

The changing purpose of tertiary education

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The University of Otago was New Zealand's first University, founded in 1869.¹

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Wendy is the Chief Executive of the McGuinness Institute. *Project TalentNZ* is the Institute's response to Sir Paul Callaghan's vision of making New Zealand a place where talent wants to live. In 2011 Sir Paul presented his idea at the Institute's *StrategyNZ* workshop, hosted at Te Papa, Wellington. See TalentNZ.org for more information. *Think Piece 25* builds on his thinking by proposing ways the tertiary education system can help to foster talent in New Zealand.

INTRODUCTION

In response to a Government request, the Productivity Commission is currently undertaking an inquiry into 'new models of tertiary education'. At a time when the technological and social climate is changing so rapidly that our current model is struggling to keep up, this inquiry presents an opportunity for the Institute to set out ideas we have gathered as to how New Zealand might adopt a more dynamic tertiary education model that is fit for the 21st century.

This think piece explores how the tertiary education system could change today in order to foster the development of skills that will be required of New Zealanders in the long term. In fifty years, the current cohort of young tertiary students will be in their early seventies, and a vastly different set of 17- to 25-year-olds will have inherited the world of tertiary institutions. How can we make space for this difference? How can we prepare our young people for a world that is continuously becoming more connected and therefore more complex? How can we change the purpose of our education system to reflect this?

This think piece is broken up into three parts: (i) What have we learnt through hosting public policy workshops for young people? (ii) What is not working? and (iii) How might New Zealand become a trailblazer in tertiary education?

(i) What have we learnt through hosting public policy workshops for young people?

The McGuinness Institute workshops invite New Zealanders between 18 and 25 years of age to come together to develop

public policy solutions to complex problems. A full list of the workshops the Institute has hosted, and their respective publications, can be found on the Institute website.²

We aim to create a space for young people to learn not just from experts but also from each other, breaking down barriers between cultures and developing a shared vision for the New Zealand they want to build for themselves and generations to come.

The following 12 observations show what participants have taught us after running seven of these workshops since 2011.

1. Broaden our understanding of what education can be

The word 'education' is derived from the Latin *educāre*, which means to 'bring up, rear, educate'.³ While uses of the word have diversified significantly outside the realm of the education system, educational institutions themselves still seem to be wedded to this ancient meaning. It is a meaning that assumes there are some who hold the knowledge and some who do not, and it enforces a clear power structure between these two groups. It implies that teaching occurs only in a single direction – downwards – and that receivers of teaching will move upwards in a straight line until they reach the same place as the teachers themselves. This is not realistic.

The assumption that those who are older have the most and best knowledge is one that must be challenged. In the 21st century, knowledge is created at faster and faster rates. It is delivered in increasingly diverse ways, many of which are not fully understood by or accessible to teachers. It could be argued, for instance, that the continued learning of outdated accounting software, statistical formulas, referencing systems, stock methods and data systems is a waste of resources and talent.

What is most important is to create spaces for the current generation of students to learn from each other, and ideally, to teach us – in order for us to better support them in their endeavours. Education should not merely be a transfer of information from the 'knowers' to the 'learners'; it should be a dynamic, multi-directional process whereby individuals and groups can constantly broaden the scope of their thinking.

2. Building capability is both an individual and a group activity

The best testing of our thinking comes from our peers. Although we have a terrific range of speakers at the workshops, the real learning occurs when participants test one another's character and skills. Participants work together in high-stress, fast-paced environments to create public policy ideas through booklets, presentations and creative works that reflect their ideas on complex policy knots (e.g. tackling poverty or strengthening communities).

Furthermore, past models of education tended to focus on the individual attainment of skills but did not necessarily produce well-rounded individuals ready to build capability in the wider community. Peer stress-testing and respect for a diverse range of skills and experiences should be a key feature of the education system at all levels.

