



# Profile & Trends

NEW ZEALAND'S TERTIARY EDUCATION SECTOR

# 2010

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A supporting set of analytical tables is available for this report.  
For further information on this report and to view the tables visit:  
[www.educationcounts.edcentre.govt.nz/publications/tertiary/p&t-2010](http://www.educationcounts.edcentre.govt.nz/publications/tertiary/p&t-2010).

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**Notes:**

1. Unless otherwise stated, the data in this publication is for the year ended 31 December 2010 and has been sourced from the Ministry of Education.
2. Provider-based qualifications are those delivered by public tertiary education institutions, private training establishments and other tertiary education providers. Workplace-based training is designed by, and delivered in conjunction with, industry and while it takes place mostly on-job a small amount of off-job training is purchased from tertiary education providers.
3. Data in this report and in the analytical tables on the Education Counts website has been revised back to 2003 as tertiary education organisations can submit updates for previous years. Data in this report has been rounded, while the unrounded data has been provided in the statistical tables.
4. The information in this report and the analytical tables need to be used in conjunction with the technical notes provided.
5. A reference to the web tables associated with the data highlights is provided at the beginning of each chapter.

## PROFILE & TRENDS 2010: NEW ZEALAND'S TERTIARY EDUCATION SECTOR

Tertiary education is generally considered to be pivotal in helping people secure better career paths, improved quality of life and higher standards of living, as well as encouraging a more equitable, culturally dynamic and informed society. These trends in the outcomes for people following tertiary education are looked at in *Profile & Trends* (see chapter 4). This year's edition is the 13th annual survey of the tertiary education system published by the Ministry of Education. The report contains data on trends and changes mainly for the 2010 academic year. Important events affecting tertiary education provision in 2011 are described in the forward-looking commentaries included in each chapter.

*Profile & Trends* begins with the key trends facing the sector and the performance of the New Zealand tertiary education system. Next is a month-by-month summary of the 2010 tertiary education year, followed by a description of the tertiary education system and the provision of tertiary education.

A large part of the report describes participation in tertiary education and industry training in New Zealand, profiling the students, their courses of study and their achievements. Providers of tertiary education are also profiled, along with the various funding streams and how these have been used. The financial performance of public tertiary education institutions and the key issues facing institutions are also described. To complete the picture, we describe the sector's research capability and provide information on the funding of tertiary education research and the human resources in the system. The Tertiary Education Commission has contributed the chapter covering the performance of providers at the sub-sector level for the 2009 and 2010 years.

*Profile & Trends* is supported by a detailed set of statistical tables. These statistics are derived mainly from returns provided by tertiary education organisations to the Ministry of Education and to the Tertiary Education Commission. However, we have also consulted the different agencies and organisations outside the ministry that have responsibilities for tertiary education. A considerable amount of information in this report has come from these agencies.

# 1 KEY FINDINGS

## A new tertiary education strategy and qualifications framework

In 2010, tertiary education organisations began work on implementing the goals and priorities of New Zealand's third tertiary education strategy, released in December 2009. The higher-level goals and the seven priorities of the Tertiary Education Strategy 2010-15 are described in chapter 2 of this report.

The New Zealand Qualifications Framework, Te Taura Here Tohu Mātauranga o Aotearoa, was launched on 1 July 2010. The new framework replaces the National Qualifications Framework and the New Zealand Register of Quality Assured Qualifications (KiwiQuals). The introduction of a single framework for all New Zealand's quality-assured qualifications was one of a number of changes resulting from the Targeted Review of Qualifications conducted by the New Zealand Qualifications Authority. Quality assurance in tertiary education in New Zealand is described in chapter 2 of this report and the New Zealand Qualifications Framework is described in chapter 3.

The tertiary education quality assurance framework is supported by the Tertiary Education Commission's monitoring of government-funded tertiary education providers. This monitoring was expanded in 2010 to include measures of performance against a set of common educational performance indicators. The performance of the tertiary education sub-sectors and industry training organisations is covered in chapter 17 of this report.

Tertiary education students continued to take on higher study loads in 2010, a trend which began in 2008. This shows potential for higher qualification completion rates in the future in line with the government's priority for tertiary education of having more young people achieve level 4 and higher qualifications. The participation rate of young Māori and Pasifika in level 4 and higher qualifications continued to increase from 2009 to 2010, suggesting that their engagement in tertiary education at higher qualification levels continues to strengthen.

While domestic students took on higher study loads in 2010, the number of students fell slightly from 2009. However, the number of tertiary education enrolments<sup>1</sup> remained stable overall in 2010 as enrolments by international students continued to increase.

Information on the outcomes of tertiary education includes the income premiums earned by people with higher-level qualifications compared with those with no or a low-level qualification. While these earnings premiums continued to decrease in 2010, at a time when there were relatively high unemployment rates and low economic growth, people with a bachelors or higher qualification had a significant earnings advantage of 63 percent over those with no qualification.

In 2010, the number of students in formal provider-based tertiary study<sup>2</sup> totalled 466,000, compared to 468,000 in 2009 and a high of 501,000 in 2005. The number of industry trainees decreased from 2009 to 2010 to 195,000, due mainly to the removal of inactive trainees from funding following an operational policy review of industry training.

## Statistics and research

*Profile & Trends* has an associated set of statistical tables available on the Education Counts website – [www.educationcounts.govt.nz](http://www.educationcounts.govt.nz). The statistics in the web tables are used to inform the analysis in *Profile & Trends*. The tables provide comprehensive coverage of the key trends in the sector's performance: resourcing, financials, human resources, research, student support, Youth Guarantee, Training Opportunities, Secondary-Tertiary Alignment Resource, trades academies, tertiary high schools, industry training, adult and community education, enrolments, participation rates, completion rates, retention rates, progression rates, and outcomes.

More tertiary education material, including information on tertiary education providers, students and other relevant material, can be found on the Education Counts website and on the websites of the Ministry of Education and the Tertiary Education Commission.

<sup>1</sup> Formal enrolments that contribute towards a recognised qualification of more than one week's duration.

<sup>2</sup> Students in formal qualifications of more than one week's duration, excluding those in workplace-based training, targeted training programmes and the Secondary-Tertiary Alignment Resource programme.



The statistics in *Profile & Trends 2010* are for the year ended 31 December 2010 and have been sourced from the Ministry of Education, unless otherwise stated. Some of the most recent changes in tertiary education are separately summarised for the various parts of the sector.

An article on e-learning in the tertiary education sector is included in chapter 5 of this report.

## Main tertiary education events in 2011

In 2011, two polytechnics merged with other tertiary education institutions and four industry training organisations merged with other industry training organisations (see chapter 2). The 2011 performance of tertiary education providers will be used as a basis for introducing performance-linked funding in 2012.

In 2011, amendments to the Education Act 1989 included:

- ▲ updating and strengthening the New Zealand Qualifications Authority's legal powers, and
- ▲ establishing a new Crown agency, Education New Zealand, responsible for New Zealand's international education promotion and representation worldwide.

Major changes to student support policy were announced in 2011 that will be implemented in 2012 and 2013, covering both the Student Loan Scheme and the Student Allowances Scheme. Some of these changes will require a legislative amendment which is expected to take place in 2012 (see chapter 11 for more detail on eligibility, loan repayment and other changes to the Student Loan Scheme).

Eight trades academies became operational in 2011, providing over 700 places for 16 and 17 year-olds.

Early indications from the Ministry of Education enrolments collection suggest that domestic enrolments are likely to decrease for the 2011 year, while international enrolments are likely to continue to increase (see chapter 17 for more information on the August 2011 enrolments snapshot).

## TERTIARY EDUCATION IN NEW ZEALAND

New Zealand's tertiary education sector makes a wide range of learning available, from foundation skills to doctoral studies. Through its research activities, the sector is a major contributor to the nation's innovation.

A key feature of the New Zealand system is the integration of funding and provision across vocational education and training, higher education, workplace training, adult and community education, and tertiary education that takes place within the senior secondary school.

Funding covers all levels of tertiary education, from second-chance education to doctoral studies. Funding through the student achievement component supports the costs of teaching and learning. From 2011, funding that supports tertiary education organisations' capability, to enable them to focus on their core roles in the tertiary education system, has been incorporated into the student achievement component.

Industry training provides workforce skills to a significant number of people. This training is designed by, and delivered in conjunction with, industry, and leads to nationally recognised qualifications. There are also targeted training funds that provide fully subsidised education and training to disadvantaged groups such as those at risk of unemployment.

The government funds such learning as foundation education, adult literacy and English for speakers of other languages. It also provides funding to providers of adult and community education.

The results of learning through tertiary education can be viewed in terms of improving competencies and attainment, or progress towards attainment, of recognised qualifications. A competency includes the skills, knowledge, attitudes and values needed to perform important tasks. The literacy, language and numeracy programmes build adults' fluency, independence and range in language, literacy and numeracy so that they can use these competencies to participate effectively in all aspects of their lives.

The New Zealand Qualifications Framework provides a standard structure for naming and describing qualifications across levels and types of provision. It incorporates all tertiary qualifications, including the 10 levels of qualification from entry-level certificates to doctorates.

## Enrolments in 2010

In 2010, the proportion of the population aged 15 years and over participating in some form of tertiary learning with an education provider was 12 percent, and more than 5 percent participated in learning that contributes towards a recognised qualification in the workplace.

There were 506,000 students<sup>3</sup> enrolled in tertiary education that contributes towards a recognised qualification at providers in 2010. Of these, 45,600 were international students, 26,000 were in targeted training programmes (including 1,980 students who took up Youth Guarantee places), 19,200 were in the Secondary-Tertiary Alignment Resource programme and 15,900 students were in formal study of less than one week's duration.

The number of domestic students enrolled in formal tertiary study of more than one week's duration fell slightly from 2009 to 2010. However, when converted to equivalent full-time student units, domestic enrolments increased from 2009 to 2010. That is, domestic students took on considerably higher study loads in 2010 (on average), a trend which began in 2008.

Domestic students in bachelors degrees had the largest increase in their number from 2009 to 2010 due, in part, to the population bulge of 18 to 19 year-olds continuing their move from school into tertiary education. The continued weak employment conditions also contributed to high levels of participation in tertiary education in 2010 by younger people. The number of domestic students in higher-level qualifications (levels 5 to 10) was more than 3 percent higher in 2010 than in 2009, while enrolments in level 1 to 4 certificates fell substantially. This led to the continuation of the shift from lower- to higher-level qualifications which started in 2005.<sup>4</sup>

Enrolments by international students continued to recover from their low point in 2008. From 2009 to 2010, the number of international students increased by 5.2 percent to 45,600.

In 2010, there were 195,000 learners engaged in industry-based training, including 11,600 in Modern Apprenticeships.<sup>5</sup> The number of industry trainees fell from 2009 to 2010 mainly as a result of a review of industry

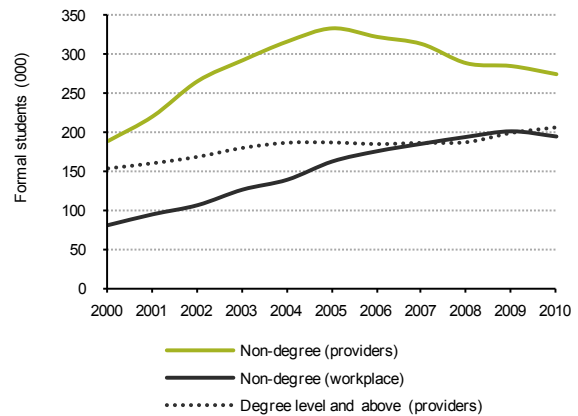
<sup>3</sup> Total provider-based students, excluding students in non-government-funded providers.

<sup>4</sup> In 2005, the reviews by government of non-degree qualifications, and the review of the provision at private training establishments, investigated the quality, relevance and value for money of these provisions and this led to the significant decrease in level 1 to 3 certificate enrolments.

