

**New Zealand Vice-Chancellors' Committee
Submission
Education (Establishment of Universities of Technology)
Amendment Bill**

1. Executive Summary

1.1 The New Zealand Vice-Chancellors' Committee (NZVCC) submits that there is no justification for the creation of the new category of tertiary education institution proposed by the Education (Establishment of Universities of Technology) Amendment Bill and it asks the Select Committee to recommend that the Bill not proceed.

1.2 Purpose of the Amendment Bill

Clause 4 sets out the purpose as being to establish a new university of technology category of institution and provide for it to be a protected term. The NZVCC submits that a new category of institution is not required to achieve the objectives for the sector proposed by the establishment of such an institution. It also submits that there is little international precedent for establishing such a separate category of institution, particularly amongst those education systems with which New Zealand would normally compare itself. Where they do exist, leading universities of technology internationally do not exhibit the lesser emphasis on research and study at postgraduate level proposed for these institutions in New Zealand.

1.3 Definition of a University of Technology

Clause 6 proposes that a university of technology be defined as an institution which "... offers both university and polytechnic education, with a balanced profile extending from vocational training to doctoral studies, and is characterised by a wide diversity of teaching, research, and advanced practice, much of it at higher levels, that maintains, advances, disseminates, and assists the application of knowledge and professional expertise, develops intellectual independence, and promotes community learning."

The NZVCC submits that it is unrealistic and undesirable to establish a single institution to provide such a broad range of tertiary education. The current categories of tertiary institution in New Zealand already provide these educational opportunities and complement each other by drawing on the relative strengths of each type of existing institution and providing pathways for students amongst the institutions.

Further, the NZVCC submits that the introduction of a new category of institution which includes the term "university" in its title but is deliberately not a university and is not required to meet the characteristics of a university established by legislation, will create public confusion and place at risk the reputation of New Zealand's universities.

2. Introduction

- 2.1 This submission is made by the New Zealand Vice-Chancellors' Committee (NZVCC) in response to the Education (Establishment of Universities of Technology) Amendment Bill.
- 2.2 The explanatory note to the Bill contains a number of assertions in its general policy and background statements. This submission examines each of those assertions in turn, and provides an international context for the issues identified in the Bill.
- 2.3 This submission provides evidence that several of these assertions can be shown to be, at best, questionable and, at worse, false, and do not provide any sound basis on which to create a new category of tertiary institution.

3. The International Context

- 3.1 Despite the Bill's claims to the contrary, the establishment of a new category of institution ('university of technology') is *not* in line with tertiary sectors overseas. In particular, it is considerably out of line with those countries with which New Zealand should be most keen to align itself.
- 3.2 While there are a large number of institutions around the world which are known as 'universities of technology', usage of the title is generally confined to Australia, Northern and Eastern Europe, parts of Asia, Africa, and the Middle East.
- 3.3 Further, among those examples that can be found, South Africa stands alone in recognising a separate *legal* category of institution known as 'university of technology'. Even in Australia (a country often held out as a model for successful 'universities of technology'), there is no separate legal category of institution called 'university of technology'. All Australian universities (of technology or otherwise) must fulfil all of the criteria required to achieve university status.
- 3.4 There appear to be no 'universities of technology' – either through legal instrument or choice of nomenclature - in the United Kingdom, Canada or in the United States.
- 3.5 Again, in Australia, and contrary to common understanding, the term 'university of technology' is *not* synonymous with 'dual-sector' (i.e. a mixture of university and polytechnic courses). Australia has five universities which are recognised as 'dual-sector' institutions. Only one of these uses the title 'university of technology', while three other institutions known as 'universities of technology' (Queensland, Sydney and Curtin) are *not* dual-sector institutions.

- 3.6 As such, while the term ‘university of technology’ does have some currency overseas, it is *not* internationally understood to be a separate category of institution, different from a ‘university’ and dual-sector in nature.

4. Bridging a ‘significant legal gap’

The Bill asserts that ... ‘The addition of such a category will help to bridge a significant legal gap within the current structure of the tertiary education sector, while enhancing flexibility and encouraging differentiation’.

- 4.1 NZVCC agrees that New Zealand’s tertiary education policies and structures should promote flexibility and encourage differentiation. However, it is the view of NZVCC that no ‘significant legal gap’ exists, and that the current structural arrangements as set out in the Education Act 1989 already provide for significant flexibility.
- 4.2 The Education Act 1989 provides for five types of tertiary institution: universities, polytechnics, wānanga, colleges of education and specialist colleges. Colleges of education have subsequently been merged into universities and no specialist colleges have been established. Each of these three other types of institutions has clearly defined characteristics, and fulfills an important and valued role within the New Zealand tertiary landscape. It is submitted that the roles of current institutions already overlap rather than leave “gaps”.
- 4.3 At present, while meeting the characteristics laid out in the Act, tertiary institutions have the flexibility to pursue their relative strengths and to make individual contributions to New Zealand and its people through differing combinations of teaching, research and scholarship. Through Section 162 of the Act, clear guidelines are in place for the establishment of each type of institution and, through the negotiation of investment plans, each institution has the ability to make changes in its foci, and to evolve over time as it develops and strengthens its academic endeavours.
- 4.4 If a new category of institution (‘university of technology’) were to be introduced, with a pre-defined emphasis on technology-related professional and vocational education, and on the delivery of sub-degree programmes, flexibility would not be enhanced. It would, in all likelihood, be diminished both for the new institutions and for New Zealand’s existing polytechnics and universities.
- 4.5 It is submitted that differentiation within the sector is able to be achieved now through clearly defined positioning as reflected in agreed Investment Plans. To accept that a new category of institution is required to “encourage differentiation” is to accept that the current reforms, including the introduction of Investment Plans, will not be sufficient to achieve the degree of differentiation sought by current Government policy. The NZVCC does not accept that a new class of institution is necessary to

achieve an appropriately differentiated tertiary education sector in New Zealand.

