiary education organisations, and on employers and students (i.e. micro level). We support efforts to create a more innovative and responsive tertiary education system through addressing information asymmetries, competition, and improving the alignment of incentives, regulation, and accountability. It goes without saying regulation should be transparent, predictable and proportionate to the risk or failure. Regulators need to be capable and have an ease of doing business or growth supporting mind-set. Data and information systems are needed for oversight, decision making, planning and priority setting, and accountability.

In our view, in order to educate and train, attract and retain the most resilient and adaptive people our tertiary education system must be capable of providing young people, *and adults already in the workforce*, with quality opportunities, ensuring they have the technical/specialist knowledge, capabilities and employability skills to work effectively in the community (as job creators or takers), today, tomorrow and in the future.

Experience suggests that in examining tertiary education it is all too easy to focus on the needs of the school leaver and that school leavers head to university. The Commission should take care to balance the needs of schools leavers and the needs of adults looking to upskill across their working careers, including those who were failed by schooling and looking to access tertiary education for the first time as adults.

In making this submission, BusinessNZ we do not attempt to respond to the 78 questions posed, rather we comment on elements of the Paper that will require some consideration by the Commission in its draft report if the report is to deliver on the inquiry intent.

### **Specific points on interpreting the terms of reference**

The Terms of Reference outline a number of trends affecting work today and what these mean for tertiary education in the future.

Technological change is a driver of business disruption, competitiveness and growth. Technology has become a critical asset in assisting businesses to engage more effectively with their customers. In this regard, the Commission needs to consider the wider social trends and changes that will influence how, by whom and where new kinds of learning products and services will be needed. For example, the kinds of learning products and services might be developed for people who, in the future, seek upskilling or retraining mid-career. We need to start building a clearer picture today of what those needs and new requirements might look like to make sure we plan for the future effectively and make the most of all new possibilities.

As already mentioned, technological change and greater connectivity are key drivers of change. Greater connectivity and technology use have enabled firms to place customers at the center. Connectivity also enables the provision of more responsive and customized products and services. The 'internet of things' allows people to learn and develop their skills and knowledge without the need for formal education and has massively widened access to knowledge. As content becomes more accessible, the skill of the modern academic has shifted away from being an imparter to an integrator of knowledge, creating more personalized conditions that assist students to learn. Connectively changes the way knowledge is developed and transferred. The trend of internationalisation, which focuses largely on international education, should also include a focus on connectivity. The Commission in considering 'new technology' should also consider the extent to which data analytics and greater connectivity can improve education outcomes.

As the Paper notes, we also need to think about the underlying demographic trends reshaping our population, workforce, and economy, the new requirements these will create and the type of education and training opportunities that might address them. We note to the Commission that this is much more than the projected decline in numbers and the changing make-up of domestic students. We have an aging population with a growing proportion of people staying in the workforce for longer. This will likely place new demands on our education and training products and services as people seek out upskilling and retooling opportunities multiple times across their lifetimes. The impact will be that the current qualification driven approach to tertiary education is irrelevant and needs to be replaced by a stronger focus on the needs of the customer.

*Recommendation: that the NZPC consider demographics trends more broadly that just the projected decline in school leavers entering tertiary education, to include tertiary models that better meet the needs of a much larger market of end users.*

We believe the Commission should also consider the impact greater urbanisation will have on equity and the ability to access quality tertiary education programmes and services. New models of tertiary education design and delivery have a role to play in geographical regions where there are too few tertiary organisations to provide genuine competition or too little demand for tertiary education to make tertiary organisations profitable. Such situations can negatively affect outcomes and represent poor value for money.

*Recommendation: that the NZPC consider the role new models of tertiary education can play in geographical regions where there are too few tertiary organisations to provide genuine competition and or too little demand for tertiary organisations to be viable. The Commission should also consider the opportunity cost of*

## **Specific points in the paper**

### ***Quality matters***

As the Paper states, the Commission will explore the big trends affecting the tertiary education system, consider how innovative models can help the system respond to these trends and look at system and institutional settings that encourage or inhibit new models. Much of the Paper is focused primarily on the system, structures, sectors, fees, costs, regulations, tertiary education organisation business models, and funding.

