

## **“Don’t Dumb us Down”: occupational therapists advocate for higher level thinking in the vocational education sector**

This is a thought piece about what the ITP sector reform might mean to us as occupational therapists in Aotearoa/New Zealand and how we might respond to it. It is a provision set of thoughts from a busy academic, wrestling with what the ITP sector reform might mean to the sector.

### Introduction

In the Maori world view there is a saying: "Ko nga tahu a o tapuwai inanahi hei tauira ora mo apopo". It translates to "The footsteps we lay down in our past create the paving stones upon which we stand today."

It is a world view that recognises it is our past that always lies in front of us. This is a perspective that can be lost to view in health professions, where our education is always about 'now' and 'the future'. But we do have a history, and a geography. We can thrive in the face of the ITP sector reforms, or we can fail to thrive. I would like to think that it is at leastly partly up to us.

The School of occupational therapy in Otago Polytechnic was established in 1990, after the catastrophic government closure of the single training centre for occupational therapists in Wellington. At this point two schools were established, one in Otago Polytechnic and one in AUT (i.e. in university). About ten years ago, Otago Polytechnic established a satellite campus in Wintec. The curriculum and teaching is shared between the two campuses, and this has established a strong pattern of collaboration, trust and networking between the campuses. We already understand about sharing curriculum resources. We also established a postgraduate qualification in occupational therapy, which was one of the early successful distance programs.

Otago Polytechnic is one of the few places internationally where occupational therapy is taught in the polytechnic sector. Where occupational therapy is taught in the polytechnic sector, there are sometimes problems with the standard of education, meaning that these programs lose international credibility. At the moment, the occupational therapy brand at Otago Polytechnic is strong. Our students are known for their practicality and are very employable.

The ITP sector reforms are intended to answer the issues of failing polytechnics. However, there is a significant concern that this might cause a loss of reputation in Otago Polytechnic, because of the loss of resourcing and leadership. Any loss of reputation would place the occupational therapy profession on a precarious footing.

This is something that has happened in Germany, and there are several polytechnic equivalent programs that do not reach international standards of education.

At this time, occupational therapy should be poised for significant growth. It has been demonstrated that occupational therapy can lower health costs, where there are chronic conditions. We should increase our growth from 15- 30% over the next ten years. This growth will be through postgraduate education (with an increased in research-led practice and with the development of a masters entry program); through the development of short postgraduate courses for therapists in practice (microcredentialing); and through a responsiveness to bicultural practice. However, growth needs to be carefully managed so that we do not have a situation where there are more occupational therapists trained than there are potential jobs. This is what has happened in both the UK and Australia.

## Introduction

On February 8<sup>th</sup> 2019, prime minister Jacinda Ardern announced:

"Domestically we are seeing both short and long-term issues that could constrain economic growth, if left unaddressed." These issues include education and training and the potential impact of automation. "Businesses are facing a constant struggle finding the people with the right skills at the right time to do the jobs that need to be done."

She said the government would shortly announce proposals for consultation regarding reforms to the vocational education system. And on 13 February 2019, the Minister of Education launched the formal start of public consultation on the Government's proposals for the Reform of Vocational Education. This plan includes

- 1) the establishment of a single New Zealand polytechnic with a plan to increase the spaces in which teaching and learning occurs;
- 2) the return for industry training organisations to a core role of setting industry standards for training and education, while polytech staff provide teaching and learning in workplaces, online, and on campuses; and,
- 3) a unified vocational education funding system that would recognise that one size does not fit all types of training or all places of where education is provided.

These proposals aim to create an accessible, affordable, flexible and high quality vocational education system that will provide learners with the training they need in a rapidly changing world. Minister Hipkins has proposed merging the current 16

institutions in the ITP sector into one institution under a head office – branch model. This proposal will centralise almost all of the activities of the ITP sector and will result in the disestablishment of all current institutions as autonomous institutions.

It is clear that there is no additional funding for this proposal. There is a lot being said about the incompetence of the sector, but little being said about how this sector has been underfunded for a decade. There has been a lot in the media about a \$100m bailout of various failing institutions, but nothing that challenges the government about why they didn't fix the funding system.

