



PART 3 TERTIARY

PARTICIPATION IN TERTIARY EDUCATION opens up career opportunities and enables people to gain the skills required for the knowledge-based society. It is also associated with a range of other positive outcomes, including better income and standards of living, and improved health.

Tertiary education is very broad. It ranges from foundation education and training, which bridges people into further education and training or work, through to world-class doctoral studies. It is learning that happens at work through to studies at universities and research institutes.

Tertiary education must be accessible, of excellent quality and relevant for all who participate.

Areas examined in this chapter are: participation, achievement, international education, and research quality.

There is a considerable and increasing amount of information on international comparisons and on trends in tertiary education, but gaps include information on quality of teaching.

11. PARTICIPATION

WHAT WE HAVE FOUND

There has been a substantial increase in the number and proportion of people enrolled in formal tertiary education. Between 2000 and 2005 the number of students enrolled in formal tertiary education increased by 45 percent, from 316,000 to 457,000. The main increase over this period has been in enrolments at certificate level.

Māori participate in formal tertiary education at a higher rate than other ethnic groups, primarily because Māori have substantially higher participation rates at sub-degree level.

Along with the increase in participation over the last six years there has been an improvement in the progression of students to further study after the completion of their qualifications. This would suggest that students are staying in formal tertiary education for longer periods.

New Zealand's lifelong approach to tertiary learning, relatively open access to enrolment, and easy access to student loans, have tended to increase the number of students focusing on part-time course-based study and those trying to combine work with study. Learning in the workplace has experienced a substantial increase in learner numbers. The number of industry training learners (including Modern Apprenticeships) increased by 98 percent between 2000 and 2005.

WHY THIS IS IMPORTANT

Participation is an important indicator in that it measures how well the population is accessing learning opportunities after compulsory schooling. Success in tertiary education provides benefits to the individual and to society, not only in terms of increased employment opportunities and income but also in terms of well-being and social capital.

Being part of a knowledge-society and economy includes the continued participation of people in learning and education over their lifetimes. With rapid changes in society, economy and technology, skills can quickly become outdated. It is important that people continue to access education after they have completed their initial education.

HOW WE ARE GOING

TERTIARY PARTICIPATION RATES

Participation rates show what proportion of the population, or sub-group of the population, are participating in tertiary education. There has been a substantial increase in the number and proportion of people enrolled in formal tertiary education. The data show:

- over 14.2 percent of the population aged 15 and over participated in some form of formal tertiary education during 2005. This is an increase of 3.7 percentage points from 10.5 percent in 2000
- the main increase in participation has been at certificate level. From 2000 to 2005 the number of students enrolling in certificates doubled from 139,000 to 278,000. The participation rate increased from 4.5 percent of the population aged 15 in 2000 to 8.8 percent in 2005

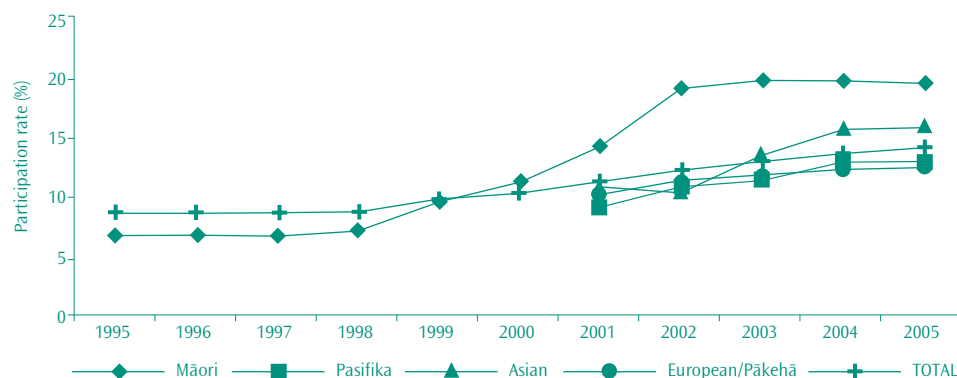
- participation in bachelors degrees by domestic students has fallen slightly in the last two years after increasing in the first part of the decade. About four percent of the population aged 15 and over were enrolled at bachelors level in 2005, the same level as in 2000. There were over 153,000 students at bachelors level in 2005
- since 1999 participation in tertiary education by Māori has grown at more than twice the rate of non-Māori, resulting in more than 19 percent of Māori aged 15 years and over participating in some form of tertiary education in 2005 (see Figure 11.1)
- although Māori have substantially higher rates at sub-degree level, Asian and European/Pākehā participation rates are highest at degree level and above
- the participation rate in tertiary education of women is three percentage points higher than for men, and continues to grow faster than for men.

PARTICIPATION IN INDUSTRY TRAINING

The substantial increase in learners in industry training is one of the most notable features of the tertiary education system in recent years. The data show:

- the number of industry training learners (including Modern Apprenticeships) doubled between 2000 and 2005 (see Figure 11.2), and now accounts for 24 percent of all learners in formal tertiary education
- the 161,700 industry training learners in 2005 surpassed the government's target of 150,000 set for the same year
- the 8,390 apprentices at 31 December 2005 represent an increase of approximately 1,200 apprentices (16 percent) over the previous year

FIGURE 11.1: AGE STANDARDISED PARTICIPATION RATES IN TERTIARY EDUCATION OF THE POPULATION AGED 15 YEARS AND OVER BY ETHNIC GROUP (1995 TO 2005)



Source: Ministry of Education (2005i)

1. Participation rates are not available for the Other ethnic group.
2. Separate participation rates are not available for Pasifika, Asian and European/Pākehā ethnic groups prior to 2000.
3. Total includes students whose ethnic groups were unknown.

