



Tertiary Education Report: Background for a first discussion about ITP viability

Date:	24 November 2017	TEC priority:	High
Security level:	In Confidence	Report no:	B/17/00875
		Minister's office No:	

ACTION SOUGHT		
	Action sought	Deadline
Hon Chris Hipkins Minister of Education	Note the attached for discussion with officials at your convenience.	
Enclosure: Yes (three sides of A3)	Round Robin: No	

CONTACT FOR TELEPHONE DISCUSSION (IF REQUIRED)			
Name	Position	Telephone	1st contact
Tim Fowler	Chief Executive	S9(2)(a)	S9(2)(a) ✓
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THE FOLLOWING DEPARTMENTS/AGENCIES HAVE SEEN THIS REPORT

- CERA DPMC ENZ ERO MBIE MoE MFAT
 MPIA MSD NZQA NZTE TEC TPK Treasury

- Minister's Office to Complete:** Approved Declined
 Noted Needs change
 Seen Overtaken by Events
 See Minister's Notes Withdrawn

Comments:

Executive Summary

1. Over the last two decades, driven by government priorities and funding incentives, institutes of technology and polytechnics (ITPs) have refocused their delivery. They have moved away from community education and sub-degree short awards (including upskilling of adults already in the workforce via part-time and block-course delivery), and toward delivering to young people studying toward a first qualification, especially at higher levels (including degrees).
2. Having made this shift, ITPs are now being out-competed on all sides for their target student group, both by the growing labour market and by other tertiary education organisations (TEOs). ITPs face rising cost pressures, and – due to a combination of internal and external factors – limited ability to shift their business models to make them more profitable.
3. At the same time, learners' expectations for modern, technology-enabled personalised learning have grown.
4. The ITP subsector is now in a position where widespread business change seems necessary to ensure the ongoing quality, attractiveness and sustainability of its vocational delivery. The need for change is as much about the nature and quality of delivery as it is about ITP finances, though the two are intertwined. Many ITPs need to make upfront financial investments to achieve business change, and need a way to pay for these, also ensuring any future business model is sustainable.
5. The TEC has recently established a project, "Sustainable ITPs", to consider how ITPs can meet the challenges they face. The first phase of this project is about building an information base and problem definition that is shared between the TEC and the sector, as a prelude to engaging collaboratively with ITPs in to explore and test different options for change. Those options will be framed in large part by your policy choices.
6. We understand the Government is seeking to increase the innovative capacity and responsiveness of the tertiary sector, and to improve the sector's ability to meet diverse learner needs (including upskilling adults in work) and to contribute to regional economic growth.
7. ITPs' sustainability challenges represent an opportunity for the Government to promote its policy goals by repurposing and reshaping the network to be significantly more employer- and employee-facing. This will likely require reconfiguration of the network – structural or via increased collaboration – to realise efficiencies and set it on a more sustainable footing.
8. The TEC would welcome a discussion with you about these matters.

Recommendations

Hon Chris Hipkins, Minister of Education

It is recommended that you:

1. **note** the contents of this briefing and A3s, for discussion with officials at your convenience.



Tim Fowler

Chief Executive,
Tertiary Education Commission

24 November 2017

Hon Chris Hipkins

Minister of Education

_____/_____/_____/

Proactively Released

Purpose

1. This briefing and A3s are intended to support a discussion with you, at your convenience, about the future of ITPs, and relevant work TEC is getting underway with the sector. The briefing provides you with a short history of ITPs and the challenges and opportunities they represent for government, and introduces TEC's "Sustainable ITPs" project. The A3s present some useful data.

