

TE HONONGA AKORANGA

COMET



Submission to the Productivity Commission on **Technological Change and the Future of Work**

Submission 104/20
Prepared on behalf of COMET Auckland, February 2020

Whakatauāki

E kore e taea e te whenu kotahi ki te raranga i te whāriki kia mōhio tātou ki ā tātou.

Mā te mahi tahi o ngā whenu, mā te mahi tahi o ngā kairaranga, ka oti tēnei whāriki.

I te otinga me titiro tātou ki ngā mea pai ka puta mai.

Ā tana wā, me titiro hoki ki ngā raranga i makere nā te mea, he kōrero ano kei reira.

- nā Kūkupa Tirikatene

The tapestry of understanding cannot be woven by one strand alone.

Only by the working together of strands and the working together of weavers will such a tapestry be completed.

With its completion let us look at the good that comes from it.

And, in time we should also look at those stitches which have been dropped, because they also have a message.

About COMET Auckland

[COMET Auckland - Te Hononga Akoranga](#) is an independent charitable trust and Auckland Council's CCO focused on education, skills and lifelong learning across Auckland and, increasingly, other parts of the country. Our latest Statement of Intent is [here](#).

Briefly, our work involves:

Sector leadership – mapping data and evidence, working with sector leaders to identify and prioritise the most pressing areas of focus, and connecting people around that common agenda, to plan collaborative action.

That can then lead to advocacy or changes to partners' business as usual, or sometimes to planning and trialling new ways of working (incubation projects).

These incubation projects generally develop through scoping and planning to trialling, and then implementation and evaluation, with the goal of handing them on once they are fully developed so we can move on to focus on another part of the system.

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Introduction

Thank you for the opportunity to comment on the inquiry on Technological Change and the Future of Work. This submission focuses mainly on two of the five reports which most closely relate to our work:

- Draft Report 3 – Training New Zealand’s Workforce
- Draft Report 4 – Educating New Zealand’s Future Workforce

This submission has been assembled based on our own collective knowledge and experience, and our ongoing engagement with our stakeholders, including educators, community leaders, employers, parents and students.

We are interested in presenting an oral submission, if this can be done in Auckland.

General comments

The reports provide a valuable summary of the issues and evidence related to the skills pipeline and how this could be affected by technology change.

The bottom line is that our economy is missing out on large pools of potential skills because our education system is consistently under-performing, especially in relation to equity of outcomes.

There are many causes for this, not all of which are identified in your reports. We note, for example, that the main groups for whom the education and skills system is currently under-performing (Māori, Pasifika, and recent migrants) have certain things in common – they bring a language other than English, their culture is distinct from the mainstream Pakeha culture, and there is a level of prejudice and even racism in society against these population groups. Many are also from lower socio-economic backgrounds. Some causes of educational inequity that we see and hear about in our work are:

- lack of support for families in the first 3 years due to a false assumption that children are better off in ECE
- lack of effective use of language, culture and identity in teaching and learning, thus failing to build on the strengths that Māori, Pasifika and migrant children bring
- bullying and racism in education
- gaps in initial teacher education, especially around intercultural understanding
- inadequate equity funding for schools and ECEs which does not provide for the additional social and learning resources required to overcome economic disadvantage
- Y1-8 teachers being asked to teach across the curriculum, outside their areas of expertise, which particularly impacts on maths and science learning
- disjointed and ineffective careers system
- disconnects between sectors (including between education and work) that obscure learning pathways
- barriers (or no clear pathways) to retraining later in life
- under-funding and lack of focus on the ACE system which could otherwise provide a bridge for people with no qualifications to gain enough confidence to succeed in re-training.

As technology impacts on workforce needs, addressing the inequities in our education system and creating better pathways for re-training will become even more urgent. Skills that are likely to be in demand are those related to designing and working with technology; and interpersonal skills that

cannot be replaced by machines. The former will require more people coming through with STEM (science, technology, engineering and maths) skills; the latter will require more relationship, collaboration and intercultural skills which are mostly developed through the social studies and languages curriculums.