<sup>5</sup> The number of learners engaged in industry training refers to total trainees during year, while Modern Apprenticeship measures in this report are based number of apprentices at 31 December.

training operational policy aimed at improving the performance of industry training and getting better value for money as well as the continuing effects of relatively high levels of unemployment in 2010.

**Figure 1.1** Trends in formal students by level of study and setting

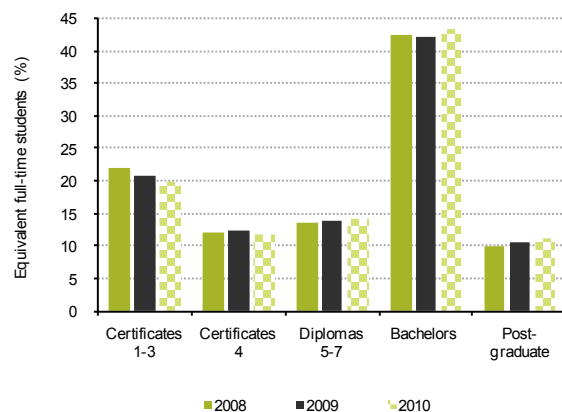


There were 11,800 school students in Gateway programmes in 2010. Gateway is designed to help secondary school students experience work-based tertiary education and/or achieve credits on the New Zealand Qualifications Framework or to gain employment.

In 2010, 145,000 qualifications were completed by domestic and international students. Of the domestic students who completed a qualification, 69,100 were women and 47,600 were men.

Tertiary education that does not contribute towards a recognised qualification, such as adult and community education, attracted an estimated 109,000 enrolments in 2010. Significant cuts to government funding of this type of tertiary education took place in 2010. There were less than half as many enrolments in adult and community education in 2010 than in 2009.

**Figure 1.2** Distribution of equivalent full-time students by level of study



## Outcomes of tertiary education

People's earnings reflect the quality of the skills they bring to their workplace. High-level skills help businesses to be more productive. Before the weakening of the New Zealand economy and employment market since 2008, the earnings premium for people with a bachelors or higher qualification was higher. For example, from 2000 to 2005, the earnings of people with a bachelors or higher qualification were 70 percent higher than for people without a qualification. In 2010, the earnings of people with a bachelors or higher qualification were 63 percent higher than for people with no qualification.<sup>6</sup>

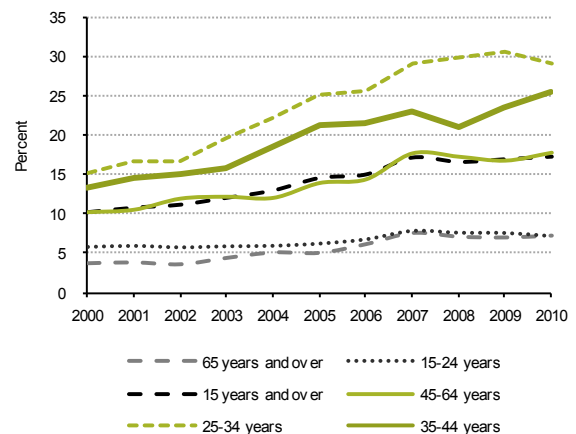
People with tertiary qualifications are also more likely to be employed than people without a qualification. While the continued weak economic conditions have led to higher unemployment rates for many groups, people with no qualifications and younger people (who are developing their skills and workplace experience) have had the highest unemployment rates. In 2010, the unemployment rate for people with a bachelors or higher qualification was 4.1 percent, while it was 9.4 percent for people without a qualification. Similarly, the unemployment rate for people with level 1 to 4 certificates or a diploma was 5.8 percent, while for people with only a school qualification it was 8.3 percent.

The proportion of the population aged 15 years and over with a bachelors degree or higher qualification has increased from 10 percent in 2000 to 17 percent in 2010. In turn, the proportion of people without a qualification or only a school qualification has become smaller. The proportion of the population aged 15 years and over with a tertiary qualification increased from 45 percent in 2000 to about 50 percent in 2005. It has remained at this level since then. Of the ethnic groups, Māori had the biggest decrease in the proportion without a qualification over the last 10 years. While the proportion of Pasifika peoples without a qualification increased, those with a bachelors or higher qualification increased from 3.7 percent in 2000 to 5.2 percent in 2010. The proportion of Māori with a bachelors or higher qualification more than doubled from 2000 to 2010 to 8.1 percent.

The proportion of the adult population holding a bachelors or higher qualification is higher for women than for men. Men continue to be more likely than women to hold tertiary certificates and diplomas. This difference reflects changes in the tertiary education participation trends over the last 15

years, with more women completing bachelors qualifications, and the expansion of industry training, which led to higher proportions of men gaining certificates and diplomas. The proportion of younger people with a bachelors or higher qualification is considerably higher than for older people. In 2010, 29 percent of people aged 25 to 34 years held a bachelors or higher qualification, compared to 18 percent for people aged 45 to 64 years.

**Figure 1.3** Population aged 15 years and over (June quarter) with a bachelors degree or higher qualification by age group



Men continued to participate in the labour market at a higher rate than women, but the gap between them is smaller for people with higher-level qualifications. Young men aged 20 to 24 years were most affected by the continued weak employment market – 14 percent of them were not in employment, study or a care-giving role in 2010.

<sup>6</sup> Based on median hourly earnings from the Statistics New Zealand's Household Labour Force Survey.

## Workplace-based learning

The number of industry trainees decreased from 2009 to 2010. A review of industry training operational policy, which led to the removal of inactive trainees from funded training, was the main reason for the decrease in the number of trainees. The decrease followed two years in which the growth in the number of trainees had slowed and since 2008 the relatively high levels of unemployment continued. In 2010, the total number of workers trained throughout the year decreased by 6,660 to 194,000. The removal of inactive trainees from funded training, as part of the industry training operational policy review, led to a stronger decrease in the number of active trainees at 31 December – down by 23,600 to 102,000 trainees.

Modern Apprenticeship numbers also fell from 2009 to 2010. This was the first decrease in the number of modern apprentices since the introduction of the scheme in 2000. Young people who wish to enter a Modern Apprenticeship have to be aged between 16 and 21 years. The decline in the number of modern apprentices may reflect the reluctance of some employers to take on new apprentices at a time of low economic growth. For example, Modern Apprenticeships are widely used by the building and construction industry and the number of trainees in this industry has declined since 2008. The initiatives introduced by government in 2009 to extend the timeframe for trainees to find work while still being eligible for training subsidies, may counter, or delay, some of the effects of the weak labour market for young people in industries where Modern Apprenticeships are widely used. Trainees who change employers, or lose their jobs, can now continue their training for 12 weeks, double the previous limit.

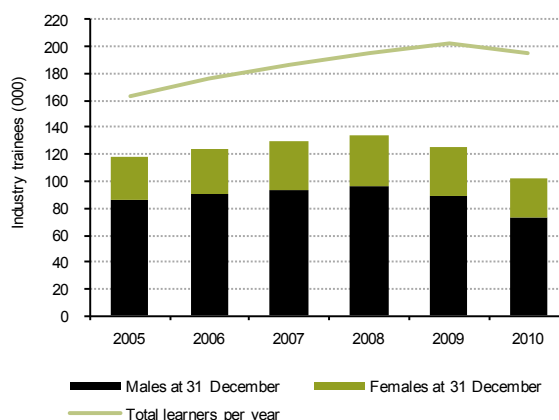
In contrast, Gateway placements increased from 2009 to 2010 by almost 10 percent. Aimed at offering senior secondary students workplace-based learning, Gateway has expanded substantially since its introduction in 2001. There were also 1,980 places made available in 2010 for 16 to 17 year-olds through Youth Guarantee (see chapter 3 for more information about this programme).

Both the removal of inactive trainees from funded training and the weak labour market have affected industries differently. Based on the number of trainees active on 31 December, four out of every five industry training organisations had fewer industry trainees in 2010 than in 2009. Also, while there were seven industry training organisations with more trainees in 2010 than in 2009, only four of these were medium-sized or large organisations, that is, organisations with over 3,000 trainees. Of these four organisations there were only two – Retail Institute, and

Skills Active – which had an increase in the number of trainees in 2009 and in 2010.

There were five industry training organisations each with over 5,000 trainees, which had decreases from 2009 to 2010 of 20 percent and over. The New Zealand Industry Training Organisation, which covers leather, meat, dairy and other industries, had the biggest decrease in the number of trainees, down from 12,000 in 2009 to just below 6,000 in 2010. Competenz, which covers engineering, food and manufacturing, had 25 percent fewer learners in 2010 than in 2009. At 9,960 learners it is now New Zealand’s biggest industry training organisation. The other three large organisations with a 20 percent or higher decrease in the number of trainees from 2009 to 2010 were building and construction services, the hospitality trade and community support services.

Figure 1.4 Learners in industry training



## Provider-based students in levels 1 to 3

In 2010, enrolments in level 1 to 3 qualifications represented 20 percent of all equivalent full-time student units in formal provider-based tertiary education.

The total number of students participating in provider-based level 1 to 3 certificates has decreased steadily since 2005. This trend continued to decrease between 2009 and 2010. The largest decrease was in the number of students in level 1 to 2 certificates, while there was a relatively smaller decrease in the number of level 3 certificate students. Learners in Training Opportunities and Youth Training also decreased in number from 2009 to 2010, while the Youth Guarantee programme, introduced in 2010, provided nearly 2,000 fees-free places for 16 and 17 year-olds.

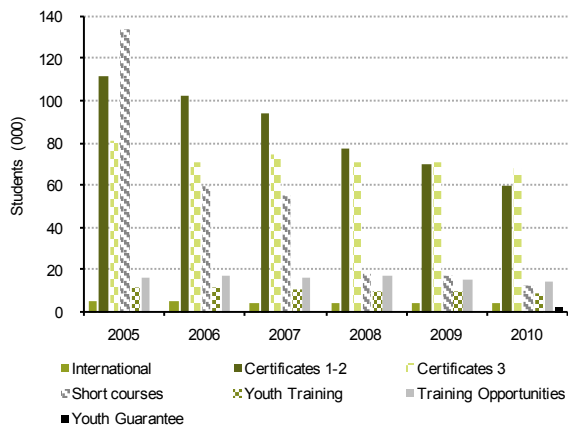
The decreases in enrolments at this level reflect continued tightening of funding allocations. Therefore the weak economic conditions and labour market have not resulted in more people studying at this level.

The number of international students studying at level 1 to 3 decreased slightly in 2010, following a small increase in 2009. Asia is still the largest source region for students studying at this level.

There are big differences in achievement between full-time and part-time students in student component-funded qualifications at these levels. Of students starting in 2008, 73 percent of full-time students had completed a certificate by 2010, compared to only 36 percent of part-time students. Similarly, full-time students are twice as likely to progress to further study compared with part-time students.

In level 1 and 2 qualifications, full-time students make up only 34 percent of students. However, most of the decrease in student numbers at this level has been in part-time students, meaning that more of the provision is focusing on full-time students. At level 3, full-time students make up 56 percent of students. The number of part-time students has also decreased at this level.

**Figure 1.5** Students in level 1 to 3 provider-based qualifications



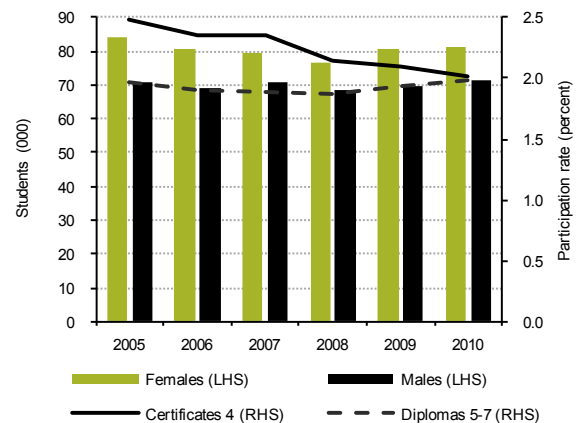
## Provider-based students in non-degree levels 4 to 7

In 2010, students enrolled in level 4 to 7 non-degree qualifications represented 26 percent of all equivalent full-time student units in provider-based tertiary education.

