



Submission from the Ministry of Education on
the New Zealand Productivity Commission's
draft report 4:

Educating New Zealand's future workforce

February 2020



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Introduction

1. The Ministry of Education (the Ministry) is the Government's lead advisor on the education system. Its role is to shape an education system that delivers excellent and equitable outcomes to all learners and their whānau.
2. The Ministry welcomes the opportunity to contribute to the New Zealand Productivity Commission (NZPC) inquiry into Technological Change and the Future of Work (the inquiry). The Ministry provided a submission on the NZPC's Issues Paper: Technological Change and the Future of Work, in July 2019; and is also providing a submission on draft report 3, Training New Zealand's workforce.
3. This submission focuses on draft report 4: Educating New Zealand's future workforce ('the draft report'). The issues covered in the draft report are of direct relevance to the role of the Ministry and the current Education Work Programme (EWP). The Ministry appreciates the opportunity to benefit from the NZPC's analysis of how well the education system prepares young people for the future of work, and any opportunities for improvement.
4. The draft report highlights a number of positive attributes of New Zealand's flexible and devolved education system, but also identifies areas of concern. Overall, the Ministry concurs with the NZPC's views of the challenges and opportunities facing the education system and, in many areas, the analysis aligns closely with our own analysis. It also aligns with what we have heard from New Zealanders over the past 18 – 24 months as part of Kōrero Mātauranga | the Education Conversation, education summits, fono and other targeted engagements.
5. However, there are some areas in the draft Report where the Ministry has a different perspective, and areas where we can provide further insights and updates from the EWP. In addition to the three major reviews highlighted in the report¹, there are many other areas of work underway that may be of relevance to determining the final findings of the inquiry².
6. There are also challenges and opportunities in the education system that the Ministry believes are missing from the draft report (e.g. those of learners with disabilities and learning support needs); and challenges that we think would benefit from greater emphasis (e.g. the persistently poorer outcomes experienced by some learners and their whānau).
7. Overall, the Ministry of Education shares the NZPC's view that the current period of significant education system reform provides an opportunity to assess how the system can be made more effective in preparing people to adapt to future changes in work. The Ministry also sees the reforms as an opportunity to ensure the education system works in partnership with whānau, communities, iwi, business and employers to prepare learners for their own future of work, and support them to achieve their working life aspirations.

Our approach to this submission

8. Our submission begins by discussing some of the general education themes in the draft report, including the value of education, and the characteristics of an education system that is fit for the future of work. It then outlines the Ministry's views on some of the key issues covered in the report. These include: understanding what the data tells us; the importance of addressing persistently poorer outcomes for some learners and their whānau; improving outcomes for learners with disabilities and learning support needs; the

¹ The Review of Tomorrow's Schools, the Review of NCEA; and the Reform of Vocational Education.

² National Education and Learning Priorities; Tertiary Education Strategy; Ka Hikitia – the Māori Education Strategy; the Pacific Education Action Plan; Learning Support Action Plan; the Strategic Plan for Early Learning; the Education Workforce Strategy; and work on Curriculum Progress and Achievement.

adequacy and implementation of the national curriculum; promoting innovation and good practice; careers education and advice; removing constraints on learning pathways; and digital inclusion.

9. The Ministry notes that *“the Commission is not proposing any specific recommendations at this stage, but the final report of the inquiry may do so”*. The report does, however, suggest some specific actions that are not within the scope of the current EWP (e.g. the removal of University Entrance (UE) requirements). Our submission therefore aims to provide the NZPC with additional information that we consider relevant to the inquiry and the formulation of the final recommendations of the March 2020 report.
10. This submission focuses primarily on the issues, challenges and opportunities discussed in draft report 4 (i.e. in relation to New Zealand’s education system). For a more fulsome understanding of the Ministry’s views on the inquiry into Technological Change and the Future of Work, this submission should be read alongside our July 2019 submission on the Issues Paper, and our February 2020 submission on Training New Zealand’s Workforce.

General education themes

11. Before addressing some of the specific issues covered in the draft report, the first part of our submission shares the Ministry’s perspective on some of the underlying themes, including: the value of education; and the characteristics of an education system fit for the future of work.