3. Break cultural barriers and build empathy

If we do not work on enabling all young New Zealanders to have meaningful conversations with one another about their vastly differing lives, loves and dreams, not only will they miss the opportunity to really know and feel connected to New Zealand, but they will not have the skills to lead our bicultural and multicultural New Zealand into the future. We need empathetic leaders for the 21st century. An 18-year-old from an Auckland private school once thanked me for creating a workshop and went on to explain that it was the first time he had had a 'deep conversation with a Māori New Zealander' and had the opportunity to meet New Zealanders from the Pacific Islands. He said it made him feel much more connected with his country and he couldn't believe that the education system had not delivered him the opportunity to get to know his compatriots.

4. The gender binary is no longer relevant

This idea has a massive impact on our gender-segregated secondary schools and on how we make tertiary education safe for all genders. This is not simply about the introduction of unisex or gender-neutral toilets, but about the language we use when teaching students, and the options we provide to students of different genders.

Related to this is the idea of 'family learning'. Modern family structures require all genders to be involved in parenting and management of family affairs, and the curriculum should reflect this. Hence the tertiary education system must be both gender-neutral and flexible to the needs of all students and their families.



Figure 1. ForesightNZ: A playing card

5. Character is the key to talent

We need to teach our young people to understand the difference between a person's character and a person's personality, and to be able to see the difference both in themselves and in their peer groups. Personality is about temperament (it is what you wake up with every day and is how you socialise with people), whereas character is about values (it is what you need to work at all day every day). Good character shows itself in terms of what

is fair, and is often illustrated when an individual is challenged by unfair behaviour in others (e.g. a whistleblower or a person that stands up to a bully). In pre-workshop sessions, we discuss with participants the distinction between personality, character and skills using Figure 2, which was developed as part of our *TalentNZ* project.

We also need to adjust our learning culture to honour character more than personality. Rewarding young people for intelligence alone can diminish their impetus to work hard, and lead to laziness or a lack of curiosity. Instead we need to exemplify how to work hard, and reward students when we see them putting in effort – it is only through hard work that progress can be made. Talented people work hard, and hard work brings about change.

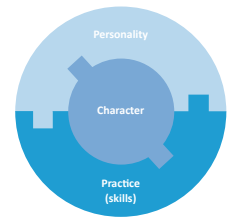


Figure 2. TalentNZ: The difference between character, personality and practice⁴

6. Revel in the opportunity to create good teams

The Institute has created a survey to help workshop cohorts get to know each other.⁵ The purpose is to accept that we are all different but that together we can be part of a great team. We believe that diverse approaches, skills and experiences allow a variety of ideas to germinate and be rigorously tested. Most importantly, this builds trust and enables consensus to be reached on complex policy issues. The tertiary education system should help people understand how they learn differently from others, and should then use this information to build different pathways for a variety of learning types. However, this should not give rise to a siloed approach: young people need to come together so they are able to learn from each other and participate in shaping their future.

7. Government should not incentivise 18- to 25-year-olds to leave New Zealand immediately

Sir Paul Callaghan suggested that our undergraduates should complete their first degree in New Zealand before travelling overseas. His argument was that there were many things young people should learn before they leave New Zealand, including our culture, our history, our diverse flora and fauna, and our geography. Once they have finished their undergraduate degrees the Government should then create a wide range of incentives and opportunities for young people to travel and study abroad, ideally benefiting from the one million other New Zealanders travelling and working overseas at any given time. Hopefully many will return, but those that remain overseas are more likely to stay connected to New Zealand if they spend their young adult years here.