There has been a change in the type of courses being taught. In 2010, 31% of students were in L1-3 in ITPs and 26% were in L7 and above; in 2017, 24% of students were in L1-3 and 36% in L7 and above (TEC). Much of this was driven by the competitive funding model introduced in 2011 and scrapped in 2018. Many of the problems being experienced in the ITP sector are occurring in the L1-4 and this is something that urgently needs to be addressed. We want to highlight we also deliver programmes at L5-L7 (degree), L8-9 (PG including masters) and L-10(DPP)

There is much that is positive in these proposals, but there are particular concerns for health professions who engage education at a degree and postgraduate degree level. The minister has said that these areas will not be touched for the time being, but has also given a clear message that there will be no further development in these areas.

The minister has given six weeks to consult about this, and the clock is ticking. However, what is clear is that this is part of a much larger reform of education in New Zealand and there is a clear determination that an amalgamation of polytechnics is going to go ahead.

### Positive elements of the proposal (in general)

This could be a great opportunity if the minister uses the opportunity to create a world class system.

Students will be better served by a focus on well-designed curricula. Sometimes 'lessons in a box' can work well – if they have permeable boundaries, and teachers can use their initiative to continue to develop them.

There will be an increase in the size of the polytechnic sector with the addition of 144,000 EFTS which will be transferred from the industry-training sector. The benefits will be particularly felt in the trades sector.

There will be efficiencies, particularly if 'back of house' services are standardised. The proposal for Centres of Vocational Excellence (CoVE) could be something that

would lead to world class systems of education for our students. There are several areas where Otago Polytechnic could be considered to be eligible as a CoVE and occupational therapy /Midwifery ,Nursing (Social Services ) could potentially be one of those (among others).

### Problematic elements of the proposal (in general)

In an island nation, skills can walk out of the country when there are changes in employment patterns. So, Aotearoa/New Zealand has depended for a long time on skills being brought into the country by immigrants. This pattern is no longer effective. For example, occupational therapy is no longer on the occupation skills shortage list (since 2015)

There is clearly a need for skills in the country, and yet we educate for skills (and knowledge and attitudes) at all levels of training. For example, BCITO wants apprenticeships that are at the same level as degrees. There is no appetite for a dumbing down of education. The health professions obviously have higher level thinking acknowledged as part of their education; but this higher level thinking also applies to many of the trades: the work of a plumber can vary from very simple, to very complex. The development of professional practice postgraduate degrees is a recognition of the complexity of higher level thinking in vocations such as occupational therapy. The master's of occupational therapy is a professional practice degree, where our students come to us as experts – wanting to learn how to systematise their understanding

A conception of vocational education that does not recognise that skills require higher level thinking is problematic.

- The new proposal brings a freeze on all developments in the postgraduate sector.
- The proposal has been modelled on a failed experiment in places like NSW (which lost \$240m in the third year of a similar operation).
- The creation of a megatechs leads to a loss of autonomy, which would be particularly felt by current centres of excellence, like Otago Polytechnic. The minister says that he wants a responsive educational sector, but there is nothing in the proposal that specifically designs for responsiveness to the job market.

### A solution-focused mindset

We seek to retain the best of Otago Polytechnic, knowing that there will be things that we currently do that will be taken over by a new system entity of some sort. As an organisation of proven excellence and a leader in the sector, we have helpful recommendations for, and expectations of, the future shape and structure of the sector that we will set out for the Minister.

There are various international models of vocational education that have been successfully developed in other countries. For example the Finnish model follows an individualised approach to each student throughout their learning career. This model is very similar to what the minister is proposing for the primary and secondary sector, so it makes sense to continue this model in the tertiary context.

In terms of organisation, there are examples in the US of state community college and university systems, e.g. UCLA, SUNY, Minnesota CC. In these cases there are defined roles for the parent organisation and the subsidiary institutions. The latter have mandated autonomy over key matters such as what and how to teach and how to assess.

The minister is advocating a 'lesson in a box' approach, which has been used to good effect in the US. In these situations the teacher has the option of whether or not they want to use the materials given, or whether they want to develop other materials. These additional materials would then go into the pool of learning materials that teachers could draw on. It is important not to use the Australian model, which has been a costly failure.

### [The meaning of vocational education](#)

The proposal from the minister carries the implicit assumption that academic higher education is found in universities, and technical and vocational education is found in colleges. This distinction between academic and vocational, however, is a rather crude one and unhelpful pedagogically, particularly given that many vocational courses often have high level academic components and some of the professional learning courses found in universities are clearly vocational in nature (think of medicine, accountancy).