The ‘value of education’

12. The Ministry agrees that the attainment of education and skills matters for individuals in the economy and society for the range of reasons outlined in the draft report, including: higher incomes and lower unemployment; the ability of firms to adopt new technology; and higher levels of physical, mental and emotional wellbeing.
13. However, the Ministry considers that there are other reasons why education matters to individuals and their whānau that may also be relevant to the inquiry. Some of these are touched on in the draft report, but warrant further consideration prior to the finalisation of the inquiry’s recommendations. For example:
 - a. education plays a key role in shaping the values, behaviours and attitudes of society. This includes the views, reactions and responsiveness of people within the future workforce towards technology and technological change. Education can therefore help to influence whether the workforce has an inherent predisposition and motivation towards actively seeking out and embracing new technology (i.e. attitude), as well as the technical skills required for its use (i.e. aptitude);
 - b. education not only influences the skills, competencies, values and behaviours of the ‘workforce’, but also those of future innovators, entrepreneurs, investors, leaders, managers and other change agents. This means education can influence the way future decisions are made about investments in new technology, and the way technological change is introduced and managed within the workforce; and
 - c. the impacts of education are intergenerational, with evidence that the educational attainment of parents influences that of their children. This means that the educational outcomes of today’s learners are likely to influence the labour market prospects of future generations.
14. The Ministry also notes that it should not be assumed that the value of education is the same for all learners, whānau and communities. For example, following feedback received from fono held throughout 2018 and 2019, one of the five potential areas of focus for the Pacific Education Action Plan is: changing the education system’s definition of success to

reflect our Pacific people's diverse dreams and goals. The drivers of kaupapa Māori education and the Māori economy are also not necessarily the same as for non-Māori, as is reflected in Te Marautanga o Aotearoa.

An education system that is fit for the future of work

15. The Ministry agrees that some of the desirable characteristics of an education system for the future of work are its ability to:
 - a. empower people to learn new skills and knowledge throughout life; and
 - b. help people make well-informed choices and avoid closing off viable options inadvertently, unnecessarily or too early.
16. The Ministry strongly agrees that an important characteristic of an education system for the future of work is its ability to ensure that *all* learners can achieve foundational skills (i.e. literacy, numeracy and digital skills) and key competencies (e.g. thinking, managing self, and relating to others). Without both foundational skills and key competencies, it is not possible for learners to learn new skills and knowledge, and to use their knowledge, skills, attitudes and values to make well informed choices and meet complex demands.
17. A further characteristic of an education system that is fit for the future of work that the Ministry considers to be particularly important is that:

All learners and their whānau can have confidence that what and how they are learning now will provide them with the best opportunity to meet their aspirations for their future, and respond to what the future of work demands of them.
18. This means that learners who are currently underserved by the education system (e.g. Māori learners, Pacific learners, learners from socioeconomically disadvantaged communities, and learners with disabilities and learning support needs) must be able to have confidence that the reforms of the education system will address the persistent systemic inequities that they currently experience.
19. From the Ministry's perspective, and particularly in the context of the future of work, it is vital that the education system works collaboratively with teachers, education leaders, whānau, communities, iwi, business and employers, to continuously gather knowledge, insights and evidence about emerging trends, shifts, patterns and changes in work, and translate these into meaningful outcomes for learners and learning in a timely and relevant manner.
20. New ways of gaining insight into changing needs and ensuring the curriculum is relevant to learners needs are being developed as part of the EWP. These include, for example, workforce development councils representing industry views of skills needs; regional skills leadership groups representing regions; Te Taumata Aronui to provide government with Māori community and employer perspectives on tertiary education; and a range of initiatives to connect schools with local employers.

Understanding what the data tells us

21. The draft report focuses on the evidence of an equity gap in the attainment of core skills, and New Zealand's relative decline in some international measures. These findings are of concern, and have informed the Ministry's work programme. However, the data story contains some nuances that are not captured in the draft report, and that we think are important to consider.
22. For example, while the ERO report highlights issues with the implementation of the key competencies in New Zealand schools, there is also evidence that New Zealand performs highly on international comparisons for these broader capabilities. In particular, New Zealand's performance on collaborative problem solving (how individuals work together

with others to solve a problem), as explored in PISA 2015, was very high (a mean score of 533, well above the OECD average of 500). Only Singapore, Japan, and Hong Kong China had significantly higher average results.