- 4.6 Further, were the Bill to be enacted, it is the view of the NZVCC that diversification would at best be only artificially and temporarily enhanced as ‘universities of technology’ would inevitably suffer from a different (lower) status and prestige (both nationally and internationally). This is evidenced by New Zealand and Australian experience – the Auckland University of Technology, Victoria University of Technology and Royal Melbourne Institute of Technology have all moved to drop the word ‘technology’ from their brand.
- 4.7 The establishment of a new category of institution will not solve any perceived ‘significant legal gap within the current structure’, but will instead open up a chasm of disparity and grievance between former polytechnics who are in the new category and those who are not. It will also undermine the position of those universities, and departments within them, that are closely connected with industry currently, and have a strong focus on applied research that is highly relevant to the technological and development needs of industrial partners. To establish a separate class of institution in law that is defined by close links with business and industry would be to undermine the position of those universities already contributing in this way as part of their portfolio.
- 4.8 The protection of the term ‘university of technology’ could also be interpreted as a precursor to potentially reducing investment in technology elsewhere in the sector, including in the existing universities where the bulk of ‘technology’ teaching and research is already undertaken. This would not be consistent with an emphasis on diversification, nor on quality.

5. Offsetting postgraduate students and internationally published research

The Bill asserts that... ‘By comparison with research-led universities, their [universities of technology] lower proportion of research post-graduate students, and [lesser] intensity of internationally published research, will be offset by a particularly strong commitment to high level professional and vocational education, establishment of close links with business and industry, engagement in applied research and advanced practice, delivery of appropriate sub-degree programmes, and provision for pathways by which students can progress to higher levels of education and training as and when required to pursue their career goals’.

- 5.1 The characteristics of a university, as set out in the Act, require that ‘...their research and teaching are closely interdependent and most of their teaching is done by people who are active in advancing knowledge ... [and] they meet international standards of research...’. In this context, the Bill’s reference to ‘research-led universities’ is a mistake. Research post-graduate students and internationally published research are not fringe elements or inessential aspects of the function and operation of a

university. All New Zealand universities are, and should be, ‘research-led’ universities.

- 5.2 A genuine commitment to ‘high level professional and vocational education’, and to ‘applied research and advanced practice’, as described in the Bill, requires teachers and practitioners who are at the forefront of their field. These are the same academics and researchers who carry out the basic and applied research that New Zealand needs in this arena. However, the best teachers are attracted to universities by research opportunities and by the ability to work with high quality research postgraduate students.¹ It is unlikely that a ‘university of technology’ would be able to attract the academic staff needed to provide a high quality education and make the contribution to applied research and advanced practice, as suggested in the Bill, if it also has a ‘lower proportion of research post-graduate students, and [lesser] intensity of internationally published research’.
- 5.3 By suggesting that the ‘research-led’ elements of a university will be offset by a ‘strong commitment to high level professional and vocational education’, ‘close links with business and industry’, ‘engagement in applied research’, ‘delivery of sub-degree programmes’ and ‘provision for pathways’, the Bill is more accurately describing a successful and vibrant polytechnic. Such institutions make an important and valued contribution to this country, and coupled with good staircasing and other pathway arrangements, provide able students with the opportunity to progress to higher levels of education. As noted in Section 4.7, professional programmes, applied research and close links with industry and business are also a key part of the contribution made by some universities.

6. Reflecting diversification in higher education providers

The Bill asserts that... ‘The creation of a new category of tertiary institution will reflect the international diversification of higher education providers, and natural development following the creation of the new class of specialist colleges’.

- 6.1 As shown in Section 10 of this submission, the creation of a new category of tertiary institution (‘university of technology’) does *not* reflect the international diversification of higher education providers. While many institutions around the world use the term ‘university of technology’, it is not well established as a separate category of tertiary institution of the type envisaged here.
- 6.2 Further it is not at all clear how the creation of a new category of university is a ‘natural development following the creation of the new class of specialist colleges’. As noted earlier no specialist colleges have been established. Moreover, the establishment of one category does not necessarily lead to the need to establish another, as was identified by the Ministry of Education back in 1997, when it reported that it is ‘unclear

¹ Universities UK, 2003. “Response to ‘The Future of Higher Education’: DfES White Paper”.

what benefits would accrue from such a distinction, and whether any benefits would outweigh the consequent restriction of competition.’²

- 6.3 Additionally, the reclassification of some polytechnics as ‘universities of technology’ has the potential to damage the standing of the entire polytechnic sector; ‘the status of polytechnics would be weakened, if not seriously undermined – and this would have potentially negative implications for the learners whom polytechnics are designed to serve.’³
- 6.4 Finally, if the number of ‘universities of technology’ created by the emergence of this category was sufficiently large so as to exceed the number of ‘research-led universities’, diversity in the sector would be seriously reduced and the national and international standing and reputation of New Zealand universities placed in jeopardy.

7. Providing more flexibility in pathways

The Bill asserts that... ‘More flexibility is needed to better recognise dual-sector institutions that provide pathways from sub-degree to degree education’.

- 7.1 Creating a new category of university with ‘primary responsibility’ in this area is not necessary to create additional and more successful pathways for students, nor is it a guaranteed outcome of the proposed amendment.
- 7.2 New Zealand’s existing universities already provide multiple pathways into university-level education. This is consistent with the Tertiary Education Strategy 2007-12 which seeks ‘enhanced differentiation and complementarity among universities (and with other sub-sectors) to ensure an effective, high quality network of university provision’ through ‘strengthening pathways from schools and other tertiary education organisations’.⁴
- 7.3 These pathways are underpinned by clear guidelines supporting cross-crediting and the transfer of credit between New Zealand universities and other institutions involved in tertiary study (including polytechnics).⁵ The aim of these credit transfer arrangements is to facilitate access and promote new study opportunities without compromising the quality or standards of qualifications. Through NZVCC, the existing universities also subscribe to NZQA’s ‘Credit Recognition and Transfer Policy’ in the active support of learning pathways. Universities also have relationship agreements with polytechnics that facilitate staircasing and reduce barriers for students to progress to university-level study.
- 7.4 In terms of international benchmarks, mention is often made of the ‘dual-sector’ nature of Australia’s ‘universities of technology’. However, this

² Ministry of Education, (1997). “A Future Tertiary Education Policy for New Zealand: Tertiary Education Review Green Paper - released September 1997”.