Educating New Zealand's future workforce

Curriculum implementation

We don't agree that the curriculum is broken. There is value in the flexibility of the current curriculum as it enables teachers to focus on things that are relevant to the students, while ensuring that key understandings and skills are built sequentially. However we agree that more support would be useful on how to ensure essential knowledge and skills are included over time, especially as transient students can otherwise end up missing out on key knowledge that is scheduled in a different year on their new school.

We also agree that the competencies have been poorly and patchily implemented, mainly because there was not enough work done before the NZC was published on how to incorporate and assess the competencies.

For the past six years we have been working with secondary schools, youth service providers and employers to develop and deliver the [Youth Employability Programme: License to Work](#) (YEP), which is designed to build and assess the competencies in a workplace context, through interactive workshops, volunteering and work experience.

Our experience shows that students gain the competencies best when they have a balance of conscious skill-building and authentic practice in a context that is as similar as possible to where the skills are intended to be used, i.e. the workplace. We have also found that the competencies are best assessed through observation over time, for example through a work experience supervisor rating a student on how frequently they display a particular skill. We would be happy to provide information about our process, or to arrange visits to YEP sites if that would be useful.

The careers system

We completely agree that the careers system is very variable and disjointed. The repeated structural changes in last few years have led to loss of expertise and have resulted in many things falling through the cracks between agencies. This is a source of concern and frustration for people we work with at all levels of the education system. Your report identifies the issues well.

TEC's strategy, with its clear goal for "all New Zealanders 7 to 70+ to have a personalised lifelong career plan including career options and learning pathways" is the most promising direction we have heard in this space for some years, especially as it has a life-long focus rather than only on the initial transition from education to work.

We look forward to more coordinated action to turn around careers provision under this strategy, but we are concerned that the rhetoric may not translate into enough real support on the ground. There is a need for specific training and ongoing support for careers advisors, systems to connect careers advice with academic counselling for subject choice and motivation, and a significant increase in work experience linked to career directions. School and tertiary-based careers advisors need access to expertise, advice and information that fits specific student needs. This needs to be more than just a website.

Our work in youth employability has shown us that schools struggle to provide relevant work experience for their students, yet work experience is the most powerful way for students to gain an understanding of the world of work so they can make sense of career information, assess career options and gain confidence. Building and maintaining relationships with a range of local employers, finding the right match for each student, supporting logistics for students to attend work experience, and sorting the inevitable issues all take time and expertise for which schools are under-resourced. Increasing Gateway funding and requiring that it include at least 80 hours of work experience and more structured, skill-focused preparation before students go on work experience would be a good start.

Intercultural skills

Aotearoa is becoming more culturally diverse, and intercultural skills are also needed externally, for trade, tourism and diplomacy. Learning a language is a powerful way to understand a culture, because so much of culture is embodied in language. The languages strand of the curriculum is only consistently delivered at secondary level, meaning that children are missing out on their strongest language-learning years in early primary school. We recommend that Te Reo Māori, as our national language, be offered as part of core curriculum from year one. This would assist with inter-racial understanding in Aotearoa, while also equipping children with language and cultural skills which will enable them to more easily understand other cultures and languages.

Racism

It is disturbing to all New Zealanders to think that there might be racism in our schools; yet clearly this is the case. The recent report from the Office of the Commissioner for Children shows that a significant proportion of school students report experiencing racism at school.

Our own consultation with rangatahi from a range of education settings confirmed these findings. The striking thing was that young people who attend kura reported that they did not experience racism in school, and in fact they were shocked to hear that their counterparts in English-medium schools faced racism.

One way to address racism for Māori children and young people may therefore be to establish and better support more kohanga reo and kura and to encourage Māori whānau to choose this option for their tamariki and rangatahi. There is also opportunity for the English-medium system to learn from the values, attitudes and practices that kura use to celebrate young people's identity, culture and language and to support positive relationships between teachers and students.

STEM engagement

Already our education system is not meeting industry demand for STEM skills. Our recent analysis of STEM skills pipeline data (*Tāmaki Makaurau snapshot of education, learning and skills STEM edition* - soon to be published) indicates that about two-thirds of students continue to study maths to at least NCEA level 2, but far fewer study science or technology, generally dropping out of these subjects either before level 1 or between level 1 and level 2 – in other words, as soon as they have the choice. It is clear that we need to do better at engaging children in science in primary and intermediate school so they are more likely to choose science subjects from year 11 onwards.