- in 2005 eight percent of all employed people in the labour force were undertaking workplace learning through industry training, up from six percent in 2002.

TERTIARY STUDENT PROGRESSION

Progression refers to the proportion of students continuing tertiary study in the year after completing tertiary qualifications. Progression is classified into three types: students who progress to higher qualification levels; students who continue their study at the same level as the qualification they have completed; and students who continue to study at lower levels of qualifications. Almost 40 percent of tertiary students go on to further tertiary study. The data show:

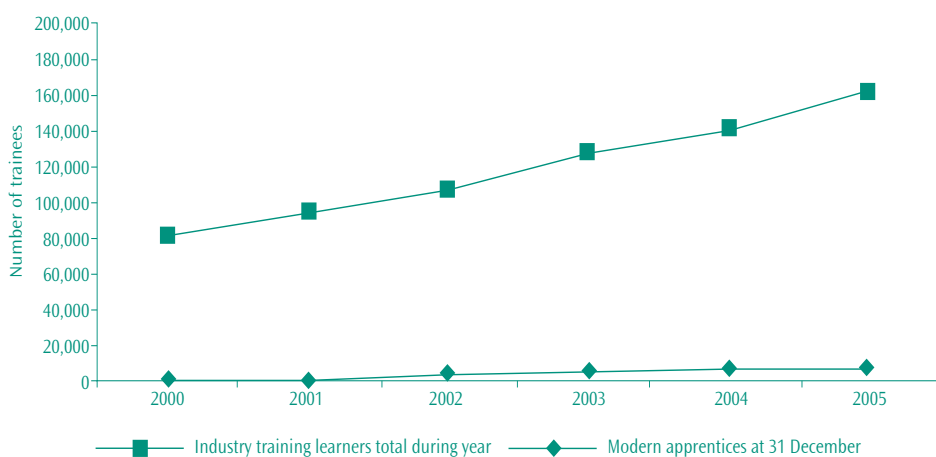
- of those students who completed tertiary qualifications in 2004, 39 percent went on to further study in 2005. This represented a 5.5 percentage point increase in the proportion of students who completed tertiary qualifications in 1999 and went on to further study in 2000
- of those students who completed tertiary qualifications in 2004, 19 percent went on to study at a higher level in 2005
- progression to higher level qualifications was highest for students completing Levels 1 to 3 certificates and generally reduces with increasing level of qualification completed
- Asian students have the highest rate of progression to higher levels of study for those completing bachelors degrees, as well as honours/postgraduate certificates or diplomas (see Figure 11.3)
- female students have slightly higher progression rates to higher level study, 19 percent compared with 17 percent for male students. However, progression rates by qualification level differ quite markedly by gender.

AFFORDABILITY OF TERTIARY EDUCATION

A full understanding of affordability needs to take account of the availability of student financial support arrangements that mitigate direct costs and also the wages people forego by taking time out from work to study. This is particularly important given the increase in older students, part-time study and students combining work and study. Here we consider the affordability of tertiary education by examining the costs of enrolling in tertiary education in relation to family income. The data show:

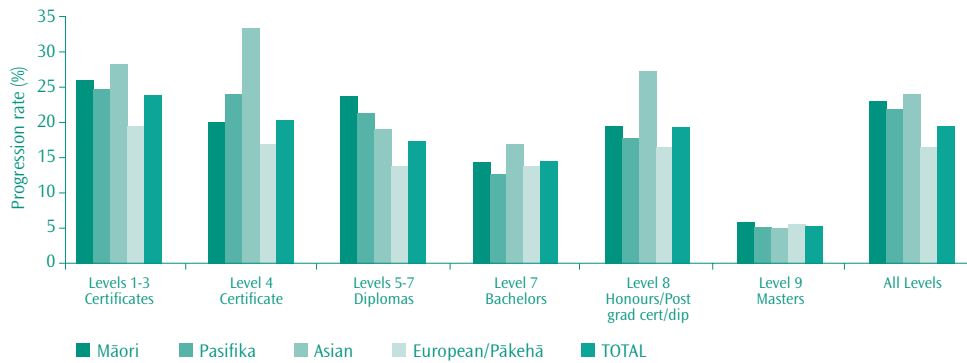
- in 2000, the average full-year, full-time tuition fee at a tertiary education institution (TEI) was equivalent to 5.7 weeks' gross earnings at the average weekly wage. By 2005 it was equivalent to 3.7 weeks. This reflects the changing course-mix over this period, with more lower-cost certificate-level provision, and more providers offering courses with discounted or zero fees. The change also reflects the impact of government policy over this period
- from 2003 to 2005 the average cost of fees as a proportion of average family income increased in all sub-sectors, after decreasing across all sectors from 2000 to 2003 (see Figure 11.4). This increase reflected the transition from the fee stabilisation scheme to policies which allowed limited increases in fees. It also reflects the fact that the proportion of students in low or zero fee courses is now reducing after increasing significantly between 2000 and 2003.