8. Poverty is a serious obstacle to higher education

There is a continuous cycle of people in poverty being negatively impacted by inequalities within the education system that prevent them from achieving their full potential. This causes an intergenerational effect that obstructs progress towards a fairer and more cohesive society. We need to understand and remove the barriers preventing our young people from achieving their dreams and ambitions. The *LivingStandardsNZ* workshop participants explained it this way:

Our concern is that not everyone starts at the starting line together. We believe it is critical that public policy is not measured in terms of equality (an input focus) but of equity (an outcome focus). This is illustrated in the diagram opposite, with crosses representing a range of starting positions and the dreams

and ambitions—representing the ultimate goal. The vertical line represents the current starting point for most New Zealanders. However, some start ahead of the line, due to being born into wealth and status where education and connections provide an insider advantage. Others start behind the line, as a result of poverty, poor health or conflict, which in turn limits resources and options. In other words, even if two people undertake a similar journey to achieve comparable dreams and ambitions, one is likely to be significantly more advantaged than the other (demonstrated by the crosses). The cross on the bottom without the dotted line symbolises the most disadvantaged; those that cannot see a path ahead, as they are so busy surviving they do not even realise there is a race being run.⁶

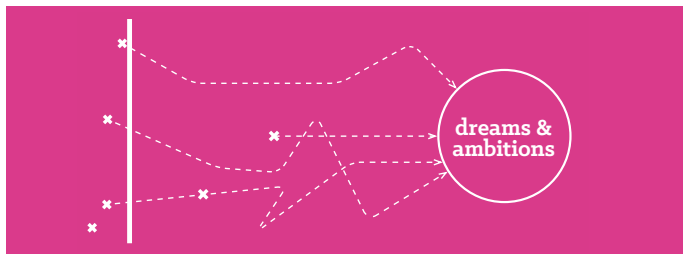


Figure 3. *LivingStandardsNZ*: The living standards metaphor⁷

Poverty is not just about money but about time, energy and confidence. Young New Zealanders have barriers to further learning because they cannot put their family into more debt, because they have more urgent family matters to attend to or because they simply do not have the confidence to believe that they can have that kind of life: ‘it is for people like you, not for people like me’. There are multiple layers of obstacles and we need to remove them all. The *TacklingPovertyNZ* workshop participants explained it this way:

A healthy home represents our vision for New Zealand in the future, but we see poverty in the present as a glass house. Those inside can see out to where they want to be, but are constrained and suppressed by the cold glass. The glass house is fragile and vulnerable to the slightest change. It is very easy to see the frustration of the people inside the glass house, but it is not easy to hear their voices, which means that they are often wrongly stigmatised and blamed. But the glass house does not have to be a trap. With the right support and opportunities in place, those inside can be empowered to escape. We want to build a better future for New Zealanders—a healthy home that nurtures its inhabitants, allows them to thrive, and spurs them to move outwards and upwards in the world.⁸



Figure 4. *TacklingPovertyNZ*: The Glass House⁹

9. The future is uncertain but the skills we need to tackle it are not

Although we cannot know what the future holds for New Zealand, it is possible to observe trends and deduce which skills and capabilities young New Zealanders will need in order to deal with rapid change. At the recent *ForesightNZ* workshop, many technological and biotechnological changes were discussed. Digital knowledge and skills are key for the future, but so too is the ability to consider highly complex ethical questions. As technology advances, we can't narrowly focus on equipping students with the ability to code and use apps – we need to think more broadly and equip them with the critical thinking skills to make ethical decisions about things such as artificial intelligence, bioethics, robots and climate engineering.¹⁰

Moving from STEM (Science, Technology, Engineering and Maths) to STEAM (the addition of Arts) is something that is already happening. If we want fresh ideas, we need to create spaces where a diverse range of people can come together to solve complex problems and develop new ways of doing things.



Figure 5. *StrategyNZ*: Illustrating an understanding of future studies¹¹

10. Data is growing exponentially

Modern policy and business decisions are being made with an increasing awareness of large data sets. We need to ensure that young people understand how to navigate the data world, how to build narratives from numbers and how to critically assess both the quality of the data and what the data is telling us. In much the same way as we are beginning to apply data analysis to the problem of poverty,¹² we also need to apply it to the tertiary education system.