A short history of the ITP subsector

ITPs have their roots in technical and community colleges dating back to the 19th century

2. ITPs have their origins in 19th century "technical colleges" which provided school-leavers (from about age 14) with technical training for work. In the early 1960s, as demand for technical education grew, technical colleges in urban centres were split into secondary schools and tertiary-level ITPs (in Auckland, Hamilton, Wellington, Christchurch and Dunedin).
3. The 1970s saw the growth of "community colleges" in regional centres. These initially offered non-vocational continuing education for adults alongside technical training. However, in the 1980s they reoriented to purely vocational provision, driven by changes to government funding, and effectively became regional ITPs.
4. The Education Act 1989 established ITPs as tertiary Crown entities under a common governance framework with universities, colleges of education and wānanga. ITPs' statutory role was (and is) to **"offer a wide diversity of continuing education, including vocational training that contributes to the maintenance, advancement, and dissemination of knowledge and expertise and promotes community learning and by research, particularly applied and technological research, that aids development"** (s.162(4)).
5. ITPs shifted from being managed by the Department for Education to being independent and autonomous, managed by chief executives and governed by councils. ITPs were given permission to award degrees, and – temporarily – to apply for university status (achieved by Auckland University of Technology in 2000, shortly before government set a moratorium on the creation of new universities in New Zealand).

The ITP sector grew quickly in the early 2000s...

6. By the late 1990s, the ITP sector was significant in size, but many ITPs faced sustainability challenges due to decline in their local populations. These challenges were temporarily resolved via substantial growth in tertiary enrolments from 1999, when the funding system was uncapped (i.e. fully demand-driven), through to 2004.
7. The growth was concentrated at sub-degree level. Student numbers (across all providers) at certificate and diploma level grew by 116 per cent from 2000 to 2004, and community education enrolments grew by 546 per cent, while degree level education grew by only 6 per cent.
8. By 2003, every town with a population of over 20,000 (20 in total) had an ITP; and the ITP sector had the largest number of students in the tertiary system, with 178,000 enrolled in 2004, amounting to 80,615 equivalent full-time students (EFTS). The 20 ITPs received a total of \$558.7 million out of a total operating expenditure on tertiary education of \$2.7 billion, or around 20 per cent of total funding.

... and shifted toward more delivery at higher levels

9. Government moved to stem the cost of sub-degree growth, especially in delivery of low quality and/or low relevance to the labour market. Government removed around \$180 million through reductions in funding for community education and short awards; and a further \$20 million through removal of funding for regulatory compliance and health and safety courses. Most of these funding changes took effect in 2004.
10. At the same time government reinvested \$200 million back into the sector through earmarked "Quality Reinvestment Funding". This was to support ITPs to realign delivery away from lower level qualifications, towards higher levels, including degrees.
11. Successive *Tertiary Education Strategies* (2007-2012 and 2014-2019) and related funding settings further incentivised ITPs to deliver at higher levels, and to prioritise delivery to young people studying toward their first qualification. The emphasis was on full-time, on-campus study to lift completion rates.

The Global Financial Crisis and "baby blip" increased enrolments at ITPs – but only temporarily

12. The Global Financial Crisis (GFC) boosted both full- and part-time domestic enrolments at ITPs, as the downturn in the economy encouraged more people into vocational education and training. Around the same time, more young people enrolled in bachelor degrees as the "baby blip" generation moved into tertiary education, though the demographic driver was much smaller than the economic one.
13. As the economy recovered, and the unemployment rate started to decrease, ITPs student numbers began to decline. As the accompanying A3 shows, ITP EFTS at Student Achievement Component Level 3 and above (SAC L3+) are strongly correlated with unemployment rates of youth aged 15-24.

In recent years ITPs have been increasingly challenged by economic, demographic and policy change

14. As a result of economic, demographic and policy changes in the wake of the GFC, ITPs face increased competition from the labour market, industry training, private training establishments (PTEs), wānanga, schools and universities. In combination with modest increases to funding rates, and various aspects of ITP business models, this has driven down their profit margins over time.
15. ITPs have responded chiefly through staff reductions, and growing international enrolments.
16. Below is an overview of each trend.