FIGURE 11.2: LEARNERS IN INDUSTRY TRAINING AND MODERN APPRENTICESHIPS (2000 TO 2005)



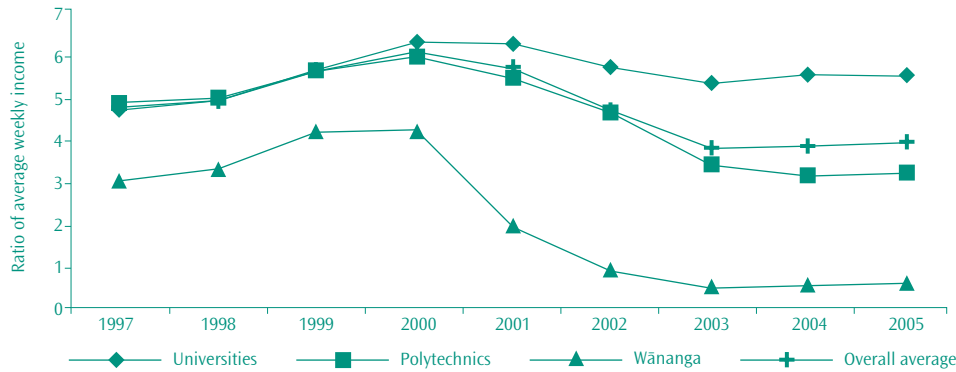
Source: Ministry of Education (2005)

FIGURE 11.3: HIGHER LEVEL PROGRESSION RATES FOR DOMESTIC STUDENTS COMPLETING IN 2002 BY ETHNIC GROUP AND QUALIFICATION LEVEL



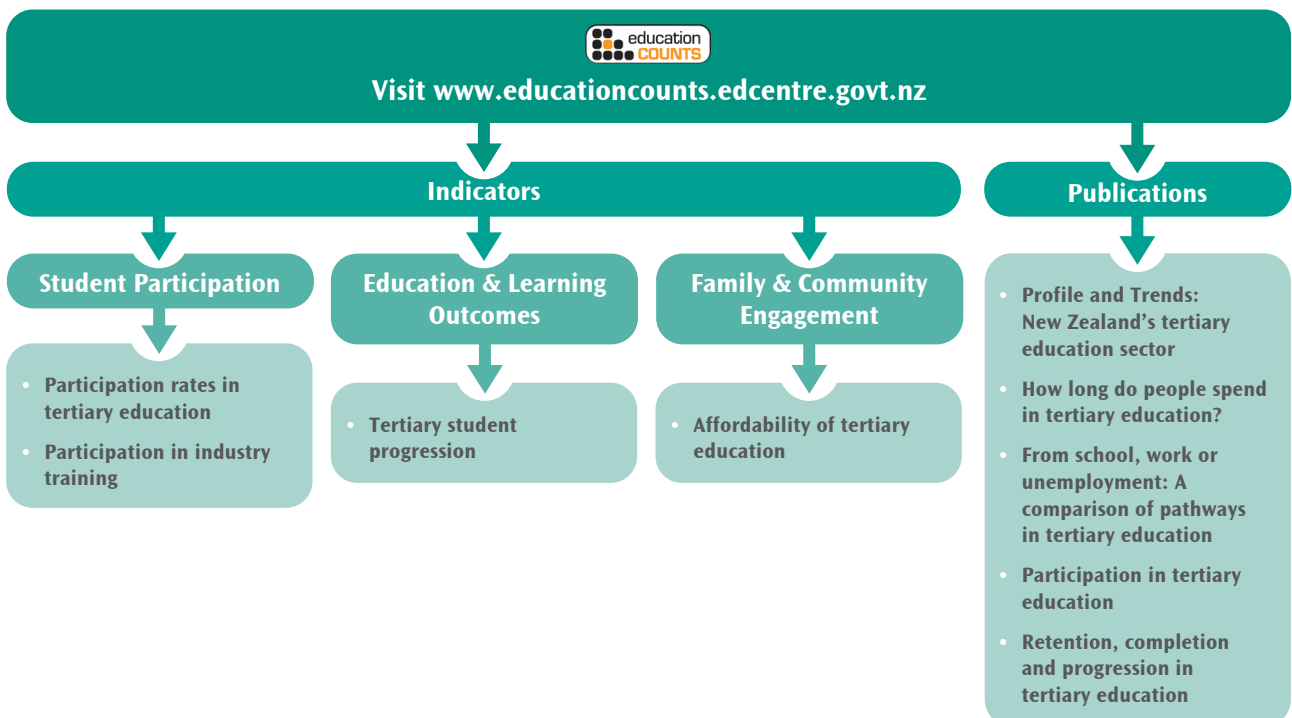
Source: Ministry of Education (2006i)
1. All rates are estimates.

FIGURE 11.4: AVERAGE DOMESTIC FEE AT TERTIARY INSTITUTIONS AS A PERCENTAGE OF AVERAGE WEEKLY INCOME BY SUB-SECTOR (1997 TO 2005)



Source: Ministry of Education (2005k)

WHERE TO FIND OUT MORE



12. ACHIEVEMENT

WHAT WE HAVE FOUND

Forty-one percent of students starting bachelors degree qualifications have successfully completed their study after five years. Fifty-eight percent of those starting at postgraduate level have completed after five years, while 37 percent of those starting at sub-degree level have completed at this level after five years.

Rates of qualification completion have not changed much over the last few years, and in some areas have decreased slightly.

Full-time students do noticeably better than part-time students. Intramural students do better than extramural. Students who are combining work with study are also much less likely to complete than those coming directly from school.

Demographic characteristics make a difference to tertiary completion. These differences persist even after adjusting for differences in types of study. Qualification completion rates are higher for women, but the gap reduces at higher levels. Asian students have the highest rates of completion, while rates are lower for Pasifika and Māori students (in particular at postgraduate level). Younger students do better than older students at bachelor level, but older students do better once adjusted for study differences (for example, older students are more likely to be studying part-time or combining study with work).