11. Geography is condensing

The impacts of globalisation have well and truly arrived, and through the internet and geopolitical cooperation, the global map has been condensed into a neighbourhood. The next generation needs to be equipped not just with the language and coding skills to connect and communicate with other countries, but also with the cultural knowledge and empathy to work with those who are different to them. Increasingly complex global problems will require young people to connect globally and work across cultural lines.

12. Learning is not just about working towards earning a living wage, but working towards a well-balanced life

Our recent *Civics and Media* workshops showed us that the fourth estate is weakening, and the public sphere is diminishing. Due to a lack of media sources that educate the public on citizenship and the political sphere, students need to receive this information elsewhere. The learning system needs to make time for students to consider their place and role in the country, and equip them with skills to participate fully in the political process.

The 2008 international civic and citizenship education study (ICCS) indicated that the teaching practice in New Zealand Year 9 classes aligned most with a personal responsibility model of citizenship (in contrast with a participatory model and, to an even lesser extent, a justice-orientated model).¹³ We believe New Zealand needs to focus on the latter two models. Below is an excerpt from our *May Policy Quarterly* article outlining ideas to remedy this from workshop participants:

Several suggestions from speakers and participants at the *Civics and Media* workshops centred around the role of schools: teaching critical thinking to students from a young age to aid skills in reasoning and spotting unconscious biases; teaching a civics and leadership course at intermediate and secondary school; supporting meaningful student elections (to demonstrate democracy in action); and ensuring that schools create a space for children to have conversations in their peer groups and beyond about difficult issues. Legal, cultural and constitutional academics emphasised that New Zealand must work harder than most countries to inform young people about our complex constitutional heritage, including the Treaty of Waitangi, the unique nature of our uncoded constitution and the wider legal and political principles that govern New Zealand.¹⁴

(ii) What is not working?

Here are a few initial thoughts:

1. The amount of Government spending on the tertiary education system is significant, yet the feedback pathways for this key public investment are less clear. Perhaps a starting point is to understand what indicators exist currently and what indicators are missing. Further, what does the narrative of the existing indicators tell us about the quality of the tertiary system? Is the funding model flawed? Do we have too many institutions? Have we created incentives for organisations to keep students in technical institutions and universities when they would be better off learning a trade or working (rather than going into debt)? Who is checking that the system is working for our young people? Who has the skills, time and finances to independently assess the system on the behalf of our young people? Who can young people go to, or who can their families go to, to make complaints?

2. Young New Zealanders may not be fully aware of their career options. We promote tertiary education as a set of pathways – a university option, a technical institute option or a trade option. This decision is made at 17 or 18 years of age. This model is too restrictive too early in the process and we need to ensure there are many different avenues between and beyond these three options.

3. Career advisors can be counter-productive. Careers advisors (or their equivalents) have enormous influence over families and students. If there is one area we would invest in, it would be reviewing and overhauling the career advisory service – turning it into a fully functioning system with effective feedback loops and independent assessments – a system based on foresight and designed for young people to navigate.

4. We also have concerns that the people the current system may be harming are the very people who are unable to engage with or be heard by the Productivity Commission. There is a lot of self-interest within the system, and trying to look at it through the eyes of those most negatively affected will be a huge challenge for the Commission. For example, the 78 questions contained in the Commission's *New Models of Tertiary Education* paper may simply be beyond the time and resources of some of the more important voices that need to be heard.

5. There appears to be very little effort put into manpower planning in key areas of servicing the public. For example, how many teachers, doctors, dentists, lawyers, nurses and social workers are needed over the next twenty years – and with what specialities and in what locations. Without an understanding of what is needed and what we currently have, a lack of alignment is inevitable and is likely to result in negative outcomes for our young people.

(iii) How might New Zealand become a trailblazer in tertiary education?

It is useful to explore some big ideas that might challenge the status quo:

1. Should New Zealand revert to the University of New Zealand model and make universities colleges?
2. Should we model our education system on Switzerland's – one of several European countries with a 'dual' vocational education and training (VET) structure through which students combine learning in schools with learning in the workplace?