Education reforms have also complicated the relationship between the sectors. For example, over the last few decades polytechnics (or equivalent colleges) have been converted into universities. This is not the place to discuss how and whether their courses were actually transformed in the process, only to confirm that the distinctions between academic and vocational, and higher and further education, are over simplistic and the relations between those distinctions are complicated.

One other complication worth noting is that, throughout this period, the same or similar degrees are found both in university and polytechnic contexts (for example, occupational therapy and nursing). The combined effect of these pedagogical, economic and managerial dimensions have meant that the ITP sector has created its own unique offerings.

In Otago Polytechnic, for example, it has led to developments where research is largely framed in ways that are helpful to meeting the needs of the students. Students in the ITP sector can access courses from level 1 to level 10 (doctorate). We currently provide research-led teaching throughout the undergraduate and postgraduate curricula. This research-led teaching is embedded in the experiences that we provide to students through our fieldwork placements. For example, occupational therapy students each experience 1000 hours of fieldwork that is supervised by an occupational therapist.

The relationship between teacher and learner is ... completely different in higher education from what it is in schools. At the higher level, the teacher is not there for the sake of the student, both have their justification in the service of scholarship. (von Humboldt 1810/1970, translated by Elton 2001, p. 45)

However, the general perception persists that to be taken seriously as a scholar one would need to be making some mark on the development of a discipline's knowledge base. It is important not to undermine that message, but to emphasise that it is equally important to encourage those other aspects of scholarship and, particularly for us here, those relating to knowledge translation activities and the co-learning activities of staff and students, working together in scholarly mode.

The notion of education that intersects directly with industry/fieldwork currently underpins a lot of work in tertiary institutions around the world under the heading of research-led teaching. The ITP sector has many examples of innovative approaches to education.

For the students who are the professionals of the future, developing the ability to investigate problems, make judgments on the basis of sound evidence, take decisions on a rational basis, and understand what they are doing and why is vital. Research and inquiry is not just for those who choose to pursue an academic career. It is central to professional life in the twenty-first century. (Brew 2007, p. 7)

There are a variety of approaches to designing and assessing student projects, which are intended to meet real industry needs. Our students make a difference in the real world.

In framing their own working definitions of scholarship/scholarly activity ... [applicants for all degree awarding powers]... should reflect on the purposes of such activity. Internally, this would include impact on the curriculum, the quality of the learning opportunities provided for students, and the student experience of higher education. Externally, this would include engagement

with external stakeholders and communities, including other academics who form part of a wider subject community, as well as employers, policy-makers, special interest groups and so on, which would contribute to the further development, academic health and currency of a subject. (QAA 2013, p. 6)

There are a number of different ways of referring to the pedagogical approach that integrates higher level thinking into vocational education. This includes, for example: 'students as partners', 'students as scholars' (Miami University, Ohio, US), 'inquiry-based learning' (McMaster University, Canada), 'student as producer' (University of Lincoln, UK), 'students as change agents' (University of Exeter, UK), 'research active curriculum' (University of Sunderland, UK), 'research-based teaching and learning' (University of Zurich, Switzerland), 'research enhanced learning and teaching' (University of Sydney, Australia), and 'students as engaged scholars in the community' (Bates College, US) (Healey et al., 2014). Research-led education in the ITP sector proudly draws on the experiences that the students bring to the learning environment.

The skills agenda is important in the ITP sector, but skills are always framed in a wider context that includes knowledge and attitudes. Some key characteristics of an approach to vocational education that is research-led are that students are made aware of the contested nature of knowledge; the conditions under which knowledge is discovered and manufactured; and in general that HE is as much concerned with what is not known, as what is known. To focus on skills alone undermines the essence of what the word 'higher' means in higher education. In a similar manner, the BCITO wants apprenticeships to be carried out at degree level. There is no reason why a plumber should not work at multiple levels – all the way up to urban and hospital design (which would be at level 10).

### Allied Health vocational education in the ITP sector

In this section we provide some context around the provision of vocational education for allied health professionals in the ITP sector. This includes nursing, physiotherapy and occupational therapy. The example of occupational therapy is used here to illustrate some of the particular educational issues for regulated health professionals. There will be some similarities, but there will also be key differences that will need to be carefully taken into account in any re-design of the ITP sector.