WHY THIS IS IMPORTANT

Completion is important as a measure of the rate of production of qualifications from New Zealand's tertiary education system, and hence as an indicator for the rate of the country's skills acquisition. High tertiary completion rates indicate that we are developing or maintaining a highly skilled workforce.

Completion also provides an indicator of the internal efficiency or quality of the tertiary education system. Having said this, it should be recognised that there are many factors outside the tertiary education system that will impact on outcomes, and that concepts of retention and completion are not always good markers of quality, and need to be read in the context of other indicators.

HOW WE ARE GOING

COMPLETION OF TERTIARY EDUCATION QUALIFICATIONS

Forty percent of all students starting qualifications in 2001 had completed by 2005. The data show:

- forty-one percent of students starting bachelors degree qualifications have completed them after five years. This increases to 46 percent after six years
- national qualification completion rates for sub-degree qualifications are between 29 percent and 36 percent when considered as individual levels of study, and 37 percent when considered as a group
- national qualification completion rates for postgraduate qualifications range between 47 percent and 59 percent when considered as individual levels of study, and 58 percent when considered as a group²¹

- while just 29 percent of doctorate students have completed their qualifications after five years, estimates of final long-term doctorate completions range between 55 percent and 60 percent
- full-time students have significantly higher qualification completion rates than part-time students. Around two-thirds of bachelors degree students studying full-time for a full year complete within six years, compared with less than 30 percent for students studying under half of an equivalent full-time student per year
- intramural (or internal) students complete bachelors degrees at a higher rate than extramural students: 65 percent compared to 47 percent
- over all tertiary levels, Asians have the highest rate of five-year qualification completion, while Māori and Pasifika have the lowest. However, there are significant differences to this pattern at specific levels of study (see Table 12.1)
- while younger students have higher degree completion rates than older students, once differences are adjusted for (such as the fact that older students are more likely to be studying part-time and extramurally) older students do better²²
- females complete qualifications at a higher rate than males, across all levels except Masters (see Figure 12.1)
- International students do better than domestic students. For example, 48 percent of domestic students who began their bachelors degrees in 1998 had completed after six years, compared with 57 percent for the corresponding cohort of international students.

TABLE 12.1: FIVE-YEAR QUALIFICATION COMPLETION RATES FOR STUDENTS STARTING QUALIFICATIONS IN 2001 BY QUALIFICATION LEVEL AND ETHNIC GROUP

Level of study	Five-year qualification completion rate (%)				
	Māori	Pasifika	Asian	European/Pākehā	Total
Levels 1-3 Certificates	31	30	49	34	33
Level 4 Certificates	40	30	38	34	36
Levels 5-7 Diplomas	28	26	33	30	29
Level 7 Bachelors	30	28	45	43	41
Level 8 Honours/Postgraduate Certificate/Diploma	58	55	55	60	59
Level 9 Masters	32	42	62	47	47
Level 10 Doctorates	13	-	26	28	27
Total	35	33	51	41	39

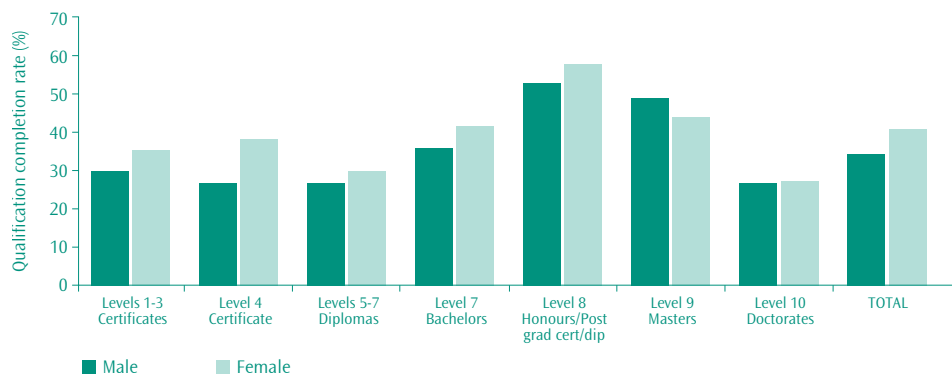
Source: Ministry of Education (2006j)

1. The qualification completion rate refers to the percentage of students starting qualifications in 2001 who have completed qualifications at that same level (but not necessarily the same qualification) by the end of 2005.
2. Rates based on less than 30 students have been suppressed.

²¹ When considering completion rates for groups of 'study levels' a student can start at one level of the group and finish at another level, hence a group rate can be higher than its constituent study levels. For example, a student starting a postgraduate diploma but completing a masters degree won't be counted under either postgraduate diploma or masters degree but would be counted under total postgraduate level.

²² Scott, D., Smart W. (2005). *What factors make a difference to getting a degree in New Zealand?* Wellington: Ministry of Education.

FIGURE 12.1 – FIVE YEAR QUALIFICATION COMPLETION RATES FOR STUDENTS STARTING A QUALIFICATION IN 2001 BY QUALIFICATION LEVEL AND GENDER



Source: Ministry of Education (2006)

1. The qualification completion rate refers to the percentage of students starting qualifications in 2001 who have completed a qualification (not necessarily the one they started) by the end of 2005.

Of all students who leave without completing, most (62 percent) do so in their first calendar year of study. Over three-quarters (77 percent) of people who leave without completing qualifications leave after one year or less of equivalent full-time study. The data show:

- forty-eight percent of bachelors degree students leave without completing their degrees. A quarter of students starting degrees do so in their first year
- for sub-degree level certificates and diplomas, around 60 percent of students will eventually leave without gaining the qualification they started; 43 percent leave in the first year
- around 30 percent of certificate non-completers leave in the first three to four weeks.