3. Should we have one publicly-funded polytechnic and one publicly-funded university per city?
4. Should we locate undergraduate colleges in regional communities? For example, colleges in towns like Rotorua and Whanganui so that young people can live and study at home?
5. Should we only fund a small number of postgraduate and research institutions (e.g. Auckland, Wellington, Christchurch and Dunedin) and have the best New Zealand and international lecturers tour these research colleges?
6. Should we have a Warrant of Fitness (WOF) on all tertiary-owned accommodation and student rental property?
7. Should we use online tools more widely?
8. Should those under 20 be able to attend a university or technical institution free for one year, or be refunded one year's fees if they pass?
9. Should we be developing better feedback systems with businesses? They are a key part of our prosperity, but we often fail to understand what the education system is doing well in terms of preparing students for the world of business, and what it is not.

CONCLUSION

The tertiary system sits within a continuum between the child and the adult. It cannot be seen in isolation. We need to broaden our conception of education. The tertiary education system at present is mired in tradition and therefore allows itself only a narrow understanding of its own purpose. Its restrictive definition of education centres the discussion on the educator (rather than the student), the knowledge (rather than the skills), the qualification (rather than the learning) and the institutions (rather than the community). If we can change the purpose of tertiary education to fit the 21st century, we will increase our wellbeing over the long term. We must work hard to provide young people with the skills to shape their world.

End Notes

¹ Pollock, K. (2012). Tertiary education. In *Tē Ara – the Encyclopedia of New Zealand*. Retrieved February 10, 2016 from <http://www.teara.govt.nz/en/tertiary-education/print>

² For a full list of workshops, see <http://mcguinnessinstitute.org/Site/Workshops>

³ Educate. (n.d.). In Online Etymology Dictionary. Retrieved from <http://www.etymonline.com/index.php?term=educate>

⁴ McGuinness Institute. (2015). *Illustrating the difference between character, personality and practice worksheet*. TalentNZ. Retrieved 8 May, 2016 from <http://talentnz.org/wp-content/uploads/2015/11/20150514-TalentNZ-worksheet-1.pdf>

⁵ McGuinness Institute. (2016). *Getting to know each other worksheet*. ForesightNZ. Retrieved 8 May, 2016 from <http://foresightnz.org/worksheets>

⁶ McGuinness Institute. (2013). *2013 Youth Living Standards Framework for New Zealand*. Wellington.

⁷ McGuinness Institute. (2013). *2013 Youth Living Standards Framework for New Zealand*. Wellington.

⁸ McGuinness Institute. (2016). *TacklingPovertyNZ: Exploring ways to reduce poverty in New Zealand*. Wellington.

⁹ McGuinness Institute. (2016). *TacklingPovertyNZ: Exploring ways to reduce poverty in New Zealand*. Wellington.

¹⁰ See, for example, the research by the World Economic Forum, which identified 16 skills required for the 21st century <http://widgets.weforum.org/nve-2015/chapter1.html>

¹¹ McGuinness Institute. (2015). *Illustrating an understanding of future studies worksheet*. TalentNZ. Retrieved 8 May, 2016 from <http://talentnz.org/wp-content/uploads/2015/11/20150514-TalentNZ-worksheet-31.pdf>

¹² See, for example, *Characteristics of Children at Risk* infographics <http://www.treasury.govt.nz/publications/research-policy/ap/2016/16-01/ap16-01-infographic.pdf>

¹³ Bolstad, R. (2012). *Participating and Contributing? The role of school and community in supporting civic and citizenship education*. Wellington: Ministry of Education. Retrieved 9 May, 2016 from https://www.educationcounts.govt.nz/_data/assets/pdf_file/0017/110177/Participating-and-Contributing-The-Role-of-School-and-Community.pdf

¹⁴ McGuinness, W. & Hett, S. (2016). *Civitas: Aligning technological and sociological transformation*. *Policy Quarterly* 12(2), 41–45.



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