## What is occupational therapy

Occupational therapy is an allied health profession that focuses on enabling engagement in everyday activities and participation in communities. The World Federation of Occupational Therapists defines occupational therapy as:

*“...a client-centred health profession concerned with promoting health and well-being through occupation. The primary goal of occupational therapy is to enable people to participate in the activities of everyday life. Occupational therapists achieve this ... by modifying the occupation or the environment to better support their occupational engagement.” (World Federation of Occupational Therapists Council, 2010)*

Occupational therapists are interested in the relationship between the person, the occupations (or activities) they need and want to do, and their physical and social environments. Occupation is considered a determinant of health and a therapeutic agent for health (Kielhofner 2009 , Molineux 2004, Wilcock 2005).

## The Aotearoa/New Zealand context of occupational therapy

In most western countries, occupational therapy looks set to grow by about 30% over the next five years. Occupational therapy is well-positioned to meet some of the demographic shifts that are occurring in society. A 30% growth in the profession means that we will need to educate more students.

At present, there are about 2600 registered occupational therapists in Aotearoa/New Zealand. Aiming for growth, we aim to provide education and ongoing professional education for at least 4000 by 2029.

As one of only two occupational therapy programs in Aotearoa/New Zealand, program at Otago Polytechnic has a significant impact on shaping the occupational therapy profession in Aotearoa/New Zealand.

The decision was made to establish the degree at Otago Polytechnic, when CIT was disestablished in 1990. At that point, the profession made the decision to have two courses: one in Auckland (at AUT) and one in Dunedin (at Otago Polytechnic).

Education within the occupational therapy profession in Aotearoa/New Zealand straddles the university and the polytechnic sector. Internationally, it is unusual for occupational therapy to be situated in the polytechnic sector. However, we are one of the most successful programs run out the polytechnic sector, and we would be concerned by any proposal that did not take into account the need for us to be responsive to our community of practice and clients. There are international examples where occupational therapy education provided through the (equivalent of) ITP sector has failed to maintain currency. For example, in Germany, this has

happened to several occupational therapy programs which have failed to get World Federation of Occupational Therapy (WFOT) accreditation.

The school of occupational therapy at Otago Polytechnic is the only place in Aotearoa/New Zealand where one can currently get a postgraduate qualification in occupational therapy. Obviously, there are other postgraduate routes for occupational therapists, but the Masters of Occupational Therapy is a unique element of our program, and one which validates and enhances our undergraduate program. There are 150 students who have graduated from the postgraduate program over the last 6 years.

Choice is important within the profession, and at the moment the profession (and association) is happy to have training in both the university and the polytechnic context. However, it is important that we continue to develop in the ITP sector, and to be responsive to the market. For example, in Dunedin, the model of health education is likely to shift as the hospital moves into a 'health hub'. In addition, a (Health) Professional Pipeline Project (2029) has just been launched (Feb 2019) to identify what training, recruitment and other development is needed to ensure that health and safety professions can meet expected demand for services in 10 years-time. Occupational therapy is among the first six disciplines to be examined by this project. A lid on development could not only be a loss of market for the megatech, but more importantly, could mean that occupational therapy would not respond and would not meet the potential for growth that is currently indicated as possible internationally.

One of the biggest challenges to occupational therapy (and other health professionals) internationally, is the difficulty in getting fieldwork placements. All occupational therapists require 1000 hours of fieldwork placements. Without a strong market negotiating position, these placements may be threatened. Anything that reduces our status and profile in the health industry can threaten the stream of placements. If the health industry perceived the changes in the ITP sector to diminish the credibility of degree programs, then we are likely to struggle to get placements. Another potential difficulty with placements might be caused if there was a rapid growth in the number of institutions offering occupational therapy programs. There is potential for this to happen in the proposed model.

#### [The local context for occupational therapy in Dunedin](#)

The occupational therapy program at Otago Polytechnic is thriving. We have healthy EFTs (about 300 undergraduate efts, and 25 postgraduate efts). About ten years ago a satellite program was developed in Hamilton. This has led to a model where the curriculum is co-developed between two campuses.