New Zealand's lifelong approach to tertiary learning, relatively open access to enrolment, easy access to student loans, and recent high demands for labour, have tended to increase the number of students focusing on part-time course-based study and those combining work with study. These factors are associated with reduced rates of qualification completion.

The relatively high level of part-time study in New Zealand leads to lower completion rates when compared with other countries with more full-time students. When only full-time bachelors degree students are considered, New Zealand rates become more comparable with rates in Australia, United States and the United Kingdom.

COMPLETION OF TERTIARY EDUCATION COURSES

Course completion rates will generally be much higher than qualification completion rates, as most qualifications will require the successful completion of a number of courses. The data show:

- course completion rates in New Zealand are over 80 percent for degree-level courses, and around 66 percent for sub-degree level courses
- course completion rates are highest for universities (81 percent) and colleges of education (84 percent) and lowest for polytechnics and private training establishments (63 percent) (see Table 12.2)
- Wānanga students complete diploma qualifications at a higher rate than students at other institutions, 41 percent compared with 29 percent for the sector as a whole.

Students successfully complete courses at a much higher rate than they complete qualifications, and many leave study (in particular, in times of higher employment) with only one or two courses left to complete for their qualifications. Other students will enrol for qualifications but abandon them once they have met their objectives, which may be passing only two or three courses. Such people will have acquired skills and knowledge useful in the workforce or in the community, even if no qualification was gained.

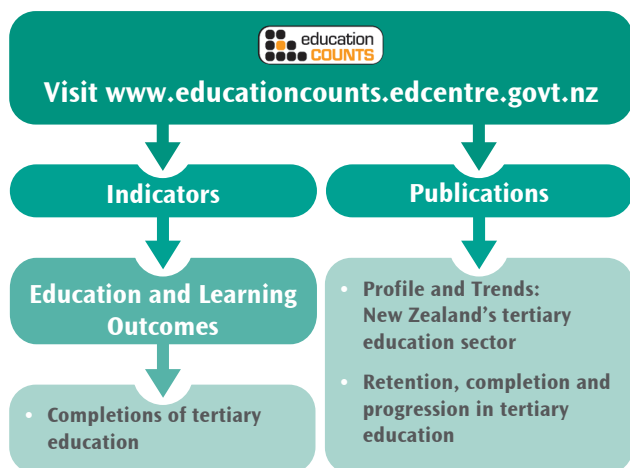
TABLE 12.2: COURSE AND QUALIFICATION COMPLETION RATES BY SUB-SECTOR

Sub-sector	Course completion rate estimate (%)	Qualification completion rate estimate (%)
Universities	81	46
Institutes of Technology & Polytechnics	63	30
Colleges of Education	84	46
Wānanga	71	42
Private Training Establishments	63	41
Total	70	39

Source: Ministry of Education

1. The qualification completion rate refers to the percentage of students starting qualifications in 2000 who have completed a qualification (not necessarily the one they started) by the end of 2004.
2. The course completion rate estimates the percentage of students starting courses in 2004 who have completed that course.

WHERE TO FIND OUT MORE



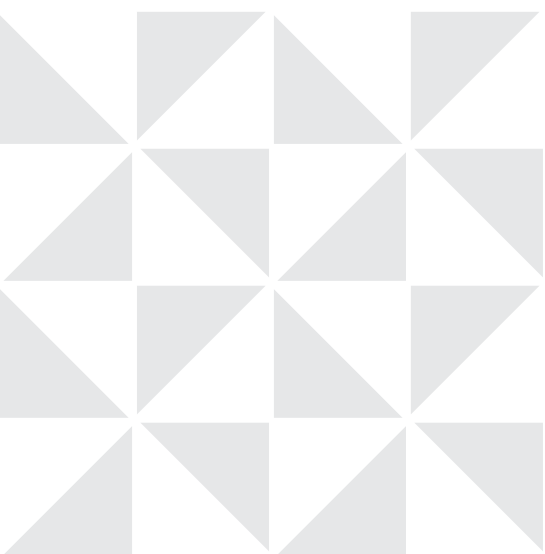
13. INTERNATIONAL EDUCATION

WHAT WE HAVE FOUND

There has been a substantial increase in numbers of international students since the late 1990s. International students now make up nine percent of all formal tertiary students.

Fifty-six percent of all international students enrolled in formal tertiary education come from China.

International students contributed \$479 million in fees to the revenue of public tertiary education institutions in 2005 (17 percent of their total revenue).



WHY THIS IS IMPORTANT

The presence of international students in New Zealand adds an international perspective to the teaching, learning and research of tertiary education organisations and has cultural, as well as educational, benefits.

In addition, the enrolment of international students has a financial dimension. Seventeen percent of revenue of public tertiary education institutions came from international students in 2005. Export education (the term used to describe marketing New Zealand education) is estimated to be worth \$2 billion annually, making export education the country's fourth largest export earner.