23. This complicates the draft report's narrative that schools and kura have not successfully embedded these skills in their local curriculum, and that this should be the main focus of New Zealand's education system response to the future of work. The Ministry's analysis suggests that variance in outcomes between (and within) schools also reflects:
 - a. inconsistencies in how foundational learning such as writing, reading and science is delivered within local curricula, and how student progress is tracked and responded to within schools;
 - b. how schools build upon foundational learning to deliver coherent disciplinary content, of meaningful depth, across a breadth of relevant subject areas (particularly in secondary settings), to ready students for further education or employment; and
 - c. differences in the challenges faced by English and Māori medium schooling. For example, the evidence indicates that the relational skills promoted by *Te Marautanga o Aotearoa* have been well implemented by Māori medium kura.
24. Further details on the Ministry's views about the current relevance of the national curriculum, and issues associated with its implementation are provided below.

Addressing persistently poorer outcomes for some learners and whānau

25. The draft report identifies one of the key challenges facing the education system for the future of work as the persistently poorer outcomes experienced by some groups of young people, especially children in socio-economically disadvantaged communities, Māori learners, and Pacific learners.
26. The Ministry agrees that this is one of the most critical and complex challenges facing New Zealand's education system and that it must be addressed. This view aligns strongly with the feedback we have received over the past 18 – 24 months as part of Kōrero Mātauranga | the Education Conversation, education summits, fono and other targeted engagements. In particular, we have heard from New Zealanders that wellbeing, equity and inclusion are really important for learners and their family and whānau, but that the education system we have now is not delivering on this for everyone.
27. As well as Māori learners, Pacific learners, and learners from socio-economically disadvantaged communities, the Ministry notes that learners with disabilities and learning support needs also experience persistently poorer outcomes from New Zealand's education system. We have provided further comment on this issue below, but we strongly recommend that the NZPC give greater consideration to opportunities for improving the education systems ability to prepare learners with disabilities and learning support needs for the future of work as part of the final report of the inquiry.
28. The Ministry notes that the group of learners that the education system currently underserves makes up a significant proportion of all learners, and therefore a large part of our future workforce, communities and economy. For example, as at 1 July 2019, 23% of students aged 5 – 19 years were Māori, and 9.8% were Pacific.³ With Māori and Pacific populations projected to grow proportionately greater into the future, this is a clear challenge in relation to the education systems ability to prepare all learners for the future of work. We believe it requires greater emphasis in the final report.
29. There are a number of work programmes underway within the Ministry and other government departments that aim to address these issues, some of which are discussed

³ <https://www.educationcounts.govt.nz/statistics/schooling/student-numbers>

further below. Addressing these inequities is also at the heart of the Government's recent decisions on the review of Tomorrow's Schools.

30. We encourage the NZPC to give greater emphasis to the need to address the persistent inequities experienced by some learners in our education system, and further consideration to the impact these outcomes could have on the future of work for these learners and their whānau, as well as future generations of the workforce if not addressed now.