In 2010, the number of students enrolled in level 4 to 7 non-degree study increased slightly. This was made up of an increase in enrolments in level 5 to 7 certificates and diplomas and a decline in enrolments in level 4 certificates.

The overall study load, as measured in equivalent full-time student units, remained almost unchanged from the 2009 level. These patterns were the same for domestic and international students. In 2010, there were 135,000 domestic students enrolled in level 4 to 7 non-degree study and 17,000 international students.

**Figure 1.6** Participation in non-degree level 4 to 7 provider-based qualifications by gender



As a proportion, enrolments by men in these qualification levels increased by more than those by women, although women still dominate this level of study.

By age group, there was little or no change for the older age groups, while the number of students aged 18 years and under fell substantially from 2009 to 2010. However, there are relatively few under 18 year-olds enrolled in these levels. The majority of students in these levels are aged 25 years and over.

Māori and Asian student numbers increased at a higher rate than the average increase for these levels, while European students showed a slightly lower than average increase.

Most students in level 4 to 7 non-degree qualifications are enrolled in polytechnics, and the number of enrolments at these institutions showed a slight increase over the 2009 figures. Universities, which have the lowest proportion of these students, showed a substantial decline in enrolments at these qualification levels.

The increasing number of level 5 to 7 diploma students is resulting in increased numbers of qualifications completed at this level. The rate at which students complete level 5 to 7 diplomas and level 4 certificates is about the same.

The rates at which students complete these qualifications and progress on to higher-level study have fluctuated over recent years. Progression rates decrease as the qualification level increases, so progression is more likely for level 4 certificate students.

While domestic students are enrolled in about equal numbers in level 4 certificates and level 5 to 7 diplomas, international students are predominately enrolled in the diploma-level qualifications. Enrolments by international students in level 5 to 7 diploma-level study increased by 10 percent in 2010, compared with 2009.

### Provider-based students in bachelors and postgraduate qualifications

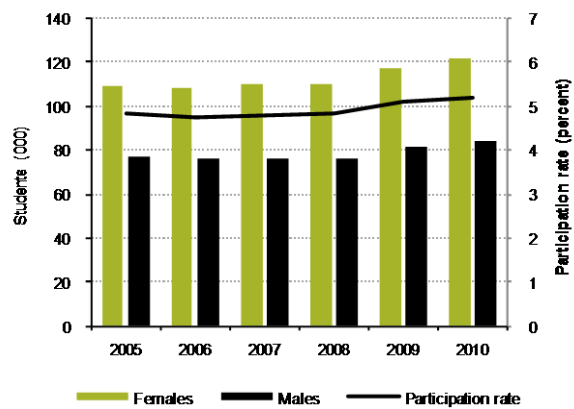
In 2010, enrolments in bachelors degree and graduate certificates and diplomas represented 44 percent of all equivalent full-time student units in provider-based tertiary education. Those in postgraduate qualifications accounted for 11 percent.

The number of students enrolled in bachelors and higher qualifications increased in 2010, up nearly 4 percent on the 2009 figures. Equivalent full-time student units increased slightly more, indicating that the study load of students in these qualifications increased in 2010.

Student numbers increased at all qualification levels, with honours degrees, postgraduate certificates and diplomas, and masters degrees showing increases above the average for these levels.

Most students in bachelors or higher qualifications study at a university. From 2009 to 2010, universities showed an increase in their domestic student numbers below the average increase for these levels. Polytechnics, wānanga and private training establishments showed substantial increases, albeit from small bases.

Figure 1.7 Participation in bachelors and higher-level qualifications by gender



The numbers of Māori and Pasifika students also showed above average increases, as did students aged 20 to 24 years. The number of students aged less than 18 years continued to decline in 2010. This decline is likely to be because of the tendency for students to stay longer at school, partly due to the weak labour market.

Business and management is the largest field of study for bachelors degrees. Teacher education is the largest field of study for students in bachelors or higher qualifications, with a large amount of study at graduate certificate and diploma level. The numbers of students in business and management and teacher education showed little change from 2009 to 2010. The largest increase was in nursing, with the number of students in this field increasing by 10 percent from 2009 to 2010.

The retention and completion rates of bachelors and postgraduate students have been relatively stable over the short term, but showed longer-term increases. There is a big difference in completion rates between part-time and full-time students, especially at bachelors level. Seventy-one percent of the domestic full-time students who started a bachelors degree in 2005 had completed this qualification by 2009, compared to 42 percent of part-time students.

International students enrolled in bachelors and higher qualifications increased by nearly 6 percent from 2009 to 2010, with increases above the average for these levels in honours degrees, postgraduate certificates/diplomas, masters degrees and doctoral studies. Almost two-thirds of international students are enrolled in bachelors degrees, and these students increased by over 4 percent from 2009 to 2010. This was the first increase after several years of declining numbers.

## Student support

Following changes made by government to widen access to student allowances in 2006, the number of recipients has increased by more than 10 percent, on average, per year. In 2010, there were 95,900 student allowances recipients.

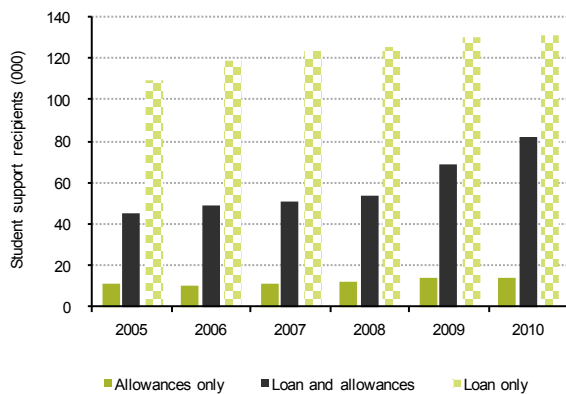
More students have taken up loans since the introduction of interest-free loans in 2006. However, from 2009 to 2010 the number of first-time borrowers decreased slightly. Overall, the number of student loan borrowers increased from 2009 to 2010 to 212,000, including 63,500 first-time borrowers.

In 2010, the average amount borrowed was \$16,700 and the median amount borrowed was \$11,400. In 2005, before the introduction of interest-free loans, the median balance was \$10,400.

There were 587,000 New Zealanders with a student loan balance with Inland Revenue in 2010, up 4.6 percent on the previous year. However, 70 percent of people with a student loan owed less than \$15,000, compared to 60 percent in 2009.

Loan repayments to Inland Revenue and the Ministry of Social Development totalled \$754 million for the year ended June 2010. Over 70 percent of repayments are collected via the PAYE system.

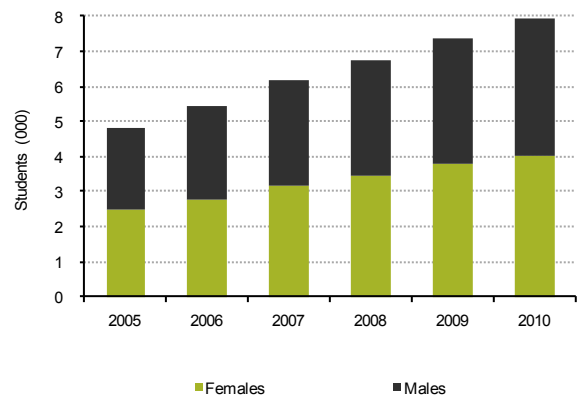
**Figure 1.8** Student allowances recipients and student loan borrowers



## Research in the tertiary education sector

The research performance of the tertiary sector improved in several areas in 2010. The volume of enrolments in doctoral degrees increased significantly, continuing a trend which began in 2006. This trend has been driven mainly by a large increase in international enrolments, which occurred in response to a change in government policy in 2006 to fund international doctoral students on the same basis as domestic students. International students comprised around 35 percent of doctoral enrolments in 2010, compared to 14 percent in 2005. An encouraging trend has seen continued increases in enrolments of Māori and Pasifika in doctorates.

**Figure 1.9** Participation in doctoral study by gender



As a result of the increased doctoral enrolments, the supervisory load placed on academics has continued to rise, with the number of doctoral enrolments per academic staff at several universities doubling since 2005.

The surge in enrolments at doctoral level has begun to be reflected in doctoral degree completions. There was significant growth in the number of doctoral degrees completed by international students.

The universities showed improvement in research output. Total research output increased at four of the five universities that reported research output in 2010.

As a percentage of world indexed publications, the share of publications and citations produced by researchers at New Zealand tertiary education institutions has been increasing over time.

## Sector capability

The financial performance of the 31 tertiary education institutions improved significantly in 2010. All three sub-sectors performed better on all of the financial viability and sustainability measures monitored by the Tertiary Education Commission. For instance:

- ▲ 28 of the 31 institutions had an operating surplus (before abnormals) above 3 percent of operating revenue – which is one of the Tertiary Education Commission's benchmarks for prudent financial performance, compared to 14 of 33 in 2005.
- ▲ the aggregate operating surplus (before abnormals) of the 31 institutions was 5.2 percent of revenue – against 2.3 percent in 2005, and
- ▲ only one institution had an operating deficit (before abnormals), compared to nine in 2005.

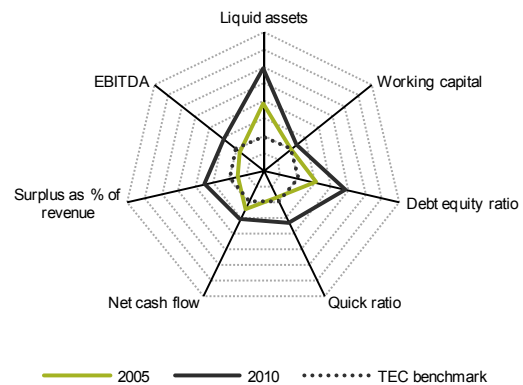
Cash cover – a measure of immediate viability – was also much stronger in 2010 than in 2005.

The institutions have continued to invest in maintaining and improving their capability. Capital expenditure rose by 2.9 percent in 2010 – and was 33 percent above the level of 2005.

While tertiary education institutions had strong financial performance, industry training organisations experienced difficult financial conditions in 2010. Collectively, the industry training organisations had an operating deficit of \$10 million – 3.9 percent of operating revenue. More than half (53 percent) had a deficit, while only 28 percent had a surplus of more than 3 percent of revenue. The corresponding figures for 2005 were 16 percent with a deficit and 73 percent with a surplus of more than 3 percent of revenue.

Two factors contributed to the weak financial performance of the industry training sector. The first was the continued weaker economic conditions, which led to reduced employment in some industries, resulting in a decrease in on-job training. The second factor was the Tertiary Education Commission's review of compliance with industry training rules which led to funding for inactive trainees being reclaimed.

**Figure 1.10** Summary financial position of tertiary education institutions



### Academic and non-academic full-time equivalent staff

The number of academic staff at public tertiary education institutions continued to decrease from 2009 to 2010, reflecting restructuring in some institutions. The non-academic staff also continued to increase, a pattern that started in 2007. The latest decrease in the academic full-time equivalent staff<sup>7</sup> was only small, as the decrease at the universities was largely offset by increases at the polytechnics and wānanga. The latest increase in the non-academic full-time equivalent staff from 2009 to 2010 was strongest in the universities.