HOW WE ARE GOING

INTERNATIONAL STUDENTS ENROLLED IN FORMAL TERTIARY EDUCATION

The substantial increase in international students since 1998 is one of the most notable features of the tertiary education system in recent years. The data show:

- during 2005 there were 47,400 international students enrolled in formal tertiary education in New Zealand
- during 2005 nearly one in ten students enrolled in formal tertiary education were international students, an increase from one in 20 students during 2000
- from 2004 to 2005 the number of international students studying in formal tertiary education in New Zealand declined by seven percent, after strong growth since 1998 (see Figure 13.1)
- in 2005, 80 percent of international students in New Zealand were from Asia, with 56 percent of international students coming from China

- during 2005, 63 percent of international students enrolled in formal tertiary education in New Zealand were studying at degree level or above, compared with 42 percent during 2001 (see Figure 13.2)
- most international students during 2005 studying at a tertiary level standard were at tertiary education institutions, 60 percent were at universities and 24 percent were at polytechnics.

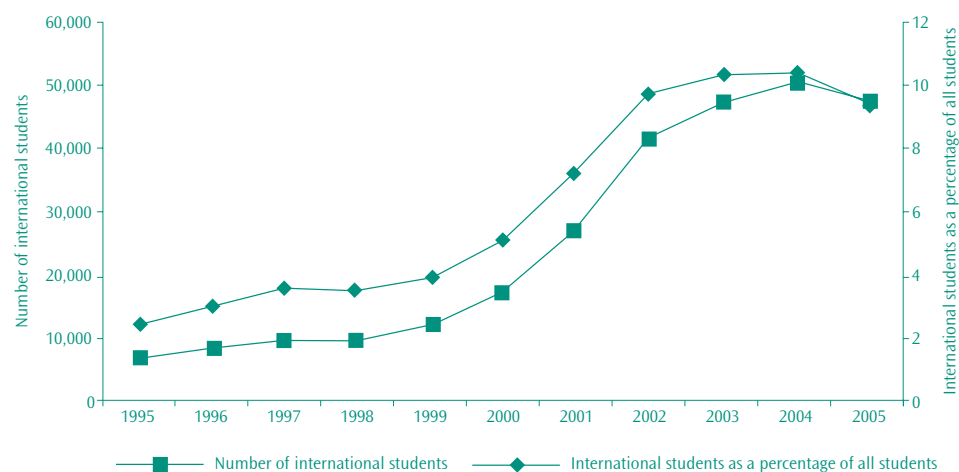
A considerable number of international students study in English language schools – private training establishments which specialise in the delivery of English language training. There were around 35,000 international students enrolled in English language schools during the March 2006 year, making up nearly 40 percent of international students studying in New Zealand.

REVENUE FROM INTERNATIONAL STUDENTS

Revenue from international students for tertiary providers and export education in general are of considerable importance. The data show:

- international students contributed \$479 million in fees to the revenue of public tertiary education institutions in 2005. This equated to 17 percent of the total revenue of public tertiary education institutions
- the fees charged to international students have increased significantly on an equivalent full-time student basis. Between 2001 and 2005 the average international tuition fee per equivalent full-time student in tertiary education institutions increased by 35 percent, from \$11,106, to \$14,875
- as a result of the decline in the number of international students, total international tuition fee revenue for tertiary education institutions decreased between 2004 and 2005 by 1.4 percent, from \$486 million to \$479 million.

FIGURE 13.1: INTERNATIONAL STUDENTS ENROLLED IN FORMAL TERTIARY EDUCATION (1995 TO 2005)



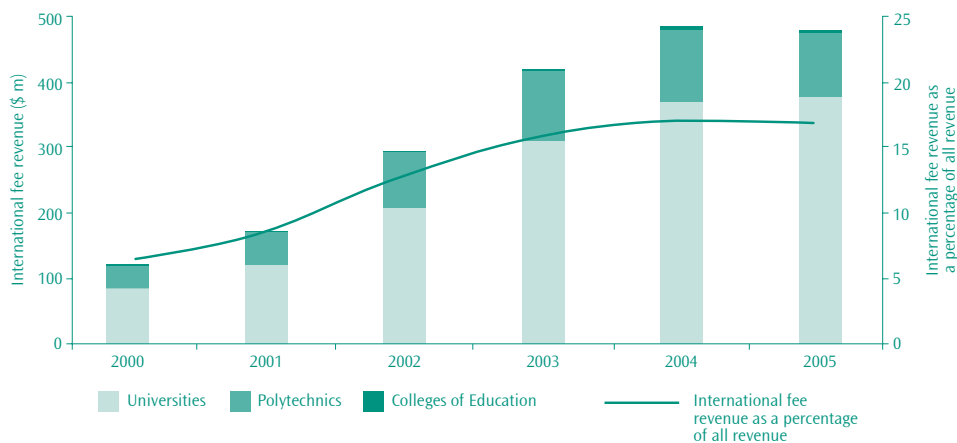
Source: Ministry of Education (2005)

FIGURE 13.2: DISTRIBUTION OF INTERNATIONAL STUDENTS ENROLLED IN FORMAL TERTIARY EDUCATION BY QUALIFICATION LEVEL (2000 TO 2005)



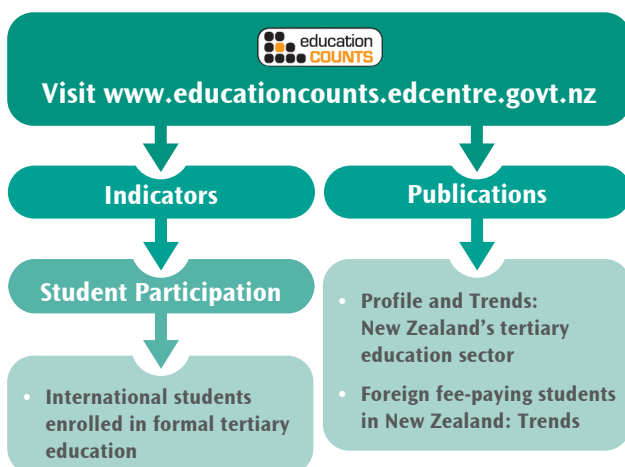
Source: Ministry of Education

FIGURE 13.3: INTERNATIONAL FEE REVENUE IN TERTIARY EDUCATION INSTITUTIONS (2000 TO 2005)



Source: Ministry of Education

WHERE TO FIND OUT MORE



14. RESEARCH

WHAT WE HAVE FOUND

The level of university research funding and its alignment with business and government priorities is improving. The research income that universities earn from funding sources that are subject to peer review is increasing.