ITPs face increased competition from the labour market, industry training, PTEs, wānanga, schools and universities

17. As noted, ITPs' enrolments of young people are significantly affected by **labour market** conditions. If school-leavers with a vocational inclination can move straight into a job, rather than pursue further study at an ITP, they usually will. Over the last half-decade, ITPs have been competing for students with an increasingly strong economy.
18. **Industry training** was reviewed in 2011. As a result of the review, New Zealand Apprenticeships were introduced (replacing youth-targeted Modern Apprenticeships) and the

general funding rate for industry training was increased. The Industry Training Act 1992 was amended to clarify the role of industry training organisations (ITOs), and significant merger activity in the ITO subsector greatly increased its capability. These factors have lifted the quality and scale of ITO delivery to learners in work, exacerbating the impact of the growing economy on ITP enrolments.

19. Government introduced competitive funding of **foundation education** from 2012. In the first competitive funding round, ITPs were out-competed significantly:
 - by PTEs, which tend to have lower cost structures and more flexible business models, and were able to cherry-pick high-margin areas in which to compete on price; and
 - by Te Wānanga o Aotearoa, which has a very low-cost nationwide/distance offering focusing on Māori and Pasifika learners, both of whom are *Tertiary Education Strategy 2014-2019* priority groups.
20. ITPs fared better in the second competitive round in 2014, but worse again in the third round in 2016.
21. At degree level, ITPs have been particularly affected by the demographic change that has driven softer system-wide demand for degree-level study in the last few years. A higher proportion of young people are attaining NCEA level 2, but the overall pipeline of school-leavers is nonetheless declining in size. While ITPs have slightly increased their percentage share of TEC-funded Bachelor delivery over the last decade, actual student numbers have declined at ITPs, as they have at universities. Prior to the announcement of the “one year free” policy (see paragraph 48), the Ministry of Education had forecast this decline to continue until at least 2019 and probably beyond.
22. **Universities** are responding to soft demand by accepting a wider variety of students – some of whom would otherwise have studied at an ITP – in an attempt to maintain delivery volumes. It remains to be seen how the “one year free” policy will affect this dynamic. Universities also dominate postgraduate provision, delivering 94% of all provision at levels 8-10.
23. ITPs’ enrolment challenges are compounded by the fact that overall, young people are electing to remain in **secondary school** for longer, driven by an increase in the number of secondary tertiary partnership (STP) programmes and increased NCEA attainment rates.

Domestic enrolments declined by 30% from 2008 to 2016

24. The impact of all of the above has been declining domestic enrolments at ITPs. ITP domestic student numbers fell by 30% from their peak in 2008 (185,305 enrolments) to 2016 (129,870 enrolments). The decline in domestic EFTS was smaller (in line with the shift toward more full-time study). Domestic EFTS peaked in 2010 at 72,665 EFTS and fell about 10% to 65,870 in 2015.

Funding rate increases for ITPs have been modest

25. ITPs’ average SAC funding rates have increased very modestly in recent years. These increases have been driven by a combination of government rate increases at annual Budgets (which have usually been targeted at particular levels and fields of study), and ITPs shifting more provision into categories that attract higher funding rates.
26. Table 1 below shows the average funding rate increase for ITPs across all their delivery each year since 2011, and how it is constituted. Over the last five years, the average *government* rate increase (the middle column) has been 0.45%. By way of comparison, the comparable figure for universities in 1.52%.