*Recommendation: that the NZPC consider the impact of new models on quality, quality standards, and quality monitoring frameworks of education outcomes.*

### ***Focus on educational outcomes is welcome***

BusinessNZ strongly supports the Commission's focus on the system's educational outcomes. We believe there is potential for tertiary education to contribute to improved productivity. Current models of tertiary education are qualifications driven rather than learner driven. Much attention is paid to the Performance Based Research Fund, whereas learning and education outcomes receive far less attention.

As education outcomes at the tertiary level are predicated on previous learning, the Productivity Commission should consider the secondary and tertiary programmes that are in operation. These initiatives operate across regulatory and funding frameworks and provide insight into the challenges of multiple education organisations collaborating in the interests of learner and their learner needs.

BusinessNZ also supports the Commission's work in identifying measures for education outcomes. We encourage the Commission to look at the costs and benefits of developing performance funding arrangements linked to teaching performance, to examine the feasibility of benchmarking the teaching and learning performance of tertiary education, consider options to the encourage tertiary

education organisations to better recognise and reward professional development undertaken by academic teachers and extend institutional arrangements for recognising and rewarding teaching performance. Recognition for excellent research performance should continue to be a priority.

*Recommendation: that the NZPC report on measures to reward effective teaching and learning outcomes.*

To deliver on improved learning and education outcomes for learners and New Zealand the Commission should take care to consider micro reform as well as reform at the system level. How incentives and regulations affect key actors is often overlooked in favour of system structures and system levers.

*Recommendation: That the NZPC examine ways in which changes at the micro level could improve education outcomes.*

For too long now little attention has been given to the demand side - on how to enhance the engagement of and empower learners (young and adults) and enterprises to achieve better education outcomes. The NZPC's Inquiry into Social Services has a useful model of four client types showing how to maximise effectiveness by arranging services differently to better match people's needs. In considering the enhancements to a demand-driven system it will be important for the NZPC to ensure education is responsive to the requirements of industry and community stakeholders as well as learners.

Making tertiary education more demand-driven and outcomes-focused will:

- Address quality issues.
- Better integrate learners' pathway and journey, thereby reducing duplication and learning costs, improving the time to graduate and thus improving the outcomes and learner experience.
- Encourage learners, their families and advisors to become more quality and value conscious in their choice of education and training opportunities.

*Recommendation: that the NZPC report takes into account key demand-side issues and opportunities.*

### ***Employers and tertiary education***

We agree with the NZPC view on the ways employers can participate in the tertiary education system. One of the biggest challenges in developing skills for the labour market is ensuring learning meets the needs of industry and the workplace – needs that increasingly span beyond technical knowledge and specialist skills to include employability skills and capabilities. Literacy and numeracy skills are still cause for concern.

One of the best ways of doing this is to strengthen the connections between industry and tertiary education organisations. Another way is to make the fullest use of the workplace as a powerful learning environment and find effective and efficient mechanisms for linking employer interests to the mix of training provision, design and delivery. Some tertiary providers are making good efforts to provide internship and work experience opportunities for their graduates to develop the broader employability skills. Even in models of tertiary education where practicums are established part of the overall programme there is scope to make these more purposeful and linked the development of the overall graduate. Medicine has been making good progress in maximising the learner from practical experiences.

Industry training is the only formal mechanism for industry involvement in the tertiary education system and for historical reasons is largely constrained to level 1-4 qualifications on the qualifications framework. Industry training organisations have increasingly provided input into vocational programmes at levels 2-3 in school and tertiary provider settings but they are not resourced to do this. It is also necessary to influence study options at school, students' study choices, and the education offerings of tertiary education organisations. This is easier said than done

Despite a lot of ad hoc activity and initiatives there is little robust evidence that business and industry engagement is currently effective and has had the desired impact. One point solutions like ICT Grad schools fail to recognise the complexity involved in developing a supply of talent to better meet the needs of industry in the medium term. The Engineering Education to Employment programme also highlights the shortcomings of existing funding levers and a single agency approach. Future in Tech only reaches a small proportion of schools and school students. Gateway is largely a standalone programme, although Industry Training Organisations are using this is more innovative ways to attract and retain students into pathways.

Industry and employers provide a range of government agencies and tertiary education organisations with information about their needs but at no point is this intelligence pulled together and utilised. There is scope to use technology to better integrate and use the labour market and economic intelligence we do have at the national, regional and local level. Greater connectivity allows for department or programme heads to combine industry input (via advisory boards) into a programme thereby improving its quality, achieving economies of scale, reduces transaction costs, and improves results for learners and industry.