³ TEAC, 2001. “Shaping the System: Second Report of the Tertiary Education Advisory Commission”.

⁴ Tertiary Education Strategy 2007-12, p.14.

⁵ Committee on University Academic Programmes (updated March 2007), Functions and Procedures, Sections 8.2 and 8.3. Available on the NZVCC website: <http://www.nzvcc.ac.nz/files/cuap/FANDP07.pdf>

reflects a lack of understanding of the application of these two terms in Australia.

- 7.5 Australia has five universities which are recognised as ‘dual-sector’ institutions. That is, they offer technical and further education courses (TAFE, now more commonly known as VET or Vocational Education Training) in addition to traditional university academic offerings. The aim behind the dual-sector model is ‘to promote greater harmonisation between the higher education and TAFE sectors particularly through encouraging institutions to develop articulation pathways’.⁶
- 7.6 The dual-sector model is confined to four universities in the state of Victoria - RMIT University (formerly known as the Royal Melbourne Institute of Technology), Swinburne University of Technology, Victoria University (formerly known as the Victoria University of Technology) and the University of Ballarat - and one in the Northern Territories (Charles Darwin University).
- 7.7 Australia has no separate category of university called ‘university of technology’. Use of the title ‘university of technology’ is made at the discretion of the institution and of the state to illustrate the focus and academic strengths of an institution. In several instances, it also reflects their technological antecedents. An institution can only be called a ‘university of technology’ if it meets the normal criteria applied to university status.⁷
- 7.8 ‘Dual-sector’ is not synonymous with the term ‘university of technology’. Only one dual-sector institution uses the title ‘university of technology’ (Swinburne University of Technology). The Royal Melbourne Institute of Technology is known more usually as RMIT University or simply RMIT. Victoria University was previously known as Victoria University of Technology, but in 2005 applied to the Victorian Government to have the name ‘Victoria University’ recognised in legislation. This name had already been in widespread use for seven years, and it was officially adopted in August 2005. At the time, Vice-Chancellor Elizabeth Harman was quoted as saying of the word ‘technology’ – ‘the word reflects the past, not the future, and it suggests we are a narrow specialist when in fact we are a broad educational provider’.⁸
- 7.9 A 1999 project and joint report of the Australian National Training Authority (ANTA) and the Australian Vice-Chancellors’ Committee found that while there is evidence to support the view that dual-sector models *can* be effective in increasing opportunities for students to articulate into higher levels of tertiary education, the same goals have also been achieved by several TAFE institutions ‘through partnerships with HE [Higher Education] without the need or requirement to become a ‘single’ institution’. The same project found that the development of strong and

⁶ Swinburne University of Technology, 1997. “Submission: Higher Education Review”.

⁷ TEAC, 2001. “Shaping the System: Second Report of the Tertiary Education Advisory Commission”.

⁸ http://en.wikipedia.org/wiki/Victoria_University_of_Technology

effective models for linking qualifications and enabling articulation is not dependent upon the creation of dual-sector institutions.⁹

- 7.10 Indeed, ‘being a dual-sector university does not guarantee high levels of TAFE articulation as despite having four of Australia’s five dual-sector institutions, Victoria still does not have a significantly higher level of articulation than the national average’.¹⁰ Several large non-dual sector universities in Victoria offer more places to VET graduates than do the dual-sector institutions. Monash and Deakin University ‘collectively play as large a role in the recruitment of TAFE students to HE as do the three metropolitan multi-sector institutions put together’.¹¹
- 7.11 Further, ‘the conditions which led to the development of dual sector organisations in Australia are not replicated in New Zealand where there is a single funding system, a single system of student support, a single legislative basis and the provision for degrees to be taught outside universities’.¹²
- 7.12 There are three other Australian institutions which are known as ‘universities of technology’ but are not dual-sector providers – the University of Technology, Sydney, Curtin University of Technology, and Queensland University of Technology.¹³ For these three institutions, their broad emphasis on technology is certainly not synonymous with the delivery of sub-degree programmes (at least 97% of their students are studying at bachelors degree level or above).¹⁴

8. Demonstrating the essential characteristics of a university

The Bill asserts that... ‘A university of technology will demonstrate the same essential characteristics as any other university...’.

- 8.1 The characteristics of a university are defined in Section 162(4)(a) of the Education Act 1989, whereby the Act states ‘that universities have all the following characteristics ...:
- (i) they are primarily concerned with more advanced learning, the principal aim being to develop intellectual independence:
 - (ii) their research and teaching are closely interdependent and most of their teaching is done by people who are active in advancing knowledge:
 - (iii) they meet international standards of research and teaching:

⁹ ANTA/AVCC, 1999. “Pathways to Partnership”.

¹⁰ Professor Ian Young, Vice-Chancellor Swinburne University of Technology (speaking at the Post-Compulsory Education: Bridging the Gap Symposium, Victoria University, 18 May 2005).

¹¹ Teese, 1997. Reported in ANTA/AVCC, 1999. “Pathways to Partnership”.

¹² Response of NZVCC to “The Distinctive Contributions of Tertiary Education Organisations”, A Tertiary Education Commission Consultation Paper [2004].

¹³ Times Higher Educational Supplement (2005) adjudged University of Technology, Sydney to be 87th in the world, Curtin University of Technology to be 101st equal, and Queensland University of Technology 118th. Their success has not been achieved through a lessening of emphasis on internationally published research.