Table 1. Size and composition of average increases in SAC funding rates at ITPs, 2011-2017

	Average SAC rate increase	Portion due to changes to government funding rates	Portion due to changes in ITPs' mixes of provision
2011	2.20%	2.20%	0.00%
2012	1.49%	1.27%	0.22%
2013	1.25%	0.43%	0.83%
2014	0.97%	0.19%	0.78%
2015	0.46%	0.19%	0.27%
2016	0.84%	0.22%	0.62%
2017	1.96%	1.21%	0.74%

Various features of ITPs' business models make them less profitable

27. In addition to the economic, demographic and policy changes described above, ITP profitability is impaired by various features of their business models:

- **Breadth of delivery:** ITP are characterised in the Education Act 1989 as offering “a wide diversity of continuing education” to their local catchment. This both reflects and bolsters long-standing community expectations of ITPs, and their own identity and culture as comprehensive community-driven providers. Most ITPs deliver education from foundation through to degree level. In the context of increased competition from other providers, class sizes at some ITPs are small, with commensurately high per-student costs for programme development, teaching, student support and facilities. ITPs often have limited ability to redeploy under-utilised faculty or equipment in other areas of their business, as most of it is specialised.
- **Compliance burden:** ITPs' breadth of delivery means they need to access many different government funds for teaching and learning – between 12 and 13 on average – each of which has its own funding rules, KPIs and reporting requirements. This generates a big administrative burden, especially for small ITPs.
- **Workforce structure:** Staff salaries represent the bulk of ITPs' costs. The ITP workforce has been successful in recent years in negotiating pay increases above the rate of inflation (and above the rate of funding rate increases) through collective bargaining. Collective agreements also tend to set terms of employment that lock the ITP into operating during traditional business hours, with a long summer break. This can make it difficult for ITPs to offer flexible delivery in the evenings and at weekends to working adults.
- **High costs of some types of change:** ITPs face high financial, cultural and reputational costs in making structural changes to their business that could result in redundancies or a perceived reduction in service to the local community. There is a strong sense of community ownership of local ITPs, especially in the regions. Collective employment contracts contribute to the financial cost of structural change.
- **Variable management and governance capability:** ITPs' capability in identifying and responding to business challenges is variable, and management and governance has historically often been weak. That said, it has improved since 2010 with the legislative reform of ITP councils.
- **Applied research role:** ITPs' statutory characterisation states that they do research, particularly applied and technological research, and legislation requires that all degree-level programmes at ITPs must be taught mainly by people active in research. ITPs perform poorly in the Performance-Based Research Fund (PBRF) which rewards theoretical over applied research (ITPs received about 2.5% of the PBRF funding pool in 2015). This means they must find other ways to fund their investment in research.

28. ITPs also face some of the same tertiary funding system challenges as other providers when it comes to teaching and learning. The system penalises poor performance through Performance-Linked Funding, but cannot meaningfully recognise or incentivise good performance except by awarding additional volume – which is only valuable to providers facing excess learner demand. This limits the incentive and ability of the best providers to innovate to further improve performance or efficiency.

Some ITPs have responded by increasing their collaborative activity...

29. ITPs have recognised that they need to collaborate more to achieve scale and manage costs across the network. Since 2011, ITPs have reduced in number from 20 to 16 through formal mergers:
- In 2011, Telford Rural Polytechnic became a campus of Lincoln University through merger; and Tairāwhiti Polytechnic merged with Eastern Institute of Technology (EIT).
 - In 2016, Ara Institute of Canterbury was established following the merger of Christchurch Polytechnic Institute of Technology and Aoraki Polytechnic; and Toi Ohomai Institute of Technology was formed through the merger of Bay of Plenty Polytechnic and Waiariki Institute of Technology.
30. The Telford transfer to Lincoln University was not a success, and the provision has since been transferred again to Taratahi Agricultural Training College. In contrast, EIT, Ara and Toi Ohomai are high-performing providers that seem to have successfully retained the good-practice aspects of their constituent precursors.
31. Whitireia and WelTec have not formally merged but have formed a “strategic partnership” which sees them sharing a council, chief executive, leadership team and back-office services.
32. The Tertiary Accord of New Zealand (TANZ) was established in 2000 as a collaboration between seven ITPs, and in 2016 launched a shared online delivery platform, the TANZ eCampus.
33. Further collaboration (whether through mergers or through other types of shared resourcing arrangements) is required, as are changes to business models. ITPs generally acknowledge this but are poorly positioned to make the upfront investment in time and resource required to achieve it. Unitec’s Transformation Project is an exception, funded through borrowing against high-value land – though it remains to be seen if the transformation process will be successful.
34. As discussed below, we see a role here for the Government to facilitate or catalyse positive change.