*Recommendation: that the Commission consider options to strengthen business and industry engagement with education organisations, where industry and business engagement is on a voluntary basis.*

### ***Distinguishing between learner focused and firm focused education and training***

In its discussion of employers, the NZPC Paper has not paid due attention to industry capability and capacity to influence education outcomes - for example, to the fact that employers' influence over some tertiary activities (e.g. programmes where learners

choose the programme) is less direct than it is over others (e.g. firm-focused learning and upskilling). Consequently, employer expectations may vary between activities.

For example, where learners choose the programme of study (learner focused) then it is reasonable to expect that:

- a student's prior learning is recognised,
- graduates are trained to industry standards (where a programme of study is clearly vocational),
- graduates have the capabilities and attributes that make them employable,
- education organisations actively review and consider future skill and capability needs, workforce trends when developing and reviewing programmes and qualifications, and
- there are options available to learners that enable them to learn and work at the same time and achieve excellent outcomes.

Yet there are significant barriers at play to achieving these expectations. For example, recognition of prior learning currently lacks any real framework, structure and support. Industry capability is also an issue needing consideration.

The ability of industries to assess their future skill and capability needs, workforce and workplace trends, will vary. In many cases industry training organisations might be able to play this role and the role of ITOs and industry groups in relation to providers needs could be strengthened (for example, Service IQ and Tourism Industry Association). However, ITOs and industry groups vary markedly in size and resources, do not cover all industries, and are not publicly funded for this strategic role. In addition, ITO and industry groups, as sector-focused organisations, might not always be best placed to conduct research or analysis into broader, cross- industry workplace or workforce trends. Given its resource and expertise advantage, there would appear to be a role for government (through the TEC, MBIE, CareersNZ, or a broader cross-agency effort) to lead strategic research and analysis to inform industry and the tertiary sector on these issues.

*Recommendation: that the NZPC note that the ability of industries to assess their future skill and capability needs, workforce and workplace trends, varies considerably. The Commission should consider (1) who is best placed to lead strategic research and analysis and the tertiary sector on future industry trends, skills and capability needs, and (2) identify options to bring about greater alignment between education and industry where the benefits of doing so exceed the costs.*

As has been seen in recent years, there is sometimes also a need for the TEC or MBIE to facilitate or convene strategic conversations between industry groups, clusters of businesses and tertiary education organisations about future skills and labour market needs. Recent examples are MBIE's Ashburton Dairy Farmers, TEC's

ICT Grad Schools, the Engineering Education to Employment programme, the Primary Industry, and in Tourism.

There is a broader question about the capacity of even mature and established industries to managed consultation and engagement with a number of different government agencies (central and local) and education and training organisations. There might be a need for education and training organisations to engage collectively with industry groups and businesses. An example of this model is the Unitec-led Auckland Construction and Infrastructure Workforce Roadmap, where an alliance of ITPs and ITOs is responding to demand from industry.

With regard to firm-focused education and training, where the firm is the major customer, the likely expectation will be of training courses and programmes developed to firm needs and available at convenient times and of training linked to firm strategies to enhance competitiveness and market position.

A good example of this sort of publicly-supported training is the Workplace Literacy Fund (employer-led) where firms seek to address a business problem and enhance the literacy, language and numeracy skills of their employees. As most people with low literacy and numeracy skills are currently in employment, work-based literacy provision is an essential response to this problem. Notwithstanding the fact that existing funding mechanisms are insufficient to meet existing demand, workplace literacy training is linked to firm and employee needs, is available at convenient times, and enhances firm performance. Greater flexibility in offering literacy and numeracy programmes that meet a firm's needs also achieve public policy goals of creating opportunities for upskilling target groups of the population

In the draft report the NZPC should discuss the role of short awards and courses in meeting the demand for upskilling and retooling opportunities from people in the middle of their careers and in meeting firms' needs.

*Recommendation: That the NZPC examine the costs and benefits of providing greater flexibility in offering offer short courses and just in time upskilling and retraining to different actors.*

### ***Learning and work is increasingly the same thing***

The role of the workplace as a place of learning is not adequately covered in the Paper. Increasingly the boundary between learning and work is blurring. As learning and work are roughly the same thing, rather than sending people off to separate training and upskilling at a tertiary education organisation, better ways to integrate the learning component of work should be found.