¹⁴ Department of Education, Science and Training, 2005. “Table 23: All Students by State, Higher Education Provider and Broad Level of Course, Full Year 2005”.

- (iv) they are a repository of knowledge and expertise:
- (v) they accept a role as critic and conscience of society; ... ‘

- 8.2 It would seem counter-intuitive as well as disadvantageous internationally to have a ‘university’ (‘of technology’) that does not meet all the characteristics of a ‘university’. However, several statements in the Bill would seem to imply that only some of these characteristics would be considered ‘essential’ for a ‘university of technology’:
- 8.3 *Characteristic (i) They are primarily concerned with more advanced learning, the principal aim being to develop intellectual independence:* The Bill states that ‘...the primary mission of a university of technology will be to deliver seamless education designed to raise workplace skills and knowledge to meet a broad spectrum of industry, business and community needs’. Intellectual independence is not mentioned anywhere in the Bill, while emphasis on sub-degree programmes would seem to indicate that ‘more advanced learning’ is not a primary concern. *This implies that characteristic (i) would not be required for a university of technology.*
- 8.4 *Characteristic (ii) Their research and teaching are closely interdependent and most of their teaching is done by people who are active in advancing knowledge:* Although ‘engagement in applied research and advanced practice’ is to be a feature of ‘universities of technology’, commitment to the close interdependence between research and teaching is worryingly absent from this proposal. The Bill states that ‘By comparison with research-led universities, [universities of technology will have a] lower proportion of research post-graduate students, and [lesser] intensity of internationally published research...’ This is a significant departure from characteristic (ii) and one that would not necessarily be evident to employers and others because, as shown in Section 10, ‘universities of technology’ are internationally understood to be full blooded universities. *This implies that characteristic (ii) would not be required for a university of technology.*
- 8.5 *Characteristic (iii) They meet international standards of research and teaching:* The Bill states that ‘By comparison with research-led universities,... [universities of technology will have a ... lesser] intensity of internationally published research...’ *This implies that characteristic (iii) would not be required for a university of technology.*
- 8.6 *Characteristic (iv) They are a repository of knowledge and expertise:* The Bill states that universities of technology will engage in ‘applied research and advanced practice’ and will ‘meet a wide spectrum of industry, business and community needs’. While there is a strong indication of the intent to exhibit this characteristic, a ‘lower proportion of postgraduate students’ and a ‘[lesser] intensity of internationally published research’, with their consequential impact on the recruitment of top quality staff and access to library resources, would imply that this characteristic could be

adjudged to be unlikely to be demonstrated. *This implies that characteristic (iv) would not be required for a university of technology.*

- 8.7 *Characteristic (v) They accept a role as critic and conscience of society:* The Bill is silent on any role as a critic and conscience of society for a university of technology. *This implies that characteristic (v) would not be required for a university of technology.*
- 8.8 It is the view of NZVCC that it is highly unlikely that a university of technology could possess the ‘essential characteristics’ of a university (both in New Zealand law and as understood in an international context) if it is not exhibiting all five of the above characteristics. These are the characteristics that universities in New Zealand were primarily concerned with as teaching institutions at the time the legislation was introduced. It is what reputable universities both in countries with which New Zealand commonly compares itself (e.g. UK, Australia, Canada, and US) and the new emerging universities of the Asia Pacific region take as self evident. If New Zealand departs from this benchmark its universities will have to rely on their individual reputations rather than the generic reputation for good quality that New Zealand universities have built up over the years.¹⁵
- 8.9 The establishment of a category of institution known as a ‘university of technology’ would lead to considerable public confusion and uncertainty about the meaning of the term ‘university’. Indeed, this confusion is already apparent amongst the proponents of the Bill. The Bill states that “A university of technology will demonstrate the same essential characteristics as any other university ...”. On the other hand, a media release by Hon Brian Donnelly at the time the Bill was referred to the Select Committee referred to “The establishment of a non-university class of institution for technology ...”.¹⁶
- 8.10 Further, Section 254(3) of the Education Act states that ‘The Authority [NZQA] shall not consent to the granting of an award that is described as a ‘degree’ unless it is satisfied that the award recognises the completion of a course of advanced learning that –
- a) is taught mainly by people engaged in research; and
 - b) emphasises general principles and basic knowledge as the basis for self directed work and learning.’

Although the Bill does not propose any amendment to this Section of the Act, if a ‘university of technology’ is to meet the essential characteristics of a university, then these two clauses must also be satisfied. It is clear that they would not be.

¹⁵ New Zealand Vice-Chancellors’ Committee submission on the application by the Council of Unitec ‘For Unitec to be disestablished as an Institute of Technology and established as a University’ [2005]

¹⁶ ‘Public to Have Say on Universities of Technology Bill’, New Zealand First Media Release, 7 November 2007

¹⁸ Tertiary Education Strategy 2007-12, p14.

9. Delivering seamless education to raise workplace skills and knowledge

The Bill asserts that ... ‘Universities of technology will have a primary responsibility for creating pathways for students to move seamlessly across all levels of tertiary education... [and]... the primary mission of a university of technology will be to raise workplace skills and knowledge to meet a broad spectrum of industry, business and community needs’.

9.1 NZVCC agrees that meeting a wide variety of industry, business and community needs is an important aspect of the function of a university (of technology, or otherwise). It also supports the urgent need to raise skills and knowledge for New Zealand’s future, and to develop close relationships with professional bodies and businesses to address particular skills shortages.¹⁸

9.2 However, the potential for the proposal to create duplication and confusion in the sector, and to undermine the positions of current institutions, is significant. While the Bill asserts that ‘raising workplace skills and knowledge’ would be a ‘primary mission of a university of technology’, this is already established as a particular focus for institutes of technology and polytechnics:

‘Economic transformation to a high skill, high productivity, and high wage economy that is internationally competitive is a key priority for New Zealand. This requires continuous development of a productive, skilled workforce....