### Academic staff (headcount)

At universities, the downward trend in the number of lecturers continued in 2010 as did the upward trend in the number of professors, research only staff and other academic staff. At polytechnics, the pattern among the various types of academic staff has been stable in recent years. From 2009 to 2010, an increase in the number of lecturers at polytechnics was partially offset by a decrease in the number of department heads. At wānanga, the academic workforce has increased in number from a low point in 2007. From 2009 to 2010, there were strong increases in the number of senior lecturers and other academic staff at wānanga.

### Personnel costs

Expenditure on the workforce has represented 58 percent of all expenditure in tertiary education institutions in recent years. In 2010, personnel expenditure amounted to \$2.44 billion, up 5.4 percent on 2009.

<sup>7</sup> Full-time equivalent staff refers to full-time and part-time staff where part-time staff are included as a percentage of full-time employment.



## Investing in knowledge and skills

Total government spending on tertiary education in the year ended June 2011 increased by 0.4 percent on the previous year to reach \$5.4 billion.<sup>8</sup> In inflation-adjusted terms, this represented a decrease of 2.4 percent. When new lending on student loans is excluded, total government expenditure on tertiary education decreased by 0.4 percent and when adjusted for inflation the decrease was 2.9 percent.

In 2010/11, government funding of tertiary education accounted for 2.7 percent of gross domestic product. When new lending on student loans is excluded, it represented 1.9 percent of gross domestic product.

Tertiary education expenditure increased on tuition subsidies, research, provider capability, student allowances and student loans. Expenditure on the Industry Training Fund, Training Opportunities and Youth Training fell.

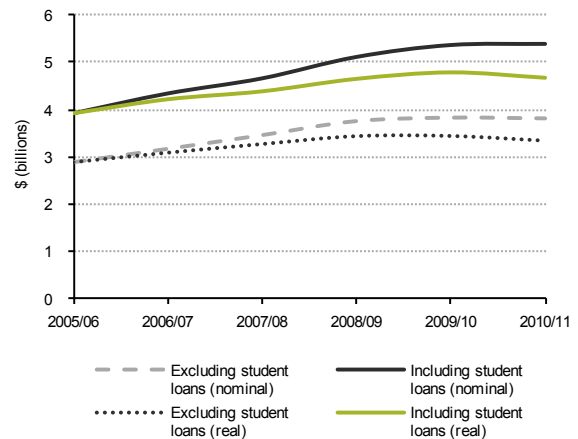
The number of equivalent full-time student places funded by the Tertiary Education Commission through the student achievement component increased in 2010. Government spending on tuition subsidies also increased as a result of increases in the number of student places and base funding rates.

There was still considerable over-delivery in 2010 in universities and private training establishments, reflecting the impact of the weak labour market in boosting participation in student achievement component-funded courses.

The average domestic tuition fee per equivalent full-time student increased by 5.6 percent at public tertiary education institutions. Part of this increase was due to a continued move away from enrolments in low-cost courses. Overall, the affordability of tertiary education declined in 2010, as the growth in average incomes continued to be modest due to the weaker economic conditions.

The contribution by government towards industry training fell, while the contribution by industry rose in 2010. This resulted in the government's share falling. This fall was a result of a review into industry training and the impact of the weak labour market.

Figure 1.11 Government spending (June years) on tertiary education



<sup>8</sup> Spending on student loans is the new lending in the year.

## 2010 year in brief

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### February

The Ministry of Education publishes three occasional papers: *Training Opportunities: exploring what happens two months later, Tertiary education, skills and productivity* and *Comparing university tuition fees with Performance-Based Research Fund performance*.

### March

Social Development and Employment Minister Paula Bennett announces increases to student allowances and student loan living costs, to take effect from 1 April 2010.

The Ministry of Education publishes two reports: *School leavers' progression to bachelors-level study* and *What do international rankings tell us about the performance of New Zealand universities?* It also publishes a factsheet: *Non-formal and formal learning – adults in education*.

The Tertiary Education Commission releases the educational performance indicators for industry training organisations.

The Ministry of Education publishes two occasional papers: *Labour market outcomes of skills and qualifications* and *Skills, qualifications, experience and the distribution of wages*.

### April

The Industry Training Federation hosts the 7th annual Vocational Education and Training Research Forum in Wellington.

The government announces the ministerial appointments to the polytechnic councils.

### May

Budget 2010 is released and includes: increased funding for international education and more new tertiary places. It also includes a number of savings initiatives, including changes to eligibility for student loans. Budget 2010 also affects student support by introducing a two-year stand-down for permanent residents and Australian citizens, a performance measure for loan eligibility, and an equivalent full-time student unit limit on student loans.

### June

The Ministry of Education publishes a series of six reports on literacy, language and numeracy.

The factsheet *Changes in student allowances in 2009* is published by the Ministry of Education.

### July

The New Zealand Qualifications Framework, Te Taura Here Tohu Mātauranga o Aotearoa, was launched on 1 July 2010. The New Zealand Qualifications Framework replaces the National Qualifications Framework and the New Zealand Register of Quality Assured Qualifications (KiwiQuals). It is one of a number of changes resulting from the Targeted Review of Qualifications conducted by the New Zealand Qualifications Authority.

Guidelines for the assessment of the quality of research in the 2012 Performance-Based Research Fund quality evaluation are released by the Tertiary Education Commission. The new guidelines put greater emphasis on commercial research and the entrepreneurial application of research.

The Ministry of Education publishes two reports: *Comparing Modern Apprenticeships and industry training* and *Are particular school subjects associated with better performance at university?*

The Tertiary Education Commission invites polytechnics, wānanga and private training establishments to apply for 2011 Youth Guarantee funding.

### August

The New Zealand Vice-Chancellors' Committee launches its new brand and name, Universities New Zealand – Te Pōkai Tara.

The Minister for Tertiary Education announces details on how performance-linked funding will be introduced to the tertiary education sector. From 2012, up to 5 percent of student achievement component funding will be linked to the educational performance of tertiary education providers based on a number of performance measures.

The Ministry of Education publishes two reports: *Profile & Trends 2009: New Zealand's Tertiary Education Sector* and *Economic and social indicators of education*.

The Ministry of Education seeks submissions on a proposed new approach to fee regulation – the Annual Maximum Fee Movement. The new fee regulation policy proposes that

tertiary education organisations will be allowed to increase fees and compulsory course costs for all government-funded courses by up to 4 percent from 2011.

The Ministry of Education publishes two occasional papers: *Analysing the performance of New Zealand universities in the 2010 Academic Ranking of World Universities* and *Industry training stocks and flows...and the effects of the economic downturn*.

### September

The September earthquake in Christchurch closes all three tertiary education institutions for a period.

The Tertiary Education Commission releases a report on the 2009 performance of government-funded tertiary education providers.

The Career Services Board announces the appointment of Dr Graeme Benny as the new chief executive for Careers New Zealand. Careers New Zealand also announces Capable Auckland, a strategy to boost Auckland's economy.

The government announced its intention to make changes to the Education Act to clarify the roles and responsibilities of its tertiary education agencies. Under the changes, the Ministry of Education was designated the agency with the responsibility for advising the government on tertiary education policy.

The Ministry of Education publishes *How does New Zealand's education system compare? OECD's Education at a glance 2010*.

### October

A report by the New Zealand Institute of Economic Research shows that government investment in New Zealand's universities provides a significant permanent increase to gross domestic product.

The Tertiary Education Commission publishes *Getting Results in Literacy and Numeracy* – a report indicating an increase in the number of adults participating in education and training that includes a literacy and numeracy component.

The Ministry of Education publishes the *Student Loan Scheme Annual Report 2010*.

The New Zealand Qualifications Authority seeks feedback on proposed changes to the university entrance requirement.

The Tertiary Education Commission has announced a series of changes to funding policy to improve performance in the industry training sector.

### November

Expressions of interest are sought by the Tertiary Education Commission from private training establishments that do not currently receive government funding to apply for student achievement component funding from 2011.

The Ministry of Education publishes *Outputs and outcomes of the government's tertiary education expenditure 2005-2009*.

The Education (Freedom of Association) Amendment Bill passes its second reading in Parliament. The purpose of this bill is to uphold students' rights to freedom of association, by ensuring that no student is compelled to join a student association.

### December

The Ministry of Education publishes *How can tertiary education deliver better value to the economy?*

## 2 THE TERTIARY EDUCATION SYSTEM

### Overview

This chapter describes the organisations that make up the tertiary education sector; the legislation relating to tertiary education; the government agencies responsible for tertiary education; and how the tertiary education system works. Some of the most recent changes to the tertiary education system are separately summarised in the section on system changes in 2011.

New Zealand's third tertiary education strategy was released in December 2009 and, in 2010, tertiary education organisations developed new investment plans based on the goals and priorities of the Tertiary Education Strategy 2010-15.

The New Zealand Qualifications Framework was established in 2010. The new framework covers all qualifications of 40 credits or more, including those developed by universities, polytechnics, wānanga, private training establishments and government training establishments. Information on how the framework contributes to the quality assurance of tertiary education in New Zealand is included in the section on how the tertiary education system works.

Monitoring of government-funded tertiary education providers and industry training organisations was expanded in 2010 to include measures of performance against a set of common education performance indicators. The measures provide an annual snapshot – a summary of performance – covering course pass rates, the completion of qualifications, the retention of students in study and their progression to higher-level tertiary study.

In 2010, tertiary education organisations known as 'other tertiary education providers' became funded on the same basis as private training establishments.<sup>1</sup>

### Tertiary education in New Zealand

Tertiary education in New Zealand includes all post-school education. This means that tertiary programmes delivered in secondary schools such as Gateway, the Secondary-Tertiary Alignment Resource (STAR) and trades academies are also included in the tertiary education system.

Some tertiary education may be referred to as further education. An example is foundation education which provides adult literacy and education for those with low-level qualifications who are looking for employment. Other examples include non-degree certificate and diploma qualifications, learners undertaking industry training, including younger people in apprenticeships, adult and community education and other non-formal adult education.

Tertiary education study at bachelors-degree level and postgraduate level is referred to as 'higher' education.

The many forms of tertiary education make a unique and invaluable contribution to New Zealand's social, economic and environmental development. Tertiary education passes on skills needed in the workforce, gives people the opportunity to build careers, contributes to social cohesion and is responsible for much of the country's innovation and knowledge creation.

<sup>1</sup> Some other tertiary education providers have been funded under Section 321 of the Education Act which covers funding of programmes of national interest.

## Tertiary education organisations

The diversity of the tertiary education sector is evident in the mix of organisations that make it up. There are three kinds of public tertiary education institutions – universities, polytechnics, and wānanga. In addition, there were just under 700 registered private training establishments in 2010 and eight government training establishments. The Education Act also provides for tertiary education providers with special national roles and these are known as ‘other tertiary education providers’.

All tertiary education organisations that receive government funding must meet financial, educational and management quality requirements set by the New Zealand Qualifications Authority to provide safeguards for learners.

### UNIVERSITIES

Universities are primarily concerned with advanced learning, and offer the opportunity to pursue disciplines from the undergraduate level to advanced postgraduate study and research. Universities develop new knowledge that underpins their teaching and they undertake research in a wide range of fields. They are expected to have well-established international links and to meet international standards of scholarship.

There are eight universities, which in 2010 collectively enrolled 179,000 students, including 22,900 international students. These enrolments represented 137,000 equivalent full-time student units.

### INSTITUTES OF TECHNOLOGY AND POLYTECHNICS

Institutes of technology and polytechnics are mainly focused on vocational training at certificate and diploma level, especially in trades and other applied areas, although this role has expanded to meet the increasingly diverse needs of learners and the economy. Polytechnics often have arrangements with industry training organisations to deliver programmes. Many polytechnics offer applied degree-level education and are involved in research activities, particularly applied research and research in technological areas. They provide pathways into tertiary education for adult learners and for learners with low prior qualifications, preparing them to achieve at higher levels.

Polytechnics offer regional tertiary education; there are 18 polytechnics spread throughout New Zealand. The number of students enrolled at polytechnics in 2010 was 187,000, including 12,400 international students. These enrolments represented 80,800 equivalent full-time student units.