*Recommendation: that the NZPC report on better ways to integrate learning and work, and on ways to improve the learning component of work.*

The economic importance of workplace learning, including industry training and workplace literacy and numeracy, is not often well understood by policy makers and



regulators and workplace learning is at times reflected in prioritisation across a wide range of policy areas.

StatisticsNZ data shows that 84% of firms train, indicating that workplaces are one of the largest providers of training in NZ. The types of skills and capabilities required in workplaces are changing. There is an increasing requirement for generic skills' and capabilities' development and for ongoing retraining. New flexibility and timeliness will be required in training frameworks and policies. Shorter course or modules of training rather than qualifications will be increasingly important, particularly for ongoing skill development and lifelong learning. This brings into question how qualifications and programmes are developed, their content and how they will be delivered.

*Recommendation: that the NZPC addresses how to make vocational education and training an attractive learning pathway for individuals (young and mid-career individuals) and make them attractive in cost benefit terms to employers and students and fair and affordable for government.*

*Recommendation: that the NZPC pay particular attention to workplace learning and training, including the barriers to the success of learn while earn options, in order to develop the workplace learning market and alternative pathways based on partnerships between businesses and education and training organisations.*

### **One shot investments and information asymmetries**

It is and will continue to be important that supply responds to the needs of key stakeholders, including industry and business, as well as to learners' needs. Information asymmetries are right across the system. The information and data on labour markets, education and training offerings, education and training quality and outcomes is spread across multiple websites, is difficult to navigate and is insufficient for key tertiary education actors, employers and students to make informed decisions. If students, employers and training managers are to make informed choices, they need access to tools that allow them to compare education and training offerings based on price, course content, delivery options, course quality, employment outcomes, and graduate salaries.

*Recommendation: that the NZPC identify a way to significantly improve market information available to inform the decision-making of the key actors in the tertiary education system.*

Unless efforts are made to inform or influence learner choices, there will be situations where the demand for popular courses results in imbalances between graduate numbers and industry demand. The Commission should look into effective and efficient approaches that achieve a balanced approach to meeting demand that will also meet New Zealand's economic requirements. The benefits of any intervention in the education and training market need to be proportionate to risk.

In an ideal world there would be a two-way flow of information between the world of education and the world of work. However, in many places we do not leverage labour

market intelligence, nor do we leverage education outcomes. As the Commission notes, the *Occupational Outlook Report* is one exception and is a good first attempt to communicate where labour market opportunities lie. But the *Occupation Outlook Report* does not deal with the issue of ensuring the content of programmes leading to necessary qualifications is in fact fit for purpose, equipping people with the knowledge, skills and capabilities needed to succeed in the professional and working world.

If employers do not indicate the need for effective programme content and educators do not communicate it, people will make uninformed study choices, although some might be able to counter the information asymmetry (i.e. those with connected parents and families who help them bridge the information gap).

In recent years improvements have been made in the provision of information to learners and others about tertiary education graduates' employment outcomes. This is welcomed – potential tertiary learners should have available the best possible information on which to base future decisions. At the same time, information about employment outcomes should inform the decisions of tertiary education organisations and industry. For example, information provided can inform tertiary education organisations about entry requirements and whether they should limit numbers in some courses or move to increase numbers in others to meet demand. Industry can also use information to inform marketing and maximise recruitment. An example is the Engineering Education to Employment programme where industry and institutions are working together to provide information and develop strategies to meet future demand where it might otherwise fall short. Other recent employer-led developments include the Auckland Building and Construction Alliance, Ashburton Dairy Farmers, Auckland Regional Airport, ICT Grad Schools, and Maori and Pasifika Trades Training. Notwithstanding some very real capability and capacity constraints on both sides, these models potentially represent the future of education.

There is never going to be a situation of perfect information but the Commission should examine approaches that remove some of the asymmetries at the student, organisational, and system level.

### **Exclusion of student support (student loans and allowances)**

We note that *Terms of Reference* for the inquiry stipulate that the Commission “*explore the options for changes to education funding and pricing mechanisms that may be required to facilitate new models of tertiary education. The focus will be on pricing and fee-setting and not on student support*”. The public policy rationale for this is unclear. The relationship between government and student contributions is important for the total revenue available for tertiary providers. Currently the government pays a subsidy to providers and to students via the Student Loan Scheme.