The roles of institutes of technology and polytechnics reflect these aims:

1. to provide skills for employment and productivity
2. to support progression to higher levels of learning or work through foundation education
3. to act as a regional facilitator.’¹⁹

9.3 It is also not readily apparent that the delivery of ‘seamless education’ through a ‘university of technology’ will necessarily raise workplace skills. The advancement of workplace skills is a multifaceted process, with recent research in Australia suggesting that ‘workplace employers... have a responsibility, equal to that of the universities, to ensure that their employees’ transition to the workplace is as smooth as it can be and that their learning at work is characterised by continual (and structured) critical reflection.’²⁰

¹⁹ Tertiary Education Strategy 2007-2012, p.14

²⁰ Crebert, G (2004). Institutional Research into General Skills and Graduate Attributes: Constraints and Dilemmas.

10. Bringing New Zealand in line with tertiary sectors overseas

The Bill asserts that... ‘The establishment of the university of technology category will bring the New Zealand tertiary sector into line with tertiary sectors overseas’.

- 10.1 The establishment of a new category (‘university of technology’) is patently *not* in line with tertiary sectors overseas; in particular, it is considerably out of line with those countries with whom New Zealand should be most keen to align itself, including Australia.
- 10.2 While there are a large number of institutions around the world which make use of the title ‘university of technology’ (Appendix A identifies over 120 of these, including the Auckland University of Technology and four institutions in Australia), in general, use of the title ‘university of technology’ is confined to Australia, Northern and Eastern Europe, parts of Asia, Africa, and the Middle East. There appear to be no examples of ‘universities of technology’ in the United Kingdom, Canada or in the United States.²¹
- 10.3 Further, with the exception of South Africa, there is no evidence to support the view that the establishment of ‘universities of technology’ as a separate category of higher education institution is a feature of education systems from which New Zealand might wish to take a lead.²² This analysis is reinforced by the Second Report of the Tertiary Education Advisory Commission (TEAC) which reported that, ‘to the Commission’s knowledge, there is no separate statutory category of ‘university of technology’ in any comparable jurisdiction.’²³
- 10.4 Even in Australia (a country often held out as a model for successful ‘universities of technology’), there is no protected definition or status for the use of the term ‘university of technology’. All universities (of technology or otherwise) must fulfil all of the criteria required to achieve university status.

11. Promoting institutions accurately in the overseas market

The Bill asserts that... ‘The capacity to recognise tertiary institutions in New Zealand as universities of technology will also allow those institutions effectively operating as such to promote themselves accurately in the overseas market’.

²¹ This list may not be complete, and does not include institutions known as ‘institutes of technology’ (like Massachusetts Institute of Technology in the US). Only those with both ‘university’ and ‘technology’ in their title have been included here.

²² In the case of South Africa, the country’s Technikons (polytechnics) were reclassified in 2004 as ‘universities of technology’, to sit alongside ‘comprehensive universities’ and ‘traditional universities’. The expectation is that these institutions will continue to fulfil the traditional role of the Technikons, but with a ‘greater commitment of service to, and upliftment of the community than has previously been the case’.²²

²³ TEAC, 2001. “Shaping the System: Second Report of the Tertiary Education Advisory Commission”. The Commission went on to say, ‘The creation of two separate categories of university might have serious implications for the international standing of New Zealand’s higher education system.’

- 11.1 As demonstrated in Section 10 of this submission, while the term ‘university of technology’ already has currency, it is *not* internationally understood to be a separate category of institution, different from a ‘university’. To the contrary, based on the profile and reputation of leading universities of technology around the world, it is highly unlikely that ‘universities of technology’ would be generally understood to be characterised by ‘a lower proportion of research post-graduate students, and [lesser] intensity of internationally published research’ (as suggested by the Bill).²⁴
- 11.2 The reputation of the New Zealand university degree internationally has been built up over many years by an adherence to standards. Creating a new category (‘university of technology’) that is out of line with common usage will weaken and confuse that standing internationally.
- 11.3 The proposition that international student numbers might be lower in New Zealand’s would-be ‘universities of technology’ as a result of current ‘inaccuracies’ in the overseas market, is also refutable. OECD analysis shows that New Zealand already recruits a relatively high proportion of international students into Tertiary Type-B programmes (i.e. practical, technical or occupational skills programmes with a minimum duration of two years full-time equivalent at the tertiary level). In 2003, a total of 32.6 per cent of all New Zealand’s international students were enrolled in such programmes, compared with 14.8 per cent in the United Kingdom and six per cent in Australia.²⁵ Only Belgium and Malaysia recruited more international students into Tertiary-Type B institutions in the OECD.²⁶ It does not appear, from these numbers, that students are dissuaded from pursuing courses such as those offered by New Zealand’s current polytechnics, despite the absence of a ‘university of technology’ category.
- 11.4 Analysis also shows that, in 2005, New Zealand’s universities enrolled a third of all ‘technology’ EFTS (a total of 16,487), while institutes of technology and polytechnics enrolled 48 per cent (24,465 EFTS).²⁷ As the potential ‘universities of technologies’ would be drawn from the existing polytechnics and institutes of technology, and are likely to not number more than two or three in the foreseeable future, it is highly unlikely that the ‘universities of technology’ will ever provide a critical mass in this area. It is of particular concern that it does not seem possible that the creation of ‘universities of technology’ alongside ‘universities’ and

²⁴ Highly-regarded institutions such as Delft University of Technology, Hong Kong University of Science and Technology, Nanyang Technological University, or any of the four Australian universities of technology, for example.

²⁵ OECD definition - Tertiary-type B programmes are typically shorter than those of Tertiary-type A and focus on practical, technical or occupational skills for direct entry into the labour market, although some theoretical foundations may be covered in the respective programmes. They have a minimum duration of two years full-time equivalent at the tertiary level.