The number of students being awarded PhDs is increasing and the completion rate of PhD students is rising.

The quality of the research in New Zealand's tertiary education sector was measured explicitly for the first time in the 2003 Performance-Based Research Fund (PBRF) quality evaluation. Around 29 percent of New Zealand's PBRF-eligible staff were assessed as having produced original and innovative research. Around six percent of PBRF eligible staff produced highly original and innovative research that was esteemed by the international academic community.



WHY THIS IS IMPORTANT

Highly qualified research graduates and high quality research are crucial to increasing New Zealand's knowledge-base and adding to innovation.

The tertiary sector has the responsibility for training most of the researchers for the innovation system, producing graduates from research degrees with the required skills, knowledge and attributes. The sustainability of the country's research and innovation sector depends on a strong and improving research culture in universities.

The tertiary sector directly undertakes research alongside, and sometimes in partnership with, other research organisations, industry and businesses, community organisations, and government. The universities are responsible for over 60 percent of New Zealand's research papers.²³

HOW WE ARE GOING

UNIVERSITY RESEARCH CONTRACT INCOME

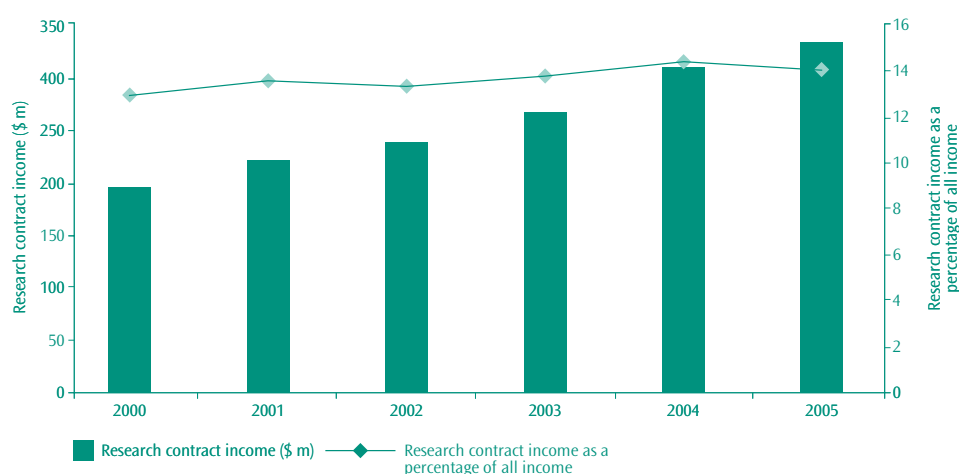
Universities report the income they have earned from research contracts on an annual basis. There are several sources of research contract income for the universities. These include contestable research funds allocated via Vote Research, Science and Technology, funding for Centres of Research Excellence (CoREs), contracted research by government agencies, and commissioned research by the private sector. Research contract income is a proxy measure of research quality. It is usually won through competitive bidding and is often subjected to rigorous peer review.²⁴

The largest part of research contract income is provided by businesses and not-for-profit organisations which contract universities to conduct specific pieces of research on their behalf

in order to meet their business needs (ie, they 'purchase' the research outputs). Trends in this form of external research income provide a proxy measure for the extent to which the research meets a test of relevance or alignment to business needs. The data show:

- total research contract income increased substantially at universities between 2000 and 2005. During this period, research contract income increased by 71 percent from \$193 million to \$331 million (see Figure 14.1). In real terms this amounts to an increase of 52 percent²⁵
- after adjusting for the size of the academic workforce and inflation, there has still been a substantial rise in research contract income at the universities. On a per full-time equivalent academic staff member basis, research contract income increased by 27 percent in real terms between 2000 and 2005
- the importance of research contract income to universities increased slightly between 2000 and 2005. As a percentage of all university income, research contract income increased from 13 percent in 2000 to 14 percent in 2005 (see Figure 14.1)
- research contract income that is sourced from businesses and not-for-profit organisations is increasing. In 2004 around \$161 million was received by universities from this source compared with \$131 million in 2002, an increase of 21 percent. In real terms this amounts to an increase of 16 percent. As a percentage of total research contract income, this funding was 52 percent in 2004 compared with 57 percent in 2002; this relative fall occurred because the value of the research contracts from government sources rose at a faster rate

FIGURE 14.1: UNIVERSITY RESEARCH CONTRACT INCOME (2000 TO 2005)



Source: Ministry of Education (2006m)

²³ Ministry of Research, Science and Technology. (2006). *National Bibliometric Report 2001-2004: International Benchmarking of New Zealand Research*. Wellington: Ministry of Research, Science and Technology.

²⁴ It needs to be noted that some research funding is commissioned by industry or by public sector agencies and is not won in competitive tender. The capacity of providers to maintain income from these sources over time, however, depends on their reputation for delivery of research of high quality. It should also be noted that the main public research funds are oriented towards certain types of disciplines or outcomes; this moderates the extent to which external research earnings can be used as a measure of research quality.