Improving outcomes for ākonga Māori and whānau

31. The narrative of Māori education in New Zealand is complex. Although there are mentions in the report that illustrate changing education policy in the beginning to mid-20th century with regards to Māori education, the Ministry views these mentions as insufficient and lacking coherence and warrant further consideration prior to the finalisation of the inquiry's recommendations.
32. From the 1980s there have been significant shifts in kaupapa Māori education that have in some ways mirrored changes more broadly in Māori society and across New Zealand. The birth of Kōhanga Reo in 1982, and kura kaupapa Māori in 1985 (although kura was not funded by the State until 1989), which operate within a whānau-based Māori philosophy and deliver the curriculum in te reo Māori, has had profound impacts on Māori and education, as has the more recent funding and growth of wharekura and wānanga.
33. For example, 85,444 (43%) of Māori learners were participating in Māori language in education at level 5 or above⁴ in 2019. Almost one-quarter of these (20,778 students, 11% of Māori students) were in Māori medium education (MME)⁵. Enrolments and completions in tertiary reo Māori qualifications have both followed an upward trend in recent years. The number and proportion of teachers completing their initial teacher training in Māori Medium has also increased over the previous five years and will require significant growth to keep up with demand.
34. The growth of kaupapa Māori education provision may also have an impact on the Māori economy. There has been significant recent research, information, and effort into establishing the concept of the Māori economy within the context of official policy, data, and strategic directions. The growth of the Māori economy and Māori education should be considered as a part of the report.
35. We would suggest a more nuanced discussion and use of disaggregated data in further sections of the report is needed to recognise the place of Māori medium education in the Māori economy, and more broadly in a discussion on the future of work. Likewise, a recognition that the drivers of kaupapa Māori education and the Māori economy are not necessarily the same as non-Māori (see, for example, section 1.3 of the draft report on the value of education).
36. Understanding that the education system must be founded on Te Tiriti o Waitangi, and that education provision must support Māori enjoying and achieving education success as Māori, are critical to improving outcomes for Māori learners and their whānau. Various work streams under the EWP (e.g. the National Education Learning Priorities, the Tertiary Education Strategy, the final report by the Tomorrow's Schools Independent Taskforce) have consistently identified racism, discrimination and stigma as barriers in the education system that must be addressed. These barriers to educational success continue to also be perpetuated in the evolving world of work (for example, through persistent ethnic and gender pay gaps).

⁴ Level 5 means that students are learning Te Reo Māori as a separate subject for less than 3 hours a week.

⁵ <https://www.educationcounts.govt.nz/statistics/maori-education/maori-in-schooling/6040>

37. Ka Hikitia, the Māori education strategy, focuses on Māori learners acquiring the skills to participate in Māori society, Aotearoa and the wider world. This aspiration has been widely articulated by whānau, hapū, iwi, and Māori over successive generations. The future of work needs to support Māori learners to be secure in their identity, language and culture as part of an integrated set of skills.
38. Any recommendations or opportunities that do not specifically analyse the impact on and for Māori may not actually address the disparities identified in the draft report.
39. We encourage the NZPC to consider broadening its view of Māori education and to take into account the considerations outlined above.

Improving outcomes for Pacific learners and families

40. Engaging with and including the aspirations and values of Pacific learners, their families and communities will be central to achieving the intention of the report to ensure that every learner is empowered, and can continue to learn and take up new work opportunities throughout their lifetime.
41. The draft Pacific Education Action Plan currently under consideration presents a clear vision for Pacific Education for the next ten years, including five system shifts that are needed to realise the vision and three underlying principles that will shape the way that the Ministry works collaboratively with the education sector and Pacific communities. Work in 2018 and 2019 served to build the collective vision for change and the draft Action Plan is focussing on taking action to achieve change at the system, regional, and community levels.
42. Currently the draft report is mainly silent about the inequities faced by Pacific peoples, both in education and in the world of work. A key characteristic of effective education at all levels is the ability of individuals and systems to be reflective and to value and develop cultural responsiveness. This is relevant for diverse Pacific peoples in an increasingly diverse New Zealand population.
43. It may also be helpful to include detail about which populations are most affected by digital exclusion, and by variable and reduced access as a result of cost. Pacific peoples are over-represented in the group that is significantly affected by these issues.
44. Relevant learning and access to the widest possible pathway options are critical for every learner. The report could benefit from a strengthened focus on issues related to the negative impact of streaming and resulting under-employment for populations experiencing inequities across education and employment.

Improving outcomes for learners with disabilities and learning support needs

45. A key gap in the draft report is the absence of any specific reference to learners with disabilities and learning support needs and their whānau, and a lack of analysis as to how effectively the education system prepares these learners for the future of work, including supporting them to achieve their own working life aspirations. There is an opportunity, for example, to highlight this disparity in the sections of the report where poorer outcomes for other priority learner groups, including Māori learners, Pacific learners, and learners from socio-economically disadvantaged communities are referenced.
46. Disabled learners make up 20% of the New Zealand population overall⁶, and are a priority learner group for the Ministry. While 98% of disabled learners are in mainstream schools, 42% of disabled people aged 15-24 are not currently in education, employment or training (NEET)⁷. This is four times the NEET rate of other young people. Furthermore, we know

⁶ New Zealand Disability Survey, 2013.