²⁶ OECD, 2005. “Education at a Glance” (Table C3.4 Distribution of Foreign Students, by level and type of tertiary education (2003))

²⁷ “Technology” is defined here as NZSCED Narrow Bands 02 (Information Technology), 03 (Engineering), 04 (Architecture), and 05 (Urban Environment). In 2004, a total of 17,097 ‘technology’ EFTS were enrolled in universities representing 42% of all technology EFTS, compared with 36% in institutes of technology. Source: Tertiary Data Warehouse, Ministry of Education website, accessed March 2007.

‘institutes of technology and polytechnics’ will assist institutions to ‘promote themselves accurately in the overseas market’ (as the Bill suggests), without in fact causing heightened confusion.

- 11.5 Finally, the OECD has concluded that the popularity or attractiveness of an individual tertiary institution does not depend solely on the reputation of that institution, but ‘on the overall perception of the quality of the country’s post-secondary education.’²⁸ Therefore, to ensure that New Zealand’s institutions are able to promote themselves successfully in the overseas marketplace, New Zealand needs to ensure that consistent messages are being sent about the high quality of all its tertiary institutions. Those messages and the reputation of New Zealand’s tertiary system should not be placed at risk by the application of inconsistent standards between one category of university and another.

12. The ‘fairness’ argument

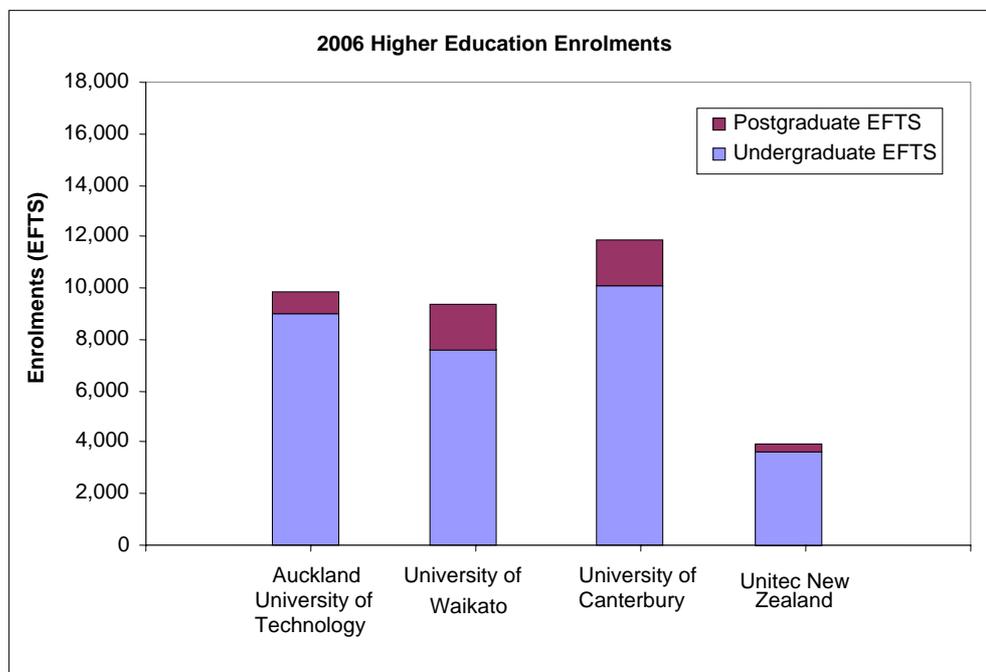
- 12.1 It is argued by some that AUT University and Unitec are very similar and it is ‘unfair’ that one should be a university and the other not. In fact the differences between AUT and Unitec (and other larger institutes of technology and polytechnics²⁹) are considerable, as the following charts and table clearly demonstrate.
- 12.2 Chart 1 contrasts AUT University’s undergraduate and postgraduate EFTS with those of other New Zealand universities with similar sized student bodies. As the chart shows, AUT’s student profile at this level is not considerably out of place within the sector. By comparison, Unitec (with 3,923 EFTS in first degree and above) looks markedly different.
- 12.3 The other larger institutes of technology and polytechnics have student profiles that are even more discrepant with the universities’ than Unitec’s. Waikato Institute of Technology has 1,587 EFTS in first degree and above, Christchurch Polytechnic Institute of Technology has 1,462 EFTS, Universal College of Learning has 1,366 EFTS, Otago Polytechnic has 1,225 EFTS and Manukau Institute of Technology has 1,091 EFTS.³⁰

²⁸ OECD, 2004. ‘Internationalisation and Trade in Higher Education: Opportunities and Challenges’.

²⁹ Manukau Institute of Technology CEO, Dr Peter Brothers has said “The major metropolitan institutes of technology in New Zealand, if this Bill does become law, will fall into the new category”, *Submission to Manukau City Council, 25 January 2008*. Otago Polytechnic CEO, Phil Kerr advised his Council that they should consider university of technology status – “Polytech has to consider becoming a university: New tertiary category plan”, *Otago Daily Times, 16 December 2005, p.5*.