There are numerous examples of a longstanding vibrant academic culture within the school of occupational therapy. For example,

- an occupation journal (1992-2003);

- a Scope (Health and Activity) journal (2016-present);
- one of the first postgraduate courses in Otago Polytechnic, which is delivered nationally and internationally through distance delivery;
- the only masters of occupational therapy in the country;
- five lecturers with PhD qualifications
- an associate professor and a professor;
- close connections with the profession;
- all lecturers maintain their professional registration.
- a reputation among the profession for producing practical and work ready graduates.
- The creation of a doctorate of professional practice has created an academic track for our students and the first occupational therapists have started to enrol in this program through Otago polytechnic.
- Strong community connections

The Otago Polytechnic occupational therapy school is involved in research that is directly applicable to clinical practice and/or to occupational therapy and health related education at both an undergraduate and postgraduate level.

In the undergraduate programme, research is taught and nurtured through the development of professional reasoning that integrates evidence based practices.

Students who progress to the Bachelor of Occupational Therapy Honours program learn about conducting research, and complete a research project under supervision. Their dissertation is externally marked (institutions outside of Aotearoa/New Zealand) and invariably achieve exceedingly well.

The postgraduate mission statement of enhancing practice through enquiry guides the development of all of the postgraduate qualifications offered. These are the Post Graduate Certificate in Occupational Therapy Practice, Post Graduate Diploma in Occupational Therapy Practice, Post Graduate Certificate in Applied Practice in Health (Specialty) and Masters of Occupational Therapy (by 60 credit project - or 120 credit thesis). Of particular note is the fact that Otago Polytechnic is the only institution in Aotearoa/New Zealand offering post graduate qualifications specifically in Occupational Therapy.

All postgraduate students enrolled in PG Cert and Dip engage with research literature and influence not just their own practice but the use of evidence in practice in their workplaces. Their engagement in the program also influences the school in terms of our focus on courses to develop and research to conduct. There is a consistent use of authentic assessment, which ensures that assignments are positioned for knowledge translation activities.

Honours and Masters students conduct their professional practice research on topics that are of interest to them, or required in their workplace. Many publish or present at conferences on completion of their research, and become influential in the occupational therapy community as a result of their research findings and dissemination.

Several academic staff at the occupational therapy school are active researchers, and engage with students and clinicians to identify research needs and to collaborate in research processes. Results of this research informs contemporary clinical practice, assists us in determining education needs of the profession that we are able to respond to, and ensures that the content of our post grad courses is relevant and robust. Evidence of this is not just in the high number of PBRF outputs achieved but in the development of courses that are popular as a result of the research.

### Higher-level thinking in the occupational therapy/health context

Occupational therapists are guided by professional and clinical reasoning skills, which are developed throughout the degree. These are particularly important because there is a need to constantly adjust to the new knowledge and practices that inform the profession. Any loss of skills would be felt by the consumers of our service.

As educators, we respond to changes in the sector rapidly and with autonomy and flexibility. We oppose anything that would remove that flexibility and professional autonomy. We have a responsibility to the profession, our clients and our students to ensure that we contribute to making occupational therapy a growth profession in Aotearoa/New Zealand.

### Positive elements of the proposal for occupational therapy

While there is uncertainty in the minister's proposal about the development of new degree/postgraduate programs, there does not seem to be a reason why the current programs should not be able to continue to develop. The following developments are currently under consideration. We hope that most of these would be able to continue with the new model.

- an internship year for honours students
- globalising fieldwork placements
- a graduate entry masters program
- regional training developments
- a suite of microcredentials
- a masters in applied health practice
- masters by publication route for thesis

- a practical project for the masters by coursework

Many of our proposals seem to be congruent with what the minister is proposing (regionalisation and microcredentials).

### Potentially problematic elements of the proposal for occupational therapy

If autonomy is lost then all NZIST sites could potentially roll out the occupational therapy programme as it would be owned by the new institution. We aren't sure if we could stop that occurring because it is the same institution. We have concern about flooding the market with occupational therapists and how the registration board might view this. This has happened in other countries with a consequent fall in the employment rates of the new graduates. It would be useful if the board would raise concerns about this and support the two sites remaining as the places for the occupational therapy programme. This message does not have to contradict the promotion of regionalisation of education, since the school of occupational therapy has already demonstrated the ability to share a curriculum across two sites.

### A solution-focused mind set

There are several groups that have a vested interest in ensuring the quality of occupational therapy education in Aotearoa/New Zealand

- OTBNZ
- OTNZ-WNA
- NOTLN (National occupational therapy leaders network)
- PEAC
- OT School
- Occupational therapy students
- AUT
- Community partners (we need to put together a list of these)

### What we want from our different stakeholders

#### *Board*

The board accredits the program, which is vital for ensuring the students can register.