⁷ http://archive.stats.govt.nz/browse_for_stats/income-and-work/employment_and_unemployment/LabourMarketStatisticsDisabilityJun17qtr_YouthMR4.aspx

that 74% of working age disabled people who are not in paid employment, would like to work if a job was available⁸.

47. Analysis undertaken by the Ministry indicates that there is strong evidence of:
 - a. lack of systemic careers advice for disabled learners;
 - b. poorly planned transitions into the workforce⁹; and
 - c. danger that the rise of automation means that job opportunities presently open to disabled people may be closed off.
48. This is especially concerning given that disabled people are three times less likely to be in work as non-disabled people.
49. The Ministry suggests that, in shaping the recommendations of the final report of the inquiry, the NZPC undertake an analysis of the future of work as it impacts on learners with disabilities and learning support needs and their whānau. Key questions that the NZPC may wish to consider include:
 - a. what might future technological and labour market change look like for disabled people (both challenges and opportunities);
 - b. how the education system can better support those disabled people affected by labour-market change in the future; and
 - c. how the education system can better position disabled people to take advantage of innovation and technological change (particularly as that technological change relates to technologies which can assist people to access the labour market).

The national curriculum (i.e. the New Zealand Curriculum and Te Marautanga o Aotearoa)

50. Curriculum in New Zealand schools and kura is designed and interpreted in a three-stage process as:
 - a. the national curriculum – the New Zealand Curriculum and/or Te Marautanga o Aotearoa describe the learning all young people should experience no matter what school or kura they go to and the progress and expectations associated with this learning as expressed in the national vision. It provides the framework for schools and kura to use in their local curriculum design. The National Administration Guidelines (NAGs) describe what each board of trustees is required to provide;
 - b. the school and kura curriculum (referred to as local curriculum) / Marau ā-kura – is designed by schools and kura with whānau, hapū, iwi and community to weave the elements of the national curriculum framework within contexts that provide rich learning opportunities. It provides a coherent pathway for classroom curriculum, while still allowing teachers and kaiako to be responsive to all learners; and
 - c. the classroom curriculum / mahere ako – is designed by teachers with ākonga, parents and whānau to respond to individual ākonga strengths, progress, and aspirations, within the framework of the school or kura curriculum.

Adequacy of the national curriculum

51. The Curriculum Progress and Achievement Ministerial Advisory Group (CPA MAG), which was formed in May 2018, found that the current national curriculum (i.e. New Zealand Curriculum and Te Marautanga o Aotearoa) and its relationship with local (school and kura) curriculum were not adequate. For example, the MAG noted recent changes to the

⁸ Ministry of Social Development, Draft Disability Employment Action Plan, November 2019.

⁹ . <https://www.odi.govt.nz/nz-disability-strategy/employment-and-economic-security/actions-to-achieve-outcome/>

national curriculum appeared ad hoc and left people with a sense of curriculum clutter and overload. They also found that the documents were not clear about what learning could not be left to chance to avoid local decisions leading to inequitable learning opportunities.

52. Analysis undertaken by the Ministry found that:
- a. the national curriculum (i.e. NZC and Te Marautanga o Aotearoa) is very flexible and does not tell teachers exactly what to do. While highly valued, it means that the process of curriculum implementation places a huge responsibility on teachers to understand and integrate multiple and disparate elements of the curriculum;
 - b. national curriculum progression descriptions are unclear and very patchy;
 - c. many local curricula are strong in their focus on students' interests and agency, but more uneven in their reference to the NZC Learning Areas; and
 - d. the 'big ideas' and intent of NZC Learning Areas are not clear enough to support local curriculum design nor inspirational enough to appear life worthy.
53. This has meant that there is considerable variation in national curriculum interpretation and implementation.