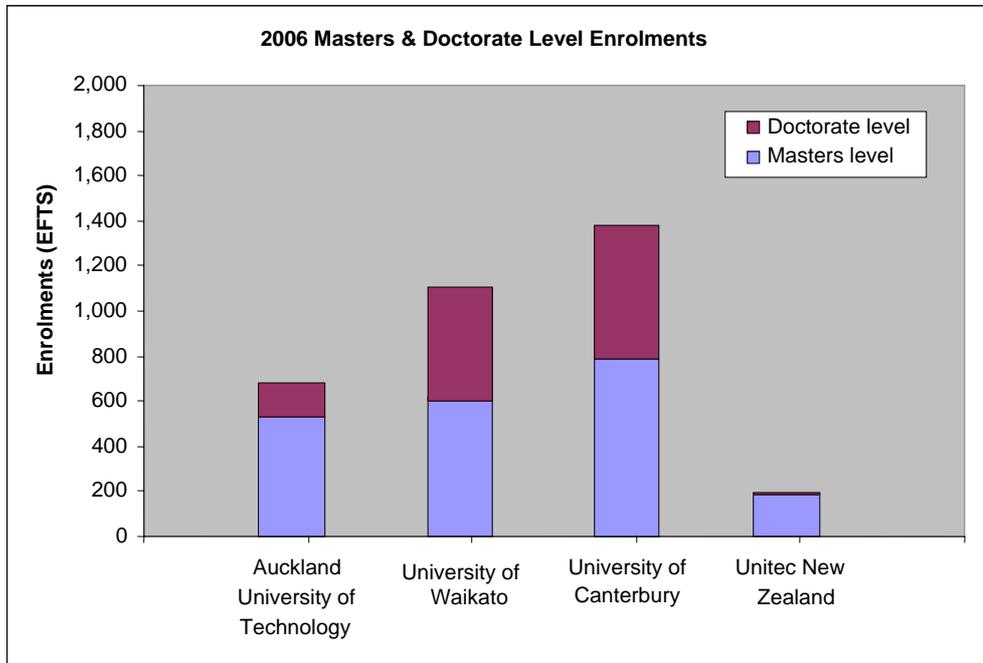
³⁰ All figures sourced from the Education Counts website, 2006 Tertiary Statistics.

Chart 1: Undergraduate and postgraduate EFTS at selected New Zealand tertiary institutions (2006)



12.4 Chart 2 compares AUT University’s masters and doctorate-level EFTS with the same grouping of similar sized universities. Once again, Unitec’s significantly lower EFTS at both masters and doctorate levels are apparent. In 2006, the institutes of technology and polytechnics sector as a whole had only 288 EFTS at masters level and seven EFTS at doctorate level, compared with 6,406 EFTS at masters level and 5,362 EFTS at doctorate level for the universities.

Chart 2: Masters and Doctorate-level EFTS at selected New Zealand tertiary institutions (2006)³²

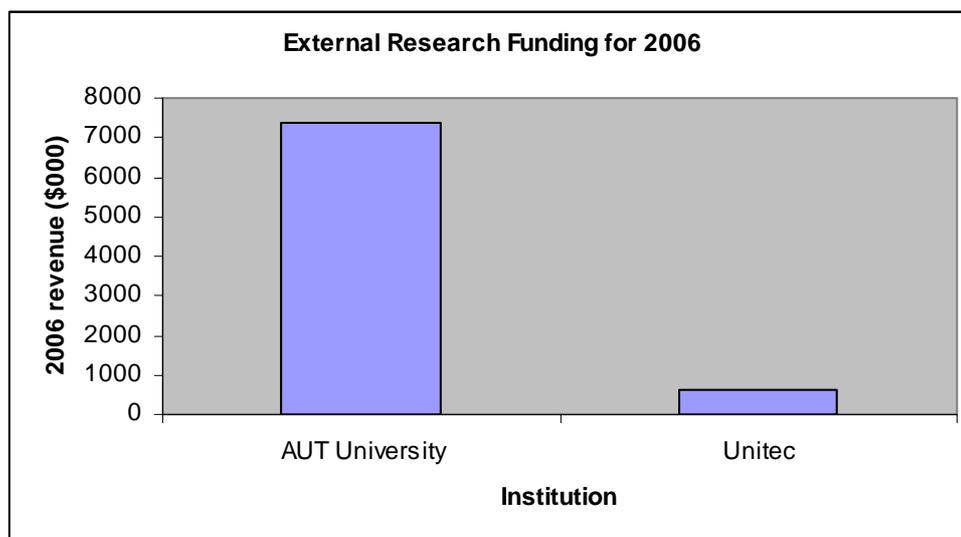


12.5 Another point of difference is that AUT has a much lower proportion of its total enrolment in pre-degree programmes than Unitec does. The Ministry of Education's *Education Counts* website reports 36% of AUT's EFTS were at pre-degree level in 2006, compared with 55% of Unitec's EFTS. Moreover, statistics from TAMU and publications of the two institutions show that the proportion of pre-degree EFTS at AUT has been steadily declining while those at Unitec have remained at approximately 50% over the last three years reported.

12.6 Comparisons between AUT University and Unitec can also be made with respect to research performance. Chart 3 shows that the total research revenue received by AUT University was more than ten times that of Unitec.

³² Education Counts, 2006 tertiary statistics.

Chart 3: Total research revenue at AUT University and Unitec (2006)³³



12.7 Similarly AUT University’s 2006 PBRF quality score was almost twice that of Unitec’s. AUT University’s score was 1.86 and Unitec’s was 0.96 (and AUT is the lowest of the eight universities, with four of the universities achieving more than twice AUT’s score).

Table 1: Research revenue and PBRF revenue: AUT University and Unitec (2005)³⁴

Measure	AUT University	Unitec
Total PBRF-eligible research outputs	1,596	232
Research outputs per academic/research staff FTE	1.6	0.4

12.8 These charts and table demonstrate the vast difference that exists between the current profile and performance of AUT University and Unitec, and between the universities generally and the larger institutes of technology and polytechnics. Hence, attempts to justify the creation of a new category of institution, a ‘University of Technology’, on the basis of ‘fairness’ are clearly not supported by the evidence.

13. The proposal is at odds with Government policy

13.1 The Government’s policy for reform of the tertiary education system is set out in the Tertiary Education Strategy 2007-2012. Preparation of this document involved 50 formal consultation meetings attended by 1,600 people and 175 written submissions. One of the four main conclusions was

³³ AUT/Unitec 2006 Annual Report.

³⁴ Research outputs from 2005 Annual Reports. Academic and Research FTE information from TAMU financial performance of individual TEIs (2005).

that New Zealand needs “...a more streamlined strategy with a clearer statement of the distinctive contribution that each part of the tertiary education sector need[s] to make.” (Hon. Michael Cullen, Ministerial Foreword, page 2). In the body of the document the distinctive contributions of Universities, Institutes of Technology and Polytechnics, Wānanga, Industry Training Organisations, Private Training Establishments, Adult and Community Education Providers and other Tertiary Education Providers are described (pages 14-17). There is no mention of even the possibility of a new type of institution in the Tertiary Education Strategy so it is clearly not envisaged as part of government’s policy over the next five years.