MBIE's Participatory Science Platform (PSP - part of the Curious Minds initiative) is a valuable way to show children and young people that science is relevant to their lives and that jobs in science don't just involve standing at a lab bench in a white coat.

We have delivered the south Auckland arm of the PSP, [SouthSci](#), for the past five years. Our tracking data shows valuable changes in attitudes towards science among both students and teachers, and ongoing connections between science-focused corporates/organisations and schools.

Unfortunately the PSP is still only delivered in three small areas of New Zealand – Otago, Taranaki and south Auckland. We think there is ample evidence to back expanding this successful programme, especially to include more lower socio-economic areas such as west Auckland, Northland and the Bay of Plenty, where children are less likely to have access to scientists in any other way.

Changing course in secondary and tertiary education

We agree that there are unhelpful barriers to changing course in secondary education. Improving careers advice would help with this, but the system does need to allow for changes in direction as young people develop and explore their options. We also see the need for students to have a broad base across education, so they can more easily change direction later in life. Having even level 1 in a range of subjects would give adults confidence to re-train outside their original direction as workforce needs change.

We suggest that NCEA be adjusted to allow a process where students are required to take at least 8 subjects over two or three years, with at least four of those subjects taken to at least level 2 and two to level 3 (i.e. more similar to a university course structure where students do level 1 papers alongside higher-level papers to broaden their learning). Within that structure we suggest a requirement for at least one science and one language subject at level 1 so students do not narrow down too early.

In tertiary, your report correctly identifies that the funding system presents disincentives to tertiary organisations working together to align courses or cross-credit between qualifications. The current reforms may enable more movement between courses within the new institute, but they will not solve issues between other parts of the tertiary system. We are also concerned that establishing one polytechnic could stifle innovation. We do not have a solution to any of these issues but suggest that TEC be tasked with addressing movements among courses in their planning.

Training New Zealand's workforce

Barriers in the training system

We agree that there needs to be a re-think of the barriers in the training system. People need multiple pathways to suit their level of prior learning, their work and home commitments and their learning styles. The data in your report clearly shows a Matthew effect – people who start with more qualifications are more likely to continue studying and building skills throughout their careers, while those with few or no qualifications find it very hard to get started on the learning ladder.

There are practical reasons for this – course fees, time to attend, transport time and costs – but there are also emotional reasons. Many people who had a difficult experience of school are convinced that they are incapable of learning, and that all learning environments are terrifying. They need to be able to take smaller steps towards learning in more familiar environments before they could consider signing up for even a transition tertiary course.

The ACE (Adult and Community Education) system is a powerful way for people with few or no qualifications to get back into learning in an approachable, supported context so they can build skills and confidence before they take on a more formal course. Even if the actual topic is not work-

related, ACE builds learning and interpersonal skills which translate to work. It also demonstrates to the learner that they are capable of learning, and that education environments do not need to be frightening. Unfortunately ACE is under-funded and largely ignored by government. We did not find any reference to ACE in your report. We suggest that a section on the importance of ACE be added in the next iteration.

Enabling micro-credentials that can be built up into qualifications over time is another way to reduce barriers to retraining and we strongly support the report's recommendations on this.

Youth at risk of poor employment outcomes

We agree there needs to be a better approach to supporting young people in the transition to work. Based on our youth employability experience referred to earlier, COMET Auckland is leading a collective impact approach to develop a cross-sector NZ employability model. This work includes representatives from multiple government agencies, sector groups and other key stakeholders. The resulting model aims to support and build on community employability models and to provide collaborative leadership towards a vision that every 14-24-year-old in NZ is employable.

One issue for providers that work with unemployed young people is that most funding aims at immediate employment outcomes, rather than training or longer-term employment. This creates an incentive for providers to get their clients into low-level, insecure work rather than taking longer to find them more secure employment or training that is relevant to their interests and skills.

We also note that some young people need intensive support to ensure they do not become long-term unemployed. We are concerned at recent changes to MSD's funding rules that seem to be restricting support contracts to only the highest-need NEETs (young people not in employment, education or training). This change is leaving a large gap in the system, so that the majority of young people who are NEET are no longer receiving support.