### WĀNANGA – MĀORI CENTRES OF TERTIARY LEARNING

Wānanga provide Māori-centred tertiary education that supports te ao Māori, provide pathways for Māori learners into other tertiary education institutions and promote the development of kaupapa Māori provision.

There are three wānanga which offer study at all levels, from foundation education to postgraduate study and research, where āhuetanga Māori (Māori tradition) and tikanga Māori (Māori custom) are an integral part of the programme. In 2010, wānanga had 42,300 students or 25,800 equivalent full-time student units.

### PRIVATE TRAINING ESTABLISHMENTS

Private training establishments offer a range of training. This includes training for specific employers on a full cost-recovery basis, while others are funded by the government for the delivery of, for example, targeted training programmes. Like public tertiary education institutions, some private training establishments have arrangements with industry training organisations to deliver programmes. Some private training establishments may also receive tuition subsidies through the student achievement component, while some receive no Crown funding at all. A substantial number of those that receive no funding are English language schools that cater to full-fee-paying international students.

In 2010, 369 of the 689 registered private training establishments received government funding through the student achievement component or Training Opportunities and Youth Training, the two largest targeted training programmes funded by the Tertiary Education Commission.

The number of students enrolled at private training establishments in 2010 was 75,900, including 10,900 international students. These enrolments represented 42,700 equivalent full-time student units.

### GOVERNMENT TRAINING ESTABLISHMENTS

Eight government agencies provide training, including the New Zealand Armed Services and New Zealand Police. They are each recognised as a government department or a Crown entity, approved by the Minister for Tertiary Education and registered by the New Zealand Qualifications Authority as a tertiary education provider. Government training establishments offer training, subject to the approval and accreditation requirements of the Education Act 1989.

### WORKPLACE-BASED LEARNING

Considerable formal training takes place in the workplace. Some of this is funded through the Industry Training Fund (which includes Modern Apprenticeships), while most of the rest is supported by industry. Workplace-based learning increases the skills of employees.

Workplace-based learning is facilitated by industry training organisations. At the end of 2010, there were 38 industry training organisations in New Zealand, established by particular industries or groups of industries and recognised by the Minister for Tertiary Education under the Industry Training Act 1992.

Industry training organisations facilitate workplace-based learning, by:

- ▲ setting national skill standards for their industry
- ▲ developing appropriate training arrangements for their industry that will lead to qualifications recognised on the New Zealand Qualifications Framework and arranging for the delivery of the training
- ▲ moderating the assessment of training within their industry against the established national standards
- ▲ monitoring training quality
- ▲ providing leadership to industry on skill and training needs, and
- ▲ providing information and advice to employees and their employers.

Workplace-based training aims to raise the workforce skill levels and boost competitive advantage for business. Its delivery is flexible. The training can be conducted on-job, off-job, through a registered training provider, through training provided by other staff in the workplace, or a combination of these. On-job training can take a number of forms. The learning can be self-paced, or the training can be delivered by an experienced staff member or an external trainer. Some businesses run formal training sessions, while others train staff through their workplace tasks. Often, the

relevant industry training organisation will provide training guides and resources. Industry training organisations also have arrangements with tertiary education institutions and private training establishments to deliver programmes

Workplace-based training is jointly funded by the government through the Industry Training Fund and by industry through financial and in-kind contributions. In 2010, industry contributed \$88 million in cash to workplace-based training, representing 34 percent of the total cost.

### NON-FORMAL EDUCATION PROVIDERS

Non-formal learning does not contribute towards gaining a qualification registered on the New Zealand Qualifications Framework.

Government-funded adult and community education is provided by community groups, secondary schools and tertiary education providers. Other non-formal adult learning, which covers any form of intentional organised learning provided by an external body, may be provided by employers, tertiary education providers, schools, clubs or individuals, such as skiing or gym instructors. Government-funded adult and community education is directed to priorities established by government. Some adult and community education programmes do not attract government funding with the costs being met entirely by the learners.

Information from the Adult Literacy and Life Skills Survey showed that 48 percent of New Zealanders aged 25 to 65 years were in some form of study in 2006. Thirty-four percent participated in non-formal study (excluding short seminars), 20 percent were in formal study and 6 percent did both. A further 27 percent engaged in non-formal learning that involved attendance at short seminars, lectures, workshops or special talks that were not part of a course. On average, adults attending courses spent 47 hours in non-formal courses during the year.

## The tertiary education strategy

The government released New Zealand's third tertiary education strategy in December 2009, following a period of consultation in October and November. The Tertiary Education Strategy 2010-15 identified four national goals:

- ▲ provide New Zealanders of all backgrounds with opportunities to gain world-class skills and knowledge
- ▲ raise the skills and knowledge of the current and future workforce to meet labour market demand and social needs
- ▲ produce high-quality research to build on New Zealand's knowledge base, respond to the needs of the economy and address environmental and social challenges, and
- ▲ enable Māori to enjoy education success as Māori.

The strategy identifies seven priorities:

- ▲ increasing the number of young people (those aged under 25 years) achieving qualifications at level 4 and above, particularly degrees
- ▲ increasing the number of Māori students enjoying success at higher qualification levels
- ▲ increasing the number of Pasifika students achieving at higher qualification levels
- ▲ increasing the number of young people moving successfully from school into tertiary education
- ▲ improving the literacy, language and numeracy and skills outcomes from level 1 to 3 study
- ▲ improving the educational and financial performance of providers, and
- ▲ strengthening research outcomes.

In 2010, new investment plans were developed with tertiary education organisations based on the goals and priorities of New Zealand's third tertiary education strategy. In most cases, these plans covered the period 2011 to 2012.

The Tertiary Education Strategy 2010-15 also contains a number of expectations of providers and students. For each type of tertiary education provider, the strategy lists three core roles and a number of expectations as follows:

### UNIVERSITIES ARE TO:

- ▲ undertake research that adds to the store of knowledge
- ▲ provide a wide range of research-led degree and postgraduate education that is of an international standard, and
- ▲ act as sources of critical thinking and intellectual talent.

The government expects universities to:

- ▲ enable a wide range of students to successfully complete degree and postgraduate qualifications
- ▲ undertake internationally recognised original research, and
- ▲ create and share new knowledge that contributes to New Zealand's economic and social development and environmental management.

### POLYTECHNICS ARE TO:

- ▲ deliver vocational education that provides skills for employment
- ▲ undertake applied research that supports vocational learning and technology transfer, and
- ▲ assist progression to higher levels of learning or work through foundation education.

The government expects polytechnics to:

- ▲ enable a wide range of students to complete industry-relevant certificate, diploma and applied degree qualifications
- ▲ enable local access to appropriate tertiary education
- ▲ support students with low literacy, language and numeracy to improve these skills and progress to higher levels of learning, and
- ▲ work with industry to ensure that vocational learning meets industry needs.

### WĀNANGA ARE TO:

- ▲ provide quality education in accordance with kaupapa Māori philosophies, principles and approaches
- ▲ undertake teaching and research that maintains, advances and disseminates knowledge, develops intellectual independence, and assists the application of knowledge regarding āhuetanga Māori according to tikanga Māori, and

- ▲ contribute towards the survival and wellbeing of Māori as a people.

The government expects wānanga to:

- ▲ create and share new Māori knowledge that contributes to whānau, hapū and iwi prosperity and New Zealand's economic, social, cultural and environmental development
- ▲ make an increasing contribution to sector-wide leadership through advancing mātauranga Māori at all qualification levels and across all fields of study, and
- ▲ enable students to complete a range of non-degree, degree and postgraduate qualifications, with clear study paths to higher levels of learning through a Māori paradigm.

#### PRIVATE TRAINING ESTABLISHMENTS ARE TO:

- ▲ offer flexible and responsive education programmes, and
- ▲ focus on specific areas of study.

The government expects private training establishments to:

- ▲ enable students to complete high-quality qualifications that lead to employment or higher-level education
- ▲ deliver tailored learning opportunities, such as marae- and iwi-based provision and Pasifika learning environments, and
- ▲ provide specialised qualifications and training.

#### INDUSTRY TRAINING ORGANISATIONS ARE TO:

- ▲ design national qualifications and run moderation systems to ensure fair, valid and consistent assessment against national standards
- ▲ arrange for the delivery of industry training that enables trainees to attain these standards, and
- ▲ provide leadership to their industries on skill and training matters, identify current and future skill needs, and work with employers and employees to meet those needs.

The government expects industry training organisations to:

- ▲ enable working New Zealanders to complete nationally recognised qualifications
- ▲ create clear pathways towards advanced trade qualifications at level 4 and above, and
- ▲ build and maintain strong support from the industries they serve.

#### ADULT AND COMMUNITY EDUCATION IS TO:

- ▲ serve learners whose first learning experience was unsuccessful
- ▲ assist those seeking pathways into tertiary learning, and
- ▲ assist people who lack the literacy, language and numeracy skills for work and further study.

The government expects adult and community education to:

- ▲ engage learners who have not been well served by education in the past
- ▲ improve the literacy, language and numeracy of individuals and whānau, and
- ▲ contribute to the overall cohesiveness of the community.

#### EXPECTATIONS OF STUDENTS:

- ▲ The government wants students to do well and achieve the best qualifications they can. Government is committed to providing support to assist students financially while they study and it intends to improve the information that students receive to allow them to make good decisions about what and where to study.
- ▲ Given the significant investment by government in tuition subsidies and student support, students are expected to take responsibility for their own performance. While government policy settings need to set clear expectations that students should gain qualifications, students also need to work closely with providers to ensure they achieve to the best of their ability and make the most of their learning environment.

The Tertiary Education Commission used the priority outcomes of the second tertiary education strategy to guide its investment discussions with tertiary education organisations as they developed investment plans for the 2011 to 2012 period.<sup>2</sup>

In June 2010, the Tertiary Education Commission published guidance for tertiary education organisations on developing their next investment plans. Funding for 2011 and 2012 was approved by the Tertiary Education Commission late in 2010.

<sup>2</sup> To consult the strategy itself use the link: [www.minedu.govt.nz/theMinistry/PolicyAndStrategy/TertiaryEducationStrategy.aspx](http://www.minedu.govt.nz/theMinistry/PolicyAndStrategy/TertiaryEducationStrategy.aspx).



## Tertiary education legislation

The main piece of legislation on tertiary education is the Education Act 1989. Among other things, this Act:

- ▲ sets up the government's tertiary education agencies and defines their roles and responsibilities
- ▲ gives the authority for the tertiary education strategy
- ▲ describes the basis for the funding of tertiary education, and
- ▲ defines the constitution and functions of different types of public tertiary education institutions.

In 2007, the Education Act was amended to provide the mechanisms for changes to the administration of tertiary education implemented in 2008. The amendment gave effect to a new system for planning, funding and monitoring the provision of tertiary education. The objective of the amendment was to ensure that the tertiary education sector contributes towards tertiary education outcomes that are more closely aligned with the social, economic and environmental interests of New Zealand.

In 2009, the Act was again amended, this time to enable the implementation of new governance arrangements for institutes of technology and polytechnics. These arrangements aim to improve the capability and effectiveness of polytechnic councils and to allow the government to respond more quickly if polytechnics pose educational or financial performance risks.

There are other pieces of legislation that also apply in tertiary education. In particular, the Industry Training Act 1992 and the Modern Apprenticeship Training Act 2000 cover parts of the system, while aspects of the operation of tertiary education institutions are governed by the State Sector Act 1988, the Crown Entities Act 2004 and the Public Finance Act 1989.

## Government agencies

The main government agencies with a responsibility for tertiary education are the Ministry of Education, the Tertiary Education Commission, the New Zealand Qualifications Authority and Careers New Zealand.