14. Concluding statement

- 14.1 The New Zealand Vice-Chancellors’ Committee submits that the proposal to introduce a new category of tertiary education institution, to be known as a ‘university of technology’, is misguided, misleading and unnecessary. The position of a university of technology in the New Zealand tertiary sector would be duplicative of current institutions and would thus undermine rather than support the objectives of the current tertiary education reforms. In particular, it would cause damage to the national and international reputation of New Zealand universities. The Bill’s stated objective of ‘raising workplace skills and knowledge to meet a broad spectrum of industry, business and community needs’ can be met by the existing range of tertiary education institutions. There is no justification whatever for posing a national and international risk to the reputation of New Zealand’s universities by introducing this new category of institution.

APPENDIX A

Institutions using ‘University of Technology’ title ³⁵

Country	Institution
Australia	Curtin University of Technology
	Queensland University of Technology
	University of Technology, Sydney
	Swinburne University of Technology [dual-sector]
Austria	Graz University of Technology
	Vienna University of Technology
Bangladesh	Islamic University of Technology
	Khulna University of Engineering and Technology
	Rajshahi University of Engineering and Technology
China	Anhui University of Technology
	Beijing University of Technology
	Changchun University of Technology
	Chengdu University of Technology
	Dalian University of Technology
	East China University of Technology
	Fujian University of Technology
	GuangDong University of Technology
	GuangXi University of Technology
	Guilin University of Technology
	Hebei University of Technology
	Hefei University of Technology
	Henan University of Science and Technology
	Huazhong University of Science and Technology
	Hunan University of Technology
	Inner Mongoloia University of Technology
	Lanzhou University of Technology
	Nanjing University of Technology
	North China University of Technology
	Shandong University of Technology
	Shanghai University of Technology
	Shenyang University of Technology
	South China University of Technology
	Taiyuan University of Technology
	Tianjin University of Technology
	Wuhan University of Technology
Xi’an University of Technology	

³⁵ This list may not be complete and does not include institutions known as ‘institutes of technology’ (like Massachusetts Institute of Technology in the US). Only those with both ‘university’ and ‘technology’ in their title have been included here.

Country	Institution
	Zhejiang University of Technology
Cyprus	Cyprus University of Technology
Czech Republic	Brno University of Technology
	Technical University of Liberec
Estonia	Tallinn University of Technology
Finland	Helsinki University of Technology
	Tampere University of Technology
	Lappeenranta University of Technology
Germany	Chemnitz University of Technology
	Clausthal University of Technology
	Dresden University of Technology
	Hamburg University of Technology
	Technische Universitat Berlin
	Technische Universitat Braunschweig
	Technische Universitat Darmstadt
	Technische Universitat Kaiserslautern
	Technische Universitat Munchen
Hong Kong	Hong Kong University of Science and Technology
Hungary	Budapest University of Technology and Economics
India	Cochin University of Science and Technology
Iran	Amirkabir University of Technology
	Iran University of Science and Technology
	Isfahan University of Technology
	KNToosi University of Technology
	Nirma University of Science and Technology
	Sahand University of Technology
	Shahrood University of Technology
	Sharif University of Technology
	Shariz University of Technology
Japan	Fukui University of Technology
	Kochi University of Technology
	Nagaoka University of Technology
	Tokyo University of Technology
	Toyohashi University of Technology
Jordan	Jordan University of Science and Technology

Country	Institution
Lithuania	Kaunas University of Technology
Malaysia	Malaysia University of Science and Technology
	Petronas University of Technology
	Universiti Teknologi Malaysia
	Universiti Teknologi Mara
Mauritius	University of Technology Mauritius
Netherlands	Delft University of Technology
	Eindhoven University of Technology
New Zealand	Auckland University of Technology (AUT University)
Nigeria	Federal University of Technology
Norway	Norwegian University of Science and Technology
Pakistan	Balochistan University of Engineering and Technology
	City University of Science and Information Technology
	Kohat University of Science and Technology
	Mehran University of Engineering and Technology
	National University of Sciences and Technology
	NED University of Engineering and Technology
	Sir Syed University of Engineering and Technology
	University of Engineering and Technology
	University of Engineering and Technology, Taxila
Papua New Guinea	Papua New Guinea University of Technology
Philippines	Technological University of the Philippines
Poland	Cracow University of Technology
	Gdansk University of Technology
	Kielce University of Technology
	Opole University of Technology
	Poznan University of Technology
	Rzeszow University of Technology
	Silesian Technical University
	Szczecin University of Technology
	Warsaw University of Technology
	Wroclaw University of Technology
Singapore	Nanyang Technological University
Slovak	Slovak University of Technology

Country	Institution
Republic	
	Technical University of Kosice
South Africa *	Cape Peninsula University of Technology
	Central University of Technology
	Durban University of Technology
	Tshwane University of Technology
	Vaal University of Technology
	Walter Sisulu University for Technology and Science
South Korea	Seoul National University of Technology
Sweden	Chalmers University of Technology
	Lulea University of Technology
Taiwan	Chaoyang University of Technology
	National Taipei University of Technology
	Southern Taiwan University of Technology
Thailand	King Mongkut's University of Technology Thonburi
	Mahanakorn University of Technology
	Rajamangala University of Technology
	Suranaree University of Technology
Vietnam	Hanoi University of Technology
	HoChiMinh City University of Technology
West Bengal	West Bengal University of Technology
West Indies	University of Technology, Jamaica

* In the case of South Africa, the country's Technikons (polytechnics) were reclassified in 2004 as 'universities of technology', to sit alongside 'comprehensive universities' and 'traditional universities'.