²⁵ Sums quoted in real terms have been adjusted for the effects of inflation over time.

- universities increased their share of the contestable funding allocated via Vote Research, Science and Technology from 23 percent in 2002 to 26 percent in 2004.

RESEARCH DEGREE COMPLETION RATES

Tertiary providers submit enrolment and completion details for tertiary students to the Ministry of Education. The enrolment and completion details of students can then be statistically matched to calculate qualification completion rates.²⁶ The data show:

- the number of students awarded PhDs increased by 36 percent from 454 in 2000 to 617 in 2005
- the five-year completion rates for PhD students increased from 25 percent for students who began their PhDs in 1998 to 29 percent for students who started in 2001. A period of five years is an unrealistically low time for many students to finish their PhDs, which is why the five-year completion rates are so low. The long-term completion rate for PhD students is estimated at between 54 percent and 57 percent.²⁷ That rate is similar to estimates of long-term completion rates for PhD degrees in Australia.²⁸

PERFORMANCE-BASED RESEARCH FUND (PBRF) ELIGIBLE STAFF RECEIVING AN A OR B QUALITY CATEGORY

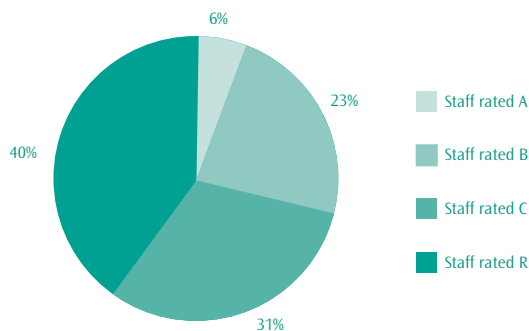
The quality of researchers in the tertiary education sector has been measured by the Tertiary Education Commission through the PBRF quality evaluation. In the evaluation all PBRF-eligible staff members submitted an evidence portfolio of their research performance across three dimensions: the quality of nominated research outputs; the esteem with which they are held by their peers; and their contribution to the research environment. Through a peer review process, each PBRF-eligible staff member was then assigned a quality category.

In the 2003 quality evaluation four quality categories were assigned to the PBRF-eligible staff who submitted evidence portfolios. A researcher who received:

- an 'A' quality category was assessed as producing research that was highly original or innovative and was esteemed by the international academic community
- a 'B' quality category was assessed as producing research that was original and innovative and recognised beyond the staff member's own institution
- a 'C' quality category was assessed as producing research that applied existing research methodologies with acknowledgement by their peers of a sound research basis
- an 'R' quality category was assigned to a researcher who did not meet the standard of a 'C' quality category.

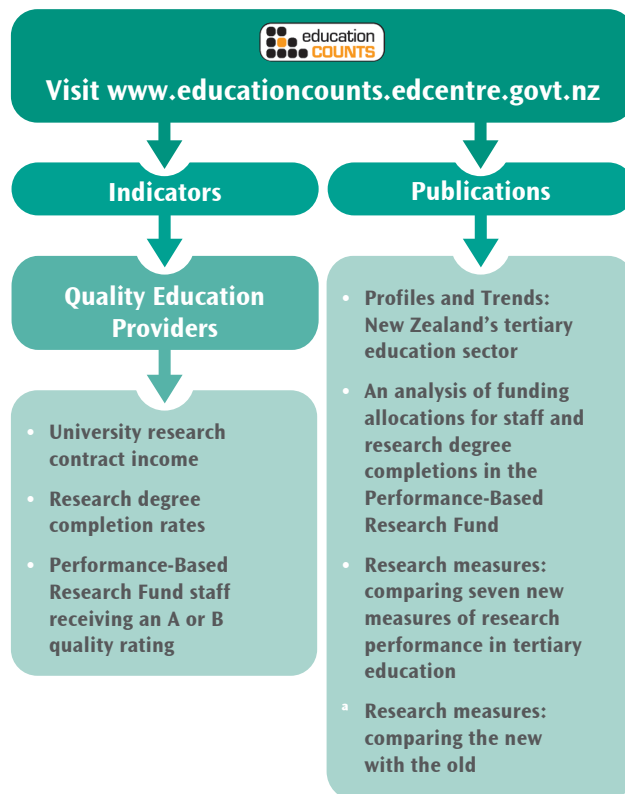
The results of the 2003 quality evaluation show that around 29 percent of PBRF-eligible staff are producing original and innovative research. Around six percent of PBRF-eligible staff are producing research that is highly original and innovative and of world-class (see Figure 14.2).

FIGURE 14.2: PERFORMANCE-BASED RESEARCH FUND (PBRF) ELIGIBLE STAFF BY QUALITY CATEGORY (2003)



Source: Ministry of Education (2004c)

WHERE TO FIND OUT MORE



²⁶ Scott, D. (2004). *Retention, Completion and Progression in Tertiary Education*. Wellington: Ministry of Education.

Scott, D. (2005). *Assessment of TSPAR matching (SN's and NSN's)*. <http://educationcounts.edcentre.govt.nz/publications/downloads/matching-assessment.doc>

²⁷ Scott, D. (2004). *Retention, Completion and Progression in Tertiary Education*. Wellington: Ministry of Education. p.13.

²⁸ May, Y., MacLachlan, M., & Karmel, T. (2001). *Postgraduate Completion Rates*. Occasional Paper Series, Higher Education Division, Department of Education, training and youth affairs, Canberra.