It is important our graduates are critically thinking practitioners who are influencing and moulding practice. The credibility We need to have both degree and postgrad to be recognised as important part of vocational education within the polytechnic.

### *Association*

The association is responsible for providing direction about the education needs of the profession. It also provides important liaison regarding WFOT accreditation. The association might decide that the reputation of the profession is at risk if it is positioned in a sector that loses credibility.

### *Staff*

We have a special relationship with the satellite campus in Wintech. We want to keep a brand that we have built up over decades. Our students are known for being practical.

### *Students*

The message from students should be that they don't want their degree to be dumbed down; they don't want anything that would threaten their registration; professional status; or capacity to get work (because we might get lots more occupational therapy schools) NZIST would own our curriculum and could potentially do what they want with it – regardless of consultation with the profession.

### *Students with disabilities*

The message from students with disabilities is that they want to be 'not forgotten' in the process of the ITP reform. Support for learning needs as a person with disability is the absolute minimum that is asked for here. What is wanted, and what a world-class ITP sector can offer, is the opportunity for students with disabilities to become leaders.

### *Clinicians*

The minister needs to hear from the many occupational therapists who have graduated from Otago Polytechnic. Let the minister know how you feel about being educated in the polytechnic sector. Let him know the support that you give to educating the next generation of occupational therapists by providing fieldwork placements.

### *Māori occupational therapists*

Occupational therapists have a strong bicultural mandate within the profession. The minister talks about wanting to protect Māori education, but overlooks how bicultural competencies are already built into the education of health professionals going through the polytechnic system. Bicultural practice is embedded in our education and in the governance of the profession. Occupational therapists may want to let the minister know how they feel about current education for bicultural practice.

### *Community groups*

We need a list of all the community groups who could speak on our behalf as an educator that has been responsive to local community needs.

### Key Points Summary

#### **The relationships between education and regulatory bodies for health professions**

**We understand that there is a particular layer of oversight that exists between professional regulatory bodies and the next generation of students. This exists in many professions, and includes a large body of health professionals who are educated in the ITP sector. The reputation of the whole sector is critical to ensure that the regulatory bodies continue to be happy with the arrangement.**

**Therefore, if the challenge is ensuring that we educate for the skills that we need in the context of regulated health professions. Then the solution needs to recognise that in each of our Degree and Advanced Programmes for regulated health professionals we already do the following (and need to maintain our capacity to continue to):**

- **Recognise that vocational education is for people with a vocation to serve**
- **Work with the regulatory bodies to ensure that this education is ethical, safe and competent.**
- **Ensure that the curriculum is approved by the registration bodies and professional associations (as well as the usual monitoring of degree courses)**
- **Ensure that programs are recognised by regulatory bodies, regardless of whether they occur across university and polytechnic (as nursing and occupational therapy), or only in the polytechnic sector (as with midwifery)**
- **Ensure that programs are approved, even though there are regional variations in how they are delivered**
- **Graduate students who can be registered with the regulatory bodies for health professionals**
- **Collaborate with the associations (and regulatory bodies) to get our qualifications recognised internationally**

- Provide significant leadership within the profession through the development of postgraduate education
- Emphasise practical skills/clinical skills, incorporate and synthesise substantial and comprehensive stepped work experience at local community level into our programmes
- Include workbased learning/fieldwork as a significant component of learning (1000 hours for occupational therapy)

In the future we need to continue to grow to be able to:

- Provide short courses that are tailored to the needs of busy clinicians (and approved by the association)
- Produce enough occupational therapists to meet the growing demand
- Standardise the funding available for healthcare courses like occupational therapy, which continues to be on a lower band of funding than nursing and physiotherapy.
- Standardise the various levels of government funding (Health Workforce New Zealand) for postgraduate training (available for nursing and midwifery, but not for occupational therapy)
- Provide more education for students in the regions
- Build cultural competence into the profession, or consider a specific Māori degree for Māori occupational therapists.

#### Next steps

We cordially (and with some urgency) invite each of the above groups to put in a submission at the following link:

<https://conversation.education.govt.nz/conversations/reform-of-vocational-education/have-your-say>

#### References

Healey, M., Jenkins, A. and Lea, J. (2014) *Developing research-based curricula in college-based higher education*.