... and most have ramped up their international delivery

35. The *Tertiary Education Strategy 2014-2019* identified “growing international linkages” as one of six tertiary priorities. Tertiary providers were encouraged to enrol fee-paying international students as part of their core business, using the revenue to cross-subsidise other areas of their operation. In addition, the government of the time viewed immigration, including via international student pathways to residency, as a useful means of growing the economy through population growth.
36. ITPs grasped the opportunity presented by these policy settings to very substantially increase their international enrolments. Growth at degree level and above was particularly strong, and in 2014 international degree-level EFTS at ITPs exceeded sub-degree EFTS for the first time.
37. ITPs’ revenue from international tuition grew from \$67 million in 2008 to \$162 million in 2015. However, the TEC’s analysis of ITPs’ finances suggests that, overall, they make about the same margin on international students as they do on domestic students. So while growth in

ITPs' international delivery will help to achieve economies of scale, ITPs' greatly increased revenue from international students has not translated into greatly increased profits.¹

Challenges remain – not just in terms of profitability but increasingly in terms of quality and fitness for purpose too

38. As the attached A3 shows, most ITPs are still making ends meet. Some have taken steps to realise efficiencies, and many have undertaken initiatives to shore up their core business (especially by focusing on international markets). Some have significant capital bases given the size of their delivery.
39. However, many have no buffer against a downturn in revenue or increase in costs, and – crucially – little or no money to invest in capital works or operational improvements.
40. Over time, unless something changes, these ITPs risk suffering a shock that tips them over the edge, or will gradually become increasingly less capable of delivering high-quality and attractive offerings to students. Students have increasingly high expectations of modern, flexible, interactive, customised and digitally-enabled learning services; and many adults need these services to fit in around their working lives, offering “just in time” or “hop on, hop off” training that allows them to extend their skill base over time while staying employed and productive.
41. If ITPs cannot make the investments and business changes needed to help them meet these expectations, they will struggle to attract learners.

The TEC is establishing the “Sustainable ITPs” project to consider how ITPs can meet the challenges they face

42. The impetus for the TEC's “Sustainable ITPs” project is our belief that the ITP sector needs to change the way it operates, and that the TEC can improve the effectiveness and efficiency of this change by providing leadership and support from the centre.
43. We are in the process of establishing a cross-agency governance group for the project. This is made up of the TEC, the Ministry of Education, the Ministry of Business, Innovation and Employment, and a non-government member with senior-level ITP experience. We envisage that this group will oversee a core TEC work programme for ITPs, which may include sub-projects done collaboratively with ITPs and/or with government agencies.
44. The main goal of the first stage of the project, between now and early 2018, is to bring together an information base and problem definition that are widely understood, and shared between the TEC and the sector.
45. To achieve this, and to supplement our in-house analysis, we have commissioned EY Australia to provide us with information about the cost of business change and modernisation for several Australian TAFEs (state-owned vocational providers), plus insights into what helped and hindered the change processes.
46. We have also asked EY Australia to provide us with interesting case studies about successful business transformations at TAFEs. We will share with these case studies with ITP sector leaders to start a conversation about whether similar approaches could work here.

¹ This contrasts with universities for whom international student delivery is, on a per-student basis, much more profitable than domestic delivery. This is because international students at universities pay much higher fees and are concentrated in fields of study where delivery costs are low.

47. As we move into 2018, we will start to collaborate with ITPs to explore and test different options for changes to the sector, with the emphasis on collective endeavours rather than institution-by-institution solutions. What these options look like will depend to a large extent on the policy environment and on your preferences as Minister, as discussed below.