### THE MINISTRY OF EDUCATION

The Ministry of Education is the government department responsible for developing the policy framework for tertiary education and for advising ministers on the development of the tertiary education strategy. It is also responsible for monitoring the success of the strategy, collecting and managing data on tertiary education, and monitoring the performance of the overall system. The Ministry of Education also works with the Ministry of Social Development and Inland Revenue on the system for financial support of students.

### THE TERTIARY EDUCATION COMMISSION

The Tertiary Education Commission, Te Amorangi Mātauranga Matua, is a Crown agent.<sup>3</sup> The Commission is made up of a board of six to nine commissioners appointed by the responsible Minister. The Commission's responsibilities are as follows:

- ▲ giving effect to the tertiary education strategy
- ▲ advising government on the implementation of the tertiary education strategy, tertiary education priorities, sector activities and the performance of the sector
- ▲ allocating the government's tertiary education funding to tertiary education organisations according to funding mechanisms determined by the Minister
- ▲ assessing investment plans and approving funding to steer the tertiary education system
- ▲ monitoring the performance of government-funded tertiary education providers, and
- ▲ conducting research and monitoring in support of its roles.

<sup>3</sup> The minister responsible for a Crown agent may appoint and remove its board members. A Crown agent must give effect to policy when directed by its minister and it also must give effect to directions from the Ministers of State Services and Finance.

### THE NEW ZEALAND QUALIFICATIONS AUTHORITY

The New Zealand Qualifications Authority is also a Crown agent. Like the Tertiary Education Commission, it has a board appointed by the responsible Minister. In 2011, an amendment to the Education Act was passed that updated and strengthened the New Zealand Qualifications Authority's legal powers. In tertiary education, its responsibilities are to:

- ▲ oversee the setting of qualification standards
- ▲ monitor and regularly review qualification standards
- ▲ maintaining a record of qualifications gained and standards met
- ▲ maintain the New Zealand Qualifications Framework and Directory of Assessment Standards, including making rules
- ▲ ensure that programmes or training schemes have assessment and moderation procedures that are fair, equitable and consistent
- ▲ promote and monitor the delivery of inter-institutional programmes and training schemes
- ▲ maintain liaison with overseas certifying and validating bodies and ensure that post-school educational and vocational qualifications maintain international comparability, and
- ▲ evaluate overseas qualifications for immigration and employment purposes.

### CAREERS NEW ZEALAND

Careers New Zealand is a Crown agent that provides information, advice and guidance services designed to help people make informed career choices.<sup>4</sup> Effective career information, advice and guidance provide a link between education, the labour market and the skills, interests and abilities of New Zealanders.

Careers New Zealand's work includes:

- ▲ developing and providing career information
- ▲ providing individuals with advice on how best to use career information
- ▲ providing career guidance services, and

- ▲ developing and enhancing the skills of individuals and organisations that facilitate career information, advice and guidance for others.

To enhance access to career information, advice and guidance, Careers New Zealand has a range of delivery channels – the internet, telephone, texting, and face to face (for individuals and groups). This allows individuals to access Careers New Zealand in a manner that best matches their needs.

As well as these bodies, there are a number of other government agencies that have an involvement with tertiary education.

### THE MINISTRY OF SOCIAL DEVELOPMENT

The Ministry of Social Development is responsible for providing leadership in the areas of social development and social policy, and the delivery of social services, particularly income support.

Financial support is provided to students by StudyLink, a service of the Ministry of Social Development. StudyLink is responsible for the administration and delivery of student loans and student allowances and income support for some students unable to find employment during vacation breaks. This includes assessing entitlements, making payments, and maintaining partnerships with key stakeholders, including other government agencies, tertiary education providers and student groups.

### INLAND REVENUE

Inland Revenue, Te Tari Taake, is responsible for the assessment and collection of student loan repayments once loans have been transferred for collection. Inland Revenue also determines entitlement to interest write-offs for borrowers.

In addition, Inland Revenue is responsible for the implementation of the Student Loan Scheme Act 2011.

### THE DEPARTMENT OF LABOUR

The Department of Labour is the agency that advises the government on all matters to do with New Zealand's labour force. As part of that role, the department collects and analyses information about the skills needed in the labour market and about how the tertiary education system interacts with the labour market.

<sup>4</sup> Careers New Zealand was known as Career Services in 2010.

## How the tertiary education system works

Government's goals for the tertiary education system is to have people equipped with the skills required by the New Zealand economy and to have the system play an important part in supporting industry through innovation. The strategic direction for tertiary education is articulated in the Tertiary Education Strategy 2010-15 (a detailed description of the strategy is provided earlier in this chapter). To enable the implementation of tertiary education priorities, the system is designed to work around four main elements:

- ▲ quality assurance
- ▲ provision of government funding
- ▲ investment and funding decisions – investment plans developed by tertiary education organisations in collaboration with the Tertiary Education Commission steer government funding in tertiary education and align funding with the government's tertiary education strategy, and
- ▲ monitoring of the performance of government-funded tertiary education providers and of the sector as a whole.

### QUALITY ASSURANCE IN TERTIARY EDUCATION IN NEW ZEALAND

Only those tertiary education components, qualifications and providers that have been quality assured by a quality assurance body attract government funding. This applies, for instance, to student achievement component funding, industry training funding, student loans and allowances, Youth Guarantee, Training Opportunities and trades academy funding.

#### QUALITY ASSURANCE

High-quality qualifications and study programmes are a key requirement for students in the tertiary education sector. The tertiary education quality assurance framework has four components:

- ▲ programme approval and accreditation for all government-funded tertiary education providers and initial entry processes of registration of private training establishments
- ▲ self-assessment by government-funded tertiary education providers

- ▲ external evaluation and review by the New Zealand Qualifications Authority, or audit by the New Zealand Universities Academic Audit Unit, and

- ▲ compliance with statutory requirements.

In addition, the Tertiary Education Commission monitors the performance of government-funded tertiary education providers against its performance targets and against a set of common educational performance indicators.

The quality assurance framework ensures that:

- ▲ New Zealand qualifications are regarded as credible and robust, both nationally and internationally
- ▲ learners are achieving quality educational outcomes, and
- ▲ tertiary education organisations are continually strengthening and improving educational outcomes through the use of ongoing organisational self-assessment.

The quality assurance framework recently underwent a major reform. The focus on systems and processes that support delivery of learning by tertiary education organisations has continued. The new system began to be implemented in late 2009.

#### New Zealand Qualifications Authority

The New Zealand Qualifications Authority has an overarching responsibility for the system of quality assurance in tertiary education.

The New Zealand Qualifications Authority has the responsibility for approving and accrediting all qualifications offered by providers, other than for the universities.

One of the mechanisms for managing quality is the **New Zealand Qualifications Framework**.<sup>5</sup> The framework imposes common standards on qualification development and nomenclature. Each qualification has: an assigned level (1 to 10); an outcome statement for the whole qualification and each of its components; a credit value (120 credits is equivalent to one year of full-time study); and a title consistent with other qualifications on the framework. (For a description of the framework go to chapter 3.)

<sup>5</sup> The New Zealand Qualifications Framework replaces the National Qualifications Framework and the New Zealand Register of Quality Assured Qualifications.

**New Zealand Vice-Chancellors’ Committee (also known as Universities New Zealand)**

The New Zealand Vice-Chancellors’ Committee derives its authority from the Education Act 1989. It provides quality assurance for university qualifications through its Committee on University Academic Programmes.

The New Zealand Vice-Chancellors’ Committee established the **New Zealand Universities Academic Audit Unit** to carry out academic quality audits of the eight universities. The unit also identifies and disseminates information on good practice in developing and maintaining quality in higher education and publishes reports and monographs. The unit maintains professional relationships with all quality assurance bodies working in tertiary education in New Zealand, and with similar agencies internationally.

**Quality Assurance Consultative Group (also known as the Inter-Institutional Quality Assurance Bodies Consultative Group)**

Established by the New Zealand Qualifications Authority as a forum for quality assurance bodies, this group brings together the quality assurance oversight bodies – the New Zealand Qualifications Authority, Universities New Zealand, and the Sector Relationship Manager of the Institutes of Technology and Polytechnics. The aim is to provide a system-wide focus on the quality of tertiary education provision and qualifications.

The group provides a forum for quality assurance bodies. It also provides a mechanism for cross-sector initiatives. In the past, these have included establishing working groups to provide input into the policy development relating to the New Zealand Qualifications Framework and credit recognition and transfer.

**QUALITY IMPROVEMENT FOCUS**

The Ministry of Education is responsible for monitoring the progress of the tertiary education sector towards the goals of the Tertiary Education Strategy 2010-15. The first monitoring report since the publication of the new strategy was published in the second half of 2010.

The Ministry has developed a monitoring framework and, over the life of the strategy, will publish a series of monitoring reports and undertake some evaluation of the effect of the strategy.

The Ministry works in close collaboration with the Tertiary Education Commission and the New Zealand Qualifications Authority to ensure that the monitoring of the tertiary education system gathers information and intelligence from the activities of those agencies.

Monitoring provides information that will help provide insight into the extent to which the intended changes are happening. The monitoring information enables understanding of:

- ▲ the contribution of tertiary education to government goals
- ▲ the general direction and trends in tertiary education in relation to the focus areas of the strategy, and
- ▲ overall progress towards the priority outcomes.

The monitoring project:

- ▲ assesses the improvements in outcomes relating to the strategy
- ▲ informs ministers of the overall progress being made against the strategy
- ▲ provides a detailed view of the overall health of the tertiary education system, using a set of enduring indicators against which broader changes can be monitored
- ▲ provides system-level contextual information to inform planning and the decisions of tertiary education organisations and the Tertiary Education Commission
- ▲ provides context for the monitoring of the education Crown entities
- ▲ provides alerts to any possible need to reconsider the policy mix
- ▲ informs the next set of tertiary education priorities and future investment plans, and
- ▲ feeds into developing the next strategy.

## HOW FUNDING WORKS

The tertiary education system funding framework complements the tertiary education strategy. Its purpose is to resource and steer the tertiary education system, while providing tertiary education organisations with the flexibility to operate in responsive and innovative ways. The two largest funding components cover the teaching and learning of domestic students, and research (through centres of research excellence funding and the Performance-Based Research Fund).

### Funding for student achievement

Student achievement component funding provides the government's contribution to the costs of teaching and learning and other costs related directly to student numbers. The volume of provision and the types of qualifications and programmes funded through the student achievement component are approved by the Tertiary Education Commission after assessment of each tertiary education organisation's investment plan.

The student achievement component rates are differentiated by discipline to reflect the costs associated with different types of study. For example, the funding rates for arts courses are lower than those for science courses. These funding categories were last reviewed in 2005. The Tertiary Education Commission calculates and publishes revised funding rates annually.

### Funding for research

The main funding for the research conducted by tertiary education organisations comes through the Performance-Based Research Fund. Under this fund, providers are allocated funding on the basis of their research performance, using a set of performance indicators, complemented by peer assessment of the quality of their research. Before the introduction of the Performance-Based Research Fund, the main funding for the research activities of tertiary education organisations was delivered as part of the student component funding for degree and postgraduate enrolments. The former system of funding research was phased out over the period 2004 to 2006.