The Student Loan Scheme was intended as a finance mechanism, not as a means of subsidising students without achieving any public policy goals. Rather than simply delivering a student subsidy, the subsidy might be better reallocated to measures to

improve quality, access, and education outcomes. Student support should not be seen in isolation. The NZPC should address the implications the new models of tertiary education and their likely effect on student support mechanisms, setting out the costs and benefits of providing subsidies directly to students via the Student Loan Scheme and considering whether this is the most efficient way to improve education outcomes.

*Recommendation: That the NZPC report on the implications of the new models of tertiary education for student support, set out the costs and benefits of providing subsidies directly to students via the Student Loan Scheme and consider whether this is the most efficient mechanism for allocating subsidies to students and improving education outcomes.*

### **New Models**

Overall, we think the Commission has identified the new models of tertiary education and training found in other jurisdictions. One exception is the growth of advanced and high level apprenticeships, or earn and learn models, in other jurisdictions.

*Recommendation: that the NZPC consider advanced apprenticeship and earn and learn models as part of its inquiry.*

BusinessNZ would like to draw the attention of the NZPC to *Pathways Awarua* as an example of a technology-enabled learning platform that is customer driven and used to improve learners' learning experience. The Tertiary Education Commission's *Pathways Awarua* online adult literacy and numeracy learning tool is an example of technology enabling learner-focused learning. Learners learn at their own place and pace of choosing. Rather than using technology to provide online videos of 'chalk and talk' lectures where the lecturer stands at the front, *Pathways Awarua* is largely open access for learners in senior secondary schools and tertiary education organisations. *Pathways Awarua* enables learners to strengthen their numeracy, reading, writing and listening skills. *Pathways* is modular, interactive, sequenced, provides immediate and tailored feedback, and allows users to track their progress. *Pathways* checks the learner's progress notes, where mistakes are made and which types of questions the learner has trouble with and acts as a platform for educators to create and share resources, supporting greater economies of scale.

Another example, as the Paper notes, is the Open Polytechnic's iQualify. iQualify is a digital platform providing media-rich teaching and learning, digital learning and assessment tools and data driven insights to support learning.

The Open Polytechnic has developed the digital platform in a way that provides affordable access to high quality online learning for other education and training organisations. The digital platform is also available to businesses, industry and professional organisations for online learning purposes, provides scale and has the potential to increase access with the roll out of UFB across the country.

The Dev Academy is a New Zealand example of disruptive innovation in education (app development) and financing student learning (via micro financing). Learning is project-based and hands on under the guidance of a mentor and expert teacher, coaches, and experts from industry. By the time students graduate they have a body of work (or portfolio of evidence) to show to potential employers, together with the skills and experience to do the job. Dev Academy graduates can demonstrate that they have acquired a custom-focused set of competencies and capabilities as an alternative to a traditional credential.

Data-driven student profiling, advice and intervention are becoming increasingly possible given the business analytical tools available in the market.

When considering all the ways technology can enhance learning, it is important to remember that it is not a silver bullet and nor is it going to ruin learning. Technology is not an end in itself; it is a set of useful tools to enhance students' education experiences and learning. To illustrate, if a student does not have critical thinking and problem-solving capabilities when designing a building using Computer Assisted Design, the software and technology will only hide and exacerbate those missing skills. The student can get by with an understanding of what is technically possible and fail to focus on good engineering or good design. Qualifications, and the learning leading to those qualifications, need to have a practical focus on technology as a tool and enabler in a way the can be integrated into business operations and realities.

### ***Creating an innovative system***

From BusinessNZ's perspective we believe a more innovative system and new models of tertiary education can be achieved through better use of incentives, regulations, choice and competition.

From a learner point of view, an innovative system and new models of tertiary education will result in greater access and more choice, better educational delivery, student-centred learning, improved flexibility, better employment prospects and provide value for money.

From a taxpayer point of view, an innovative system and new models of tertiary education will result in greater educational opportunities for taxpayers and their families, give value for money and limit potential long-term costs to government.

From an industry and employer point of view, an innovative system and new models of tertiary education will deliver skilled and work-ready graduates and again, will limit government's potential long-term costs.

### **Conclusion**

Thank you for the opportunity to comment. We look forward to further discussions and the release of the draft and final report over the next 11 months.

Kind regards,

A handwritten signature in black ink, appearing to read 'Carrie Murdoch'.

Carrie Murdoch  
**Manager Education Skills and Training**  
BusinessNZ