Policy change is coming, and its impact is hard to anticipate

48. The Government is in the process of implementing two significant policies in the tertiary education sector: fees-free tertiary delivery for new students from 2018, and increasing the student allowance by \$50 per week from 2018.

49. Both changes are likely to have impacts on ITPs from 2018 onward, but it is hard to predict with confidence what those impacts might be, or how quickly they might occur. One possibility is that ITPs in urban centres and ITPs in regional centres might face different scenarios:

- In **large urban centres**, students seeking to spend their entitlement at degree level might decide (or, in the case of young people, their parents may persuade them) that they would get “better value” from spending it at a local university, rather than a local ITP.

The ITPs in these large urban centres could potentially still gain new enrolments from students who lack the necessary academic prerequisites for degree-level study², or who cannot fit university study around their working lives. However, many such students already study at ITPs, so growth on this scenario would come only from converting those who would otherwise not have studied at all, or would have otherwise enrolled at an ITO.

- In **smaller regional centres** with no significant university presence, ITPs could gain new enrolments by attracting people who would not otherwise have studied at all, or who might have studied through an ITO. ITPs in this situation will be able to maximise their potential growth by making their delivery accessible to people already in work. These same ITPs may find that more of their local students are now able to afford to study away from home at a university, thanks to increases to the Student Allowance and (at Budget 2018) the Accommodation Supplement, but this is likely to be a marginal effect.

50. Another possibility is that ITPs across the board will face growth in enrolments from school-leavers who are not keen on university study, but unsure about their career path and not confident about finding work. For a young person in this situation, a further year of study at an ITP may be an attractive way of postponing the “What am I going to do with my life?” decision, while also gaining additional skills.

51. Given that ITP enrolments were forecast to decline significantly, ITPs that gain new enrolments through policy changes may not grow in size; they may, instead, maintain delivery volumes, or experience a smaller reduction than forecast.

Other signalled policy changes on a longer timeframe will also affect ITPs

52. The Government has signalled a variety of further policy changes that could affect ITPs in the medium term and/or at the margins. These include manifesto proposals to:

- establish Centres of Vocational Excellence at ITPs, each focused on a particular industry
- incentivise pathways between provider-based and work-based education
- improve how ITPs and ITOs work together including through joint curriculum development, clearer qualifications and more flexible learning pathways

² It is worth noting that in an environment of soft demand, universities may accept “marginal” students who they might have turned away during earlier periods of high demand.

- removing the cap on ITO training at New Zealand Qualification Framework (NZQF) level 5 and above
- give ITOs a bigger role in providing careers advice to students
- reinstate funding for programmes such as night classes that support adult learners to adapt to change
- review the TEC's structure and operations to make it a strategic funder of collaborative networks of provision, with each subsector having a clearly defined role, and
- reinstate the Tertiary Tripartite Forum with institutions, staff and government representatives to address issues of TEI effectiveness and sustainability.

53. The Government has also indicated that it may consider changes to international student visa provisions, potentially making it harder for international students to achieve residency in New Zealand. This would likely reduce ITPs' appeal to international students and consequently their profitability. You have been briefed on this separately by the Ministry of Education (METIS 1089181 refers, 3 November 2017).