Implementation of the national curriculum

54. While we agree with the NZPC's view that there has been poor curriculum implementation leading to variability in teacher capability and inadequate teacher support, we would argue that there are many reasons for this. OECD Education 2030 (2018) identified five issues associated with curriculum implementation:
- a. confronted with the needs and requests of parents, universities and employers, schools are dealing with curriculum overload. As a result, students often lack sufficient time to master key disciplinary concepts or, in the interests of a balanced life, to nurture friendships, to sleep and to exercise. It is time to shift the focus of our students from "more hours for learning" to "quality learning time";
 - b. curricula reforms suffer from time lags between recognition, decision making, implementation and impact. The gap between the intent of the curriculum and learning outcome is generally too wide;
 - c. content must be of high quality if students are to engage in learning and acquire deeper understanding;
 - d. curricula should ensure equity while innovating - all students, not just a select few, must benefit from social, economic and technological changes; and
 - e. careful planning and alignment is critically important for effective implementation of reforms.
55. These curriculum issues are recognised in the New Zealand education system. For example, New Zealand's high autonomy model has both benefits and disadvantages for addressing time lag. At a local level, flexibility has advantages in so far as it allows schools to respond to emerging needs in an agile and timely manner. This however, introduces the possibility that in addressing these needs nationally identified essential learning may be neglected. It requires teachers and schools to balance the demands of the national curriculum with local community needs. Capability for this varies considerably from school to school, introducing an area of inequity.
56. At a national level this flexibility may increase time lag. Without easily comparable curriculum data, it is difficult for a national system to identify emerging needs and address these in a systematic fashion. It is also difficult to identify and spread innovative, effective practices between schools and teachers.

57. These issues were explored by the CPA MAG, who acknowledged that strengthening sector capability is important, and considered that this should happen in ways that include more than just high quality learning opportunities for teachers and leaders. The MAG saw a need for developing effective networks across the system so everyone could benefit from the expertise within the system. They identified that teachers and leaders also need access to better curriculum and assessment tools, and progress and achievement data, to support their decision making.
58. Finally, as mentioned above, we would caution against using the implementation of the key competencies as evidence of poor implementation, because key competencies are intended to be woven with knowledge, skills, values and attitudes.
59. OECD Education 2030 (2019) identified that “future ready” students will need a broad set of knowledge skills, attitudes and values in action. Curriculum needs to support young people to develop:
 - a. agency to participate and influence; and
 - b. competencies to both acquire knowledge and skills and to use their knowledge, skills, attitudes and values to meet complex demands.
60. Therefore it is important to not only focus on competencies or discipline knowledge, but to understand the relationship between knowledge, skills, attitudes and values to develop competencies. The national curriculum has not made this relationship clear, and it has therefore been hard for schools to design a ‘woven’ curriculum that does not leave learning to chance while at the same time supporting the diverse strengths and aspirations of all learners.

Promoting innovation and good practice

61. One of the opportunities for reform identified in the report is improving the promotion of innovation and good practice.
62. A commonly recognised benefit of New Zealand’s flexible and highly devolved education system is the opportunity it creates for high levels of experimental and innovative practice. A key disadvantage, however, is a lack of formal mechanisms for identifying and verifying truly ‘good practice’, and where it is identified, sharing, promoting and encouraging its uptake across the education system.
63. The Ministry agrees that this is a key area where the education system needs strengthening, particularly in relation to achieving equitable outcomes for all learners. There are several initiatives currently underway to support this outcome that the NZPC may wish to consider as part of its inquiry.
64. For example, the report already notes that, as an outcome of the Tomorrow’s Schools review, the Government agreed to establish an Education Service Agency (ESA) within the Ministry of Education. The role of the ESA will be to provide more responsive, accessible, integrated and locally based support to teachers, leaders, students, whānau and their wider communities. The ESA will have a strong focus on delivering for all learners, particularly those that the system does not currently serve well, including Māori, Pacific, those with disabilities and/or learning support needs, and those from disadvantaged backgrounds.
65. A further outcome from the review of Tomorrow’s Schools not mentioned in the draft report is the establishment of a new role of Leadership Advisors. Leadership Advisors will be part of the ESA and will provide support directly to principals and boards. They are expected to play a key role in sharing best practice across the education system to achieve equity and excellence, supporting collaborative networks such as Kāhui Ako, and encouraging and supporting innovative approaches to teaching and learning.

66. The Tomorrow's Schools decisions also include a work programme focused specifically on developing collaborative networks across the education system, including Kāhui Ako (Communities of Learning). Around 220 Kāhui Ako already exist throughout New Zealand, and they are an important way through which innovation and best practice can be shared across schools through collaborative practice and shared learning. The work programme will look at ways to strengthen and provide greater flexible for collaborative networks such as Kāhui Ako.