In 2002 and 2003, the government invited bids from tertiary education organisations to host centres of research excellence – inter-institutional research networks focused on areas of established research excellence of importance to New Zealand. Seven centres were funded, each for a period of six years. In 2006, bids were invited for extension of the programme and in May 2007 the government announced that the centres would receive \$31.4 million of operating funding

in addition to a one-off capital funding of \$20 million. The following centres were given funding:

- ▲ the Allan Wilson Centre for Molecular Ecology and Evolution (hosted by Massey University) – studying topics ranging from molecular rates of evolution and biodiversity, through to molecular anthropology
- ▲ the Maurice Wilkins Centre for Molecular Biodiscovery (hosted by the University of Auckland) – extracting new knowledge from genomic and proteomic (protein) data
- ▲ The MacDiarmid Institute for Advanced Materials and Nanotechnology (hosted by Victoria University of Wellington) – covering the spectrum from fundamental science to applied technology and combining expertise in chemistry, physics and engineering to discover and understand new materials and technologies
- ▲ the National Centre for Advanced Bio-Protection Technologies (hosted by Lincoln University) – pursuing multidisciplinary research and development to meet the biosecurity and pest management needs of New Zealand
- ▲ the National Research Centre for Growth and Development (hosted by the University of Auckland) – concentrating on the biology of early development and its lifelong consequences for health and disease
- ▲ Ngā Pae o te Māramatanga or 'horizons of insight' (hosted by the University of Auckland) has 16 partner research entities and conducts research of relevance to Māori communities, and
- ▲ Riddet Institute (hosted by Massey University) – advancing knowledge in foods and biologicals.

In addition to these sources of research funding, tertiary education organisations active in research are expected to raise additional research revenue through the contestable science funds supported by the government through the Ministry of Science and Innovation. Tertiary education organisations also bid for contracts to provide research for firms and other organisations that want research reports for the purposes of their businesses.

See chapters 13 and 16 of *Profile & Trends 2010* for more explanations of the research funding system and how its components relate to each other.

## INVESTING IN TERTIARY EDUCATION

The tertiary education strategy spells out the contributions the government expects the tertiary education system to make to national goals. The Tertiary Education Commission's role includes giving effect to the government's tertiary education strategy. The Tertiary Education Commission is also responsible for operating the government's funding mechanisms – allocating funding to tertiary education organisations. The key instrument the Tertiary Education Commission uses for managing these responsibilities is the assessment of investment plans developed by tertiary education organisations.

### Investment plans

Developing an investment plan is the first prerequisite for eligibility for public funding for quality-assured providers. The investment plan sets targets for outcomes, and describes the provision aimed at achieving those outcomes and how success will be measured.

In assessing a plan, the Tertiary Education Commission looks for evidence of the tertiary education provider's alignment with its core roles and priority outcomes outlined in the tertiary education strategy. It also takes account of the past performance of the organisation in meeting its targets. The Tertiary Education Commission approves the funding level for each tertiary education provider and the range and scale of provision the government expects.

In setting the total amount of funding available, the government takes account of cost pressures, expected demographic change, student demand and competing priorities within and outside the education sector. Quality assurance and performance monitoring now has an increased focus on outcomes. There is greater transparency in the performance of the tertiary education system, and of tertiary education organisations within the system, as the quality of performance information improves and is made more widely available to students and the public. Part of each tertiary education organisation's funding will be linked to its performance against educational performance indicators from 2012.

When the Tertiary Education Commission works with tertiary education organisations as they develop their investment plans, a set of output indicators is integrated into plans. These output indicators developed by the Tertiary Education Commission provide an annual snapshot of the educational performance of each provider. They cover course completion rates, qualification completions and the progression and retention of students in study. The investment plan of each tertiary education provider also

states how their engagement with other providers and stakeholders informs their plan.

Tertiary education organisations report on their performance and financial targets in an annual statement of service performance included in their annual reports.

The Tertiary Education Commission, the New Zealand Qualifications Authority and the Ministry of Education also carry out a range of other monitoring activities. This includes monitoring of financial and educational performance against the commitments set out in investment plans.

## System changes in 2011

In January 2011, two polytechnics merged with other tertiary education institutions. Telford Rural Polytechnic merged with Lincoln University and Tairāwhiti Polytechnic merged with the Eastern Institute of Technology. Similarly, four industry training organisations (Local Government, Real Estate, Tranzqual and Social Services) have amalgamated with other industry training organisations during 2011.

In 2011, an amendment to the Education Act was passed that updated and strengthened the New Zealand Qualifications Authority's legal powers, established the new Crown agency, Education New Zealand,<sup>6</sup> and provided for the regulation of compulsory student services fees. It also made minor technical amendments to the Education Act 1989, in relation to international education, and the administration of student loans and allowances by the Ministry of Social Development.

The Ministry provided advice and assistance to the Education and Science Select Committee on the Education (Freedom of Association) Amendment Bill, a private members' bill which made membership of students associations voluntary, instead of compulsory.

<sup>6</sup> A Crown agency responsible for New Zealand's international education promotion and representation worldwide.

## 3 WHAT THE SECTOR PROVIDES

### Overview

This chapter describes New Zealand's tertiary education provision, the New Zealand Qualifications Framework and research and knowledge creation. Some of the most recent changes made to tertiary education provision are separately summarised in the next section.

Provider-based tertiary education continued its focus, in 2010, of having more young people – those aged 24 years and under – achieve qualifications at levels 4 and above on the New Zealand Qualifications Framework. In keeping with this priority for tertiary education, the participation rate in level 4 and higher qualifications by people aged 24 years and under was higher in 2010, at 23 percent, than in 2005, when it was 21 percent. Similarly, the potential for Māori and Pasifika to achieve at level 4 and above has increased. Sixteen percent of Māori aged 24 years and under participated in level 4 and higher qualifications in 2010, compared to 13 percent in 2005. The comparable figures for Pasifika were 18 percent in 2010 and 14 percent in 2005.

In 2010, industry training provision involved 195,000 trainees, down 3.3 percent on 2009. The number of industry trainees decreased in 2010 due mainly to a series of audits, which led to the removal of inactive trainees from funded training.

Almost two thousand 16 and 17 year-old students took up places in 2010 in polytechnics and private training establishments under the Youth Guarantee programme.

At the end of 2010, government amended the Education Act 1989 to make provision for formal secondary-tertiary education partnerships. An example of a partnership is New Zealand's first tertiary high school, which opened in 2010 at the Manukau Institute of Technology in South Auckland. Further examples of secondary-tertiary partnerships resulted from work begun in 2010 to establish trades academies.

In 2010, the the New Zealand Qualifications Authority began to implement the recommendations of the targeted review of qualifications. Focused on qualifications at level 1 to 6 of the New Zealand Qualifications Framework, the targeted review aims to reduce the duplication and proliferation of qualifications, making it easier to understand and compare them, nationally and internationally.

The national priorities for adult and community education have been reduced to three priorities: engaging those learners whose initial learning was not successful, improving the foundation skills of individuals and whānau, and strengthening social cohesion. New quality assurance arrangements designed to refocus adult and community education have been introduced. In 2010, the implementation of the new priorities began in schools and the funding reductions signalled in 2009 took effect. Five university-specific adult and community education national priorities have also been developed. These are described in the next section.

### FORMAL AND NON-FORMAL LEARNING

Learning opportunities within the New Zealand tertiary education system can be categorised as formal (that is, contributing towards a qualification) and non-formal (that is, not contributing to a qualification). Both formal and non-formal learning can be further divided into situations where students are learning at an education provider and situations where students are learning through a relationship with an employer or community organisation.

## Tertiary education provision in New Zealand

New Zealand's tertiary education system provides students with quality-assured qualifications. The New Zealand Qualifications Framework has a standard structure for naming and describing qualifications across levels and types of provision. It describes what learners can expect from a qualification and it enables portability across the system.

Tertiary education in New Zealand provides a wide range of learning, ranging from education in foundation skills to doctoral studies. The system embraces technical and vocational education and training, higher education, workplace training, adult and community education, and tertiary education within the senior secondary school.

While the system has evolved to meet the needs of New Zealand's society and economy, New Zealand also provides learning opportunities for a significant number of tertiary students from other countries.

In addition, the tertiary education sector contributes to national innovation through its research activities; more than 69 percent of New Zealand's indexed research papers come from the tertiary education sector.

Key developments in tertiary education provision in 2010 were the:

- ▲ provision of student places under Youth Guarantee by polytechnics and private training establishments
- ▲ opening of New Zealand's first tertiary high school at the Manukau Institute of Technology in South Auckland
- ▲ start of provision under the Intensive Literacy, Language and Numeracy Fund
- ▲ reductions in funded provision of adult and community education in schools
- ▲ start of reforms to reduce qualification proliferation and duplication at levels 1 to 6 of the New Zealand Qualifications Framework, and
- ▲ implementation in schools of new adult and community education priorities.

## Provider-based tertiary education provision

The government provides some funding for New Zealand students undertaking formal learning. The courses and qualifications delivered by public tertiary education institutions, private training establishments and other tertiary education providers as formal tertiary education comply with the four components of the tertiary education quality assurance framework (see chapter 2). The largest share of government funding is allocated on a per student basis, with differential rates set by subject area. This funding is seen as a contribution towards the costs of education. In most cases, the student is also charged an enrolment fee.

In 2008, an *investment* system was introduced, through which the Tertiary Education Commission makes funding decisions in relation to investment plans (see chapter 2) developed by tertiary education organisations. The Tertiary Education Commission's decisions are based on the quality and relevance of the provision offered and on the past performance of the tertiary education provider.

While the funding per student – called the student achievement component – is the largest fund the Tertiary Education Commission administers, the Commission also administers other funds which provide training programmes targeted to particular types of students, such as Gateway, Youth Guarantee, foundation education-focused Training Opportunities and Modern Apprenticeships (through the Industry Training Fund). Some of those funds are described in more detail later in this report.

While most students in formal tertiary education are New Zealand citizens, international students make up a significant number of formal students (11 percent of all enrolments, in terms of equivalent full-time student units, in 2010). New Zealand attracts learners from a variety of offshore markets – notably Asia, which accounted for 72 percent of international students in 2010.

Although international students are usually required to pay the full costs of their tuition, Australian citizens living in New Zealand are treated as domestic students and pay domestic fees. International students studying towards a recognised doctoral qualification in New Zealand are funded in the same way as domestic doctoral students, and attract student achievement component funding.



## Industry training

Industry training is designed by, and delivered in conjunction with, industry, and counts towards recognised qualifications. The costs of training are met jointly by government and industry. In 2010, the training was administered and supported through 38 industry training organisations that have been established by particular industries or groups of industries.

Industry training organisations facilitate individual training arrangements, purchase off-job training from tertiary education providers and then tailor these arrangements to the needs of learners and employers.

All trainees enter into a training agreement with their employer and most of the training takes place on-job with their progress assessed by registered assessors. On-job training can take a number of forms: the learning can be self-paced, or the training can be delivered by an experienced staff member or an external trainer. In some cases, on-job training is complemented by off-job training.

**Modern Apprenticeships** are an employment-based education initiative aimed at encouraging participation in industry training by young people aged between 16 and 21 years. The initiative combines the mentoring aspect of the apprenticeship tradition with formal industry training that leads to recognised qualifications at levels 3 and/or 4 on the New Zealand Qualifications Framework. The Tertiary Education Commission administers the Modern Apprenticeships initiative and contracts the services of Modern Apprenticeships coordinators. The coordinators promote the initiative, set up the training agreements, and act as mentors to the learners and their employers. They develop an individual training programme for each learner that specifies the qualification(s) and generic skills they will gain, and maps out how this learning will take place.

**Table 3.1** Formal and informal learning provided through the tertiary education system

	Formal	Non-formal
<b>Learning at a tertiary education organisation</b>	<ul style="list-style-type: none"> <li>– Student achievement component-funded students</li> <li>– International students</li> <li>– Learners in targeted training programmes</li> <li>– School students in tertiary education</li> <li>– Students in Secondary-Tertiary Alignment Resource programmes</li> <li>– Industry trainees and modern apprentices (off-job training)</li> <li>– Full-fee paying domestic students</li> </ul>	<ul style="list-style-type: none"> <li>– Learners in ACE through community providers, tertiary education institutions, private training establishments, schools and other community providers</li> <li>– Learners in professional development study</li> </ul>
<b>Employment and community-based learning</b>	<ul style="list-style-type: none"> <li>– Industry trainees and modern apprentices (on-job training)</li> <li>– Learners in Gateway</li> <li>– Students in Secondary-Tertiary Alignment Resource programmes (on-job learning)</li> </ul>	<ul style="list-style-type: none"> <li>– Learners in ACE through community organisations, for example, rural education activities programmes</li> <li>– Learners in adult literacy programmes</li> <li>– Learners in professional development study</li> </ul>

## Targeted training

The government provides several targeted training funds that provide fully subsidised education and training to specific groups. Learners and trainees will be able to achieve credits, or unit standards, on the New Zealand Qualifications Framework when participating in these programmes.