ITPs' sustainability challenge represents an opportunity for the Government

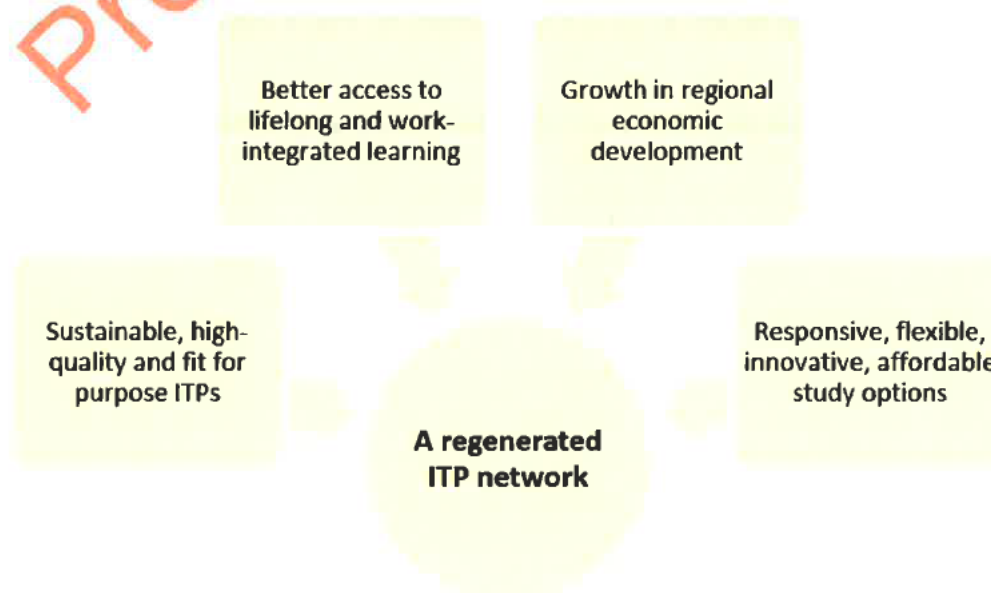
54. The Government has expressed a commitment to **lifelong learning**, including improved access to training and upskilling for adults in work. This includes an interest in modular and "hop on, hop off" approaches that enable learners to build and extend their skills throughout life, instead of the linear "school, then tertiary education, then work" historical model.

55. The Government has also noted the need for the tertiary system to be more **flexible and responsive** in its delivery approach to meet New Zealand's needs in a fast-changing labour market environment.

56. And it has committed to significantly boosting **regional economic development**.

57. The TEC sees a natural marriage between these policy goals and the need for the ITP network to reconfigure and regenerate itself to improve its performance, efficiency, responsiveness and resilience (Figure 1).

Figure 1. A regenerated ITP network could address multiple policy goals of government



58. A common theme is the need for ITPs to orient themselves more toward employees and employers, and integrate their activities with the labour market – both at the local and regional level and, for some provision, nationally. This is not just about educational delivery, but also concerns the applied research, innovation and knowledge transfer that ITPs undertake in order to address practical problems faced by firms.
59. We think the change process for ITPs needs to occur network-wide, not one institution at a time, so that ITPs can save costs and grow quality through increased collaboration and shared services. We therefore see structural change as a necessary, though not sufficient, ingredient to creating a sustainable ITP network.
60. Options (not all mutually exclusive) for changes to the configuration of the ITP network to enhance collaboration include, for example:
- creating categories or groups of ITP with different characteristics and system-level settings, as per the health sector's primary, secondary, and tertiary health providers;
 - "hub and spoke" models in which large metro campuses act as hubs with regional spokes – either via integration (mergers), or via federation, where regional ITPs retain their distinct branding;
 - regional clusters with shared services (but no "lead" provider as in the hub and spoke model); and
 - shared nationwide capability in particular areas (e.g. distance learning platforms, student management systems, degree-level programme design), owned and managed collaboratively by the whole ITP network.
61. Some types of change would require legislative amendment (e.g. changes to ITPs' statutory role). Others would be achievable by ITPs under current legislative settings, but may require policy change or, in the case of mergers, Ministerial agreement.
62. Any consolidation or sharing of services, staff, or infrastructure among ITPs could potentially also extend to other types of TEO and into the compulsory sector.

Next steps

63. We would like to explore your appetite for change in the ITP sector, your thoughts about the best direction for change, and the role you think the Government should play in shaping the sector. We can then provide further advice, as appropriate, about options for change – noting that structural change needs to be a complement to, not a substitute for, change in the way ITPs operate.
64. We welcome a discussion with you about these matters at your convenience.