Careers education and advice

67. Effective careers education provides a whole of system approach to the way students learn and the way they are prepared for the world of work. The Ministry agrees that currently careers education and guidance in New Zealand schools is variable.
68. There is evidence supporting the need for a wider community of engagement involving young people, teachers, career advisers, iwi, employers and other organisations all working together to enable the young people to build their aspirations and for the community to connect their employment opportunities with the system.
69. For example, we know that young people have higher risk of becoming NEETs if they do not have multiple contacts with employers while they are at school. A 2011 survey by the Education and Employers Taskforce and YouGov showed evidence of a positive correlation between employer engagement while in education and perceptions of successful and confident labour market progression, status in the labour market and earnings. Participation in four or more employer engagement activities while in school made young adults (19-24 years) five times less likely to be NEET, as well as earning on average 16% more. These results were independent of qualification level.
70. Key parts of effective careers education that take a whole of system approach include:
- a. careers education being integrated into the curriculum¹⁰, supported by the school leadership team¹¹. This ensures careers development is embedded within the learning environment and relevant to the future of work for the learner;
 - b. all teachers being involved in providing students with career development opportunities¹². Teachers require professional development opportunities to ensure they can meet their students' needs; and
 - c. links between the worlds of work and education¹³. The Attitude Gap Report¹⁴ found a range of disconnects between students and employers that affect the outcomes for both parties. Ensuring students have connections to the workforce through careers opportunities during their learning and connections between employers and schools is vital.
71. There are some schools in New Zealand who take this system wide approach to careers education though not all.
72. Four initiatives agreed to by Cabinet as part of the Reform of Vocational Education offer the opportunity to build momentum and encourage more people to consider vocational education as a pathway to employment. These are:

¹⁰ Investing in Career Guidance: Joint statement of OECD, ILO, UNESCO, The European Commission and its agencies ETF and CEDEFOP, December 2019.

¹¹ National Careers Institute Consultations and Co-design: Background paper (2019), Department of Employment, Skills, Small and Family Business, Australian Government.

¹² Investing in Career Guidance: Joint statement of OECD, ILO, UNESCO, The European Commission and its agencies ETF and CEDEFOP, December 2019.

¹³ National Careers Institute Consultations and Co-design: Background paper (2019), Department of Employment, Skills, Small and Family Business, Australian Government.

¹⁴ The Attitude Gap Challenge is a multi-agency co-design challenge led by the Auckland Co-design Lab (the Lab). It was sponsored by the Ministry of Business, Innovation and Employment and the Ministry of Social Development (<https://www.aucklandco-lab.nz/attitudegap>).

- a. an integrated marketing and promotions campaign to promote vocational education as a desired pathway;
 - b. events that connect schools, communities and employers that raise awareness of vocational education careers;
 - c. a new education-to-employment brokerage services that will strengthen connections between local employers and schools; and
 - d. an increased number of Trades Academy and Gateway places.
73. Within the Tertiary Education Commission’s Career System Strategy, the Drawing the Future and Inspiring the Future programmes look at the career aspirations of 10-13 year olds, which can be very limited¹⁵. They aim to broaden the opportunities of young people by connecting them with local employees in less commonly identified fields.

Removing constraints on learning pathways

74. The report notes that, while some learners have clear learning and career pathways, others do not. The pathway to university is “well-lit”, as reflected in timetabling decisions, careers advice and university entrance requirements, at the expense of other pathways. Timetabling and university entrance requirements make it difficult to develop and maintain alternative pathways. The report suggests removing constraints on learning pathways, including whether University Entrance (UE) should continue. The report also states that, just as there are constraints on pathways within schools, there are constraints on learners changing providers and learning modes in the tertiary education system.
75. The Ministry agrees that more can be done to prepare all students for successful transitions into vocational training, work, or further studies. Vocational pathways are equally important, particularly given the skills shortages across many industry sectors. There are challenges for many schools in designing timetables that provide opportunities to pursue a range of alternative pathways. It would be desirable to share and build on the good practice demonstrated by some schools in addressing these challenges, as well as looking at the opportunities arising from the NCEA Review. For example, some schools have innovative timetabling arrangements and some use Te Aho o te Kura Pounamu to ensure that senior students have access to a breadth of subjects.
76. Through the NCEA Review, the Ministry is working on a more coherent NCEA with improved expectations about how learning contributes to each NCEA level. The NCEA change package includes developing a Vocational Entrance Award which is intended to create clearer and more direct pathways from school into further vocational education, such as apprenticeships. It could signal the importance of suitable preparation and give schools, learners and their whanau a clearer understanding of industry needs.
77. A review in 2016-17 found that UE was supported by the sector and the wider community. It is a common entry standard for most degree-level study at universities and is often used by other tertiary education organisations to determine whether candidates are ready to enter degree programmes. In some cases, for example, when there are limited places in high cost programmes such as medicine, tertiary education providers set higher entry requirements for degree programmes.
78. Attempting a degree requires foregoing other opportunities for learning or employment, so it is helpful to give students an early signal of the academic demands it will place on them, and guidance on how to prepare. Holders of UE are more likely to experience success at university than non-holders. The discipline of having to undertake a prescribed set of study, and the motivation to complete this, is a strong indicator that a student will do well at university studies, or in a degree at any other institution. Removing UE could reduce

¹⁵ Investing in Career Guidance: Joint statement of OECD, ILO, UNESCO, The European Commission and its agencies ETF and CEDEFOP, December 2019.

clarity for students and increase complexity as learners would need to determine each degree provider's minimum entry requirements.

79. We recognise that UE has some issues and the Ministry, NZQA and Universities New Zealand are working to ensure that it is fit for purpose and aligns appropriately to the new standards. When the NCEA Review changes are fully implemented, including improvements to the coherence of NCEA Level 3, there may be an opportunity to consider more fundamental change. The Ministry is also exploring wider opportunities to strengthen the vocational education that secondary school students undertake.
80. As noted in the draft report, at the tertiary level, the reforms of vocational education provide opportunities to increase flexibility and mobility for learners. Polytechnics will become part of one institution, and providers will be enabled and encouraged to support work-based training as well as delivering 'provider-based' vocational education, allowing for smoother transitions between these learning modes. Furthermore, the reforms include measures (such as industry endorsement of programmes) that will lead to greater national consistency in delivery, which will greatly assist providers in recognising learning completed at other institutions.

Digital inclusion

81. The focus in the draft report on the requirement for digital inclusion for all young people is strongly supported by the Ministry. New Zealand has approximately 816,000 school age children. Extrapolating from the 2018 census data, as interpreted by the 2020 Trust, an estimated 80,000 students (in 25-30,000 homes) have no household internet access.
82. Ministry work with local community trusts indicates that the concentration of digital exclusion can be extreme in particular locations. For example, 45% of households in Naenae; and 40% of students in Opotiki and Kawerau.
83. The absence of suitable digital access at home disadvantages young people educationally in an increasingly digitally-enabled education system, as well as impacting their sense of social inclusion and ability to fully participate in civil society.
84. Schools confirm that digitally excluded students would typically be identified as some of our most disadvantaged, with other societal challenges to their ability to succeed.
85. From design conversations with a number of educators, we understand that in some cases this disparity is responded to by either:
 - a. limiting teaching methods so the cohort can learn together – where the proportion of digitally excluded students is high. This disadvantages all the students in the cohort, and creates a digital exclusion in the workforce as teachers can't use the full range of (online) practices; or
 - b. assuming students have household internet access – this means the digitally excluded students (and their families) need to access the internet via community/public internet services (e.g. at local libraries), which is not always viable.¹⁶
86. In 2017, the Ministry began the Equitable Digital Access for Student's (EDA4S) initiative, delivering solutions to improve access to connectivity and technology, by extending the Network for Learning into student homes and communities to ensure that all students can engage in an increasingly digitally-enabled education system.
87. A range of pilots are being undertaken and evaluated to explore different aspects of the learning and inclusion needs of students and to test solutions. The number of students currently involved is 1,441 with 3,000 more in the pipeline.

¹⁶ Ministers Youth Advisory Group, March 2019

88. In addition, the Ministry is leading discussions with other agencies and partners to develop a model for the digital inclusion of all members of a household, via the provision of Universal Basic Internet (UBI) at a household level. UBI leverages proven technologies and expands on the successful Equitable Digital Access for Students pilot initiative.