### Training Opportunities

Training Opportunities – a labour market programme for people aged 18 years and over who are considered disadvantaged in terms of employment and educational achievement – split into two programmes from 2011. Sixty percent of the Training Opportunities funding will be used to provide foundation education – programmes focused on literacy and numeracy – and 40 percent of funding will deliver employment training programmes. A fuller description of these changes is provided earlier in this chapter.

## Youth Guarantee

Youth Guarantee aims to:

- ▲ increase the educational achievement of targeted 16 and 17 year-olds by providing them with access to tertiary education in level 1 to 3 qualifications on the New Zealand Qualifications Framework, and
- ▲ improve the transitions from school to tertiary education and work.

Youth Guarantee includes a tertiary education initiative which provides 16 and 17 year-olds who have left school with an opportunity to participate in a range of full-time, full-year<sup>1</sup> vocational courses free of charge.

In 2010, 1,980 students took up places in 18 polytechnics and 10 private training establishments. Providers selected to provide Youth Guarantee programmes in 2010 were those that had been successful at:

- ▲ working with young people, including Māori and Pasifika students
- ▲ delivering vocational programmes at levels 1 to 3
- ▲ embedding literacy and numeracy in teaching
- ▲ providing relevant pastoral care
- ▲ achieving high rates of retention and completion, and
- ▲ providing the programme in places with the highest proportion of unemployed youth.

The funding decisions for Youth Guarantee programmes are made as part of the investing-in-a plan process. In 2010, Youth Guarantee funding supplemented the student achievement component funding for each student's enrolment. This additional funding covered the fees that the learners would otherwise have had to pay plus the costs of support services and pastoral care.

From 2012 onwards, Youth Guarantee and Youth Training will be combined. A new Youth Guarantee Fund has been established. The new Youth Guarantee programme will extend the range of course and study options available to students.

## Adult and community education

Adult and community education (ACE) is non-formal<sup>2</sup> and provides a bridge to further learning opportunities. From 2010 onwards, government-funded adult and community education will focus on three national priorities:

- ▲ engaging learners whose initial learning was not successful
- ▲ improving the literacy, language and numeracy of individuals and whānau, and
- ▲ strengthening social cohesion.

New quality assurance arrangements were introduced in 2010 to support the implementation of the new national priorities. ACE providers are to consult the community, learners and stakeholders, and ensure that the information gathered informs the design and development of specific activities to reflect the needs of target learner groups, as well as the longer-term direction of the organisation's ACE programme.

Significant cuts in government funding of adult and community education were announced in 2009, which took effect from 2010. The reductions required tertiary education organisations to consult with their community and other local ACE organisations to ensure duplication is avoided.

ACE is supported by, and delivered through, a range of tertiary education organisations, including schools; tertiary education institutions; private training establishments; and a range of community organisations, including other tertiary education providers and rural education activities programmes.

ACE Networks are collaborative groups of local ACE providers and practitioners. They provide an opportunity to share information, knowledge and expertise and to work collaboratively to meet community learning needs.

Government-funded ACE programmes in secondary schools included programmes with a focus on literacy, numeracy, computer literacy, sign language, English as a second language and Te Reo. In 2010, there were 20,600 enrolments in school-based adult and community education.

In 2010, government-funded ACE programmes with a focus on the three national ACE priorities were provided in most universities, institutes of technology and polytechnics, and wānanga. This provision attracted an estimated 70,600 learners.

<sup>1</sup> Or 0.8 of an equivalent full-time student unit.

<sup>2</sup> Non-formal learning does not contribute to a recognised qualification.

In 2010, government-funded ACE in communities was provided by 55 organisations, including courses provided by private training establishments and rural education activities programmes.

## Adult literacy, language and numeracy education

This section looks at adult literacy, language and numeracy, including English for speakers of other languages, funded other than through adult and community education.

The Workplace Literacy Fund assists employers to establish workplace literacy projects where employees can access literacy, language and numeracy tuition, through a provider, linked to workplace requirements.

Industry training projects with embedded literacy and numeracy, support industry training organisations to build the capability necessary to effectively include literacy and numeracy in trades training.

In recent years, additional funding has been made available for level 1 to 3 certificate provision that has embedded explicit teaching and assessment of literacy and numeracy.

Training Opportunities, Youth Training and Youth Guarantee programmes also provide opportunities for learners to build their literacy, language and numeracy skills.

Some tertiary education organisations provide flexible, community-based individualised learning for adults. This is often a crucial first step for an individual in building their literacy and numeracy skills.

The Intensive Literacy, Language and Numeracy Fund, introduced in 2010, provides for high-needs individuals who might not be able to access learning at work, such as parents, people who have more casual employment arrangements and people with very low levels of literacy and numeracy. Learning is provided in meaningful contexts such as family literacy (for example, how to prepare a budget) and resettlement.

For the latest information on literacy, language and numeracy see chapter 7 in this report.

There is also a range of support provided for **English for speakers of other languages (ESOL)**. These include:

- ▲ provision of English language skills and resettlement support for migrants and refugees

- ▲ the English for Migrants scheme, which provides English language tuition for migrants to New Zealand who have pre-paid their training, and
- ▲ English for speakers of other languages tuition, which is also provided through other funded provision, including Training Opportunities and student achievement component-funded courses.

## Tertiary education within senior secondary schools

There is a range of options for accessing tertiary education within the senior secondary school.

**Gateway** enables senior secondary school students to access workplace learning as a part of their school education. Students pursue individual learning programmes, gain new skills and knowledge in a workplace or their local community and gain standards that can be credited towards the National Certificate of Educational Achievement or other tertiary qualifications.

The **Secondary-Tertiary Alignment Resource (STAR)** assists schools to meet the needs of senior secondary students by granting additional funding for schools to use in accessing a wide range of courses to provide greater opportunities for senior students. STAR funding is a capped resource available to schools with students in year 11 and above. The objectives of STAR are to enable schools to:

- ▲ facilitate transition to the workplace for students, particularly those intending to go straight into the workforce or those likely to leave school without any formal qualifications
- ▲ provide or purchase tertiary-type study that will meet students' needs, motivate them to achieve, and facilitate their smooth transition to further education, training and employment, and
- ▲ support students to explore career pathways and help them make informed decisions about their schooling and future work or study.

STAR courses can involve work-based learning and/or study towards credits for the National Certificate of Educational Achievement and recognised tertiary qualifications.

### Secondary-tertiary partnerships

At the end of 2010, the government amended the Education Act to make provisions for formal secondary/tertiary education programmes.

New Zealand's first **tertiary high school** programme opened in 2010 at the Manukau Institute of Technology in South Auckland. This programme is intended to help young people make the transition from high school to tertiary education. The Manukau Institute of Technology is based in an area with large Māori and Pasifika populations, high unemployment rates, and lower than average rates of educational achievement.

A tertiary high school is a partnership between the tertiary education institution and contributing schools. It enables students who underperform in school to move into a tertiary environment to study for both school- and tertiary-level vocational qualifications.

By combining the strengths of both a school and a tertiary education institution, the tertiary high school aims to provide a smoother transition for students. This is the first programme of its kind in New Zealand. The students do most of their study in the tertiary environment, while retaining links with their school for age-appropriate activities such as sports and cultural events.

Government intends to see how the tertiary high school benefits the students involved, and whether this model can be applied more broadly across the education system.

Work on establishing 12 **trades academies** began in 2010 and eight of these became operational in 2011, providing over 700 places for 16 and 17 year-olds. The academies allow students to achieve both credits towards the National Certificate of Educational Achievement and a tertiary qualification, while gaining practical skills in the workplace. The initiative operates through partnerships between schools, tertiary institutions, industry training organisations and employers. A further 13 trades academies are expected to open in 2012, providing at least 2,000 places.

Trades academies aim to get more young people actively engaged in education. They offer students who prefer hands-on learning the opportunity to gain the skills required by the New Zealand economy. This initiative aims to provide students with more options for, and information about, learning that will contribute to future employment. The objectives of the trades academies are to:

- ▲ motivate students to stay at school by providing them with a greater range of courses

- ▲ give students a head start on training for vocational qualifications and easier access to employment, and
- ▲ make education institutions more responsive to local and national business and economic needs.

## New Zealand Qualifications Framework

The New Zealand Qualifications Authority was established in 1990 with a key function of having an overview of qualifications in the senior secondary school and tertiary education sectors. The New Zealand Qualifications Authority is responsible for the integrity, currency and accuracy of the New Zealand Qualifications Framework, which was set up in 2010 as a single repository of qualifications.<sup>3</sup>

The New Zealand Qualifications Framework covers all qualifications of 40 credits or more, including those developed by universities, institutes of technology and polytechnics, wānanga, private training establishments, industry training organisations and government training establishments. The framework provides a way of:

- ▲ conveying the skills, knowledge and attributes a graduate has gained through completing a qualification
- ▲ enabling and supporting the provision of high-quality education pathways
- ▲ identifying all quality-assured qualifications and accredited providers in New Zealand
- ▲ requiring the development of integrated and coherent qualifications
- ▲ contributing to the strengthening of Māori as a people by enhancing and advancing mātauranga Māori, and
- ▲ enhancing confidence in the quality and international comparability of New Zealand qualifications.

The register establishes 10 levels of qualifications and qualification titles that can be used at each level, where level 1 is the lowest level of complexity and level 10 is the highest.

For each qualification, there is a statement of learning outcomes that sets out what the whole qualification

<sup>3</sup> Before the introduction of the single register, there was the National Qualifications Framework, comprising national certificates and diplomas and unit standards. This framework became expanded through the development of the New Zealand Register of Quality Assured Qualifications, which included the National Qualifications Framework as a sub-set. The Register of Quality Assured Qualifications included the qualifications developed by universities, polytechnics, wānanga and government training establishments.

represents in terms of the application of knowledge, understanding, skills and attitudes, as well as the components of the qualification.

Each qualification has a specific credit value that represents the amount of learning and assessment that is typically required to achieve the qualification.

### Targeted review of qualifications at levels 1 to 6

In 2010, the following recommendations from the reviews were implemented:

- ▲ establish a unified New Zealand Qualifications Framework
- ▲ require the use of existing quality-assured qualifications, and change the design rules for National and New Zealand qualifications to allow for more inclusion of local components
- ▲ strengthen and standardise qualification outcome statement requirements
- ▲ introduce a mandatory pre-development assessment stage for qualification developers, and
- ▲ provide clear information about whether a qualification is active, inactive or closed.

The targeted review also recommended strengthening industry involvement in qualification development. To implement this recommendation, NZQA is reviewing the qualifications at level 1 to 6 to ensure that they remain relevant, current and fit for purpose.

The qualifications are being reviewed in groups/clusters of similar qualifications. Stakeholders from different an industry sector are meeting industry training organisations, tertiary education providers and government agencies to review the range of qualifications in their sector to ensure they meet the requirements of their workforce, industry or community. The review will propose a suite of qualifications that meet those needs.

**Table 3.2:** Levels and qualification titles for the New Zealand Qualifications Framework, Te Taura Here Tohu Mātauranga o Aotearoa

Level	Name sequence
10	Doctorates
9	Masters degrees
8	Postgraduate diplomas and certificates Bachelors degrees with honours
7	Graduate diplomas and certificates Bachelors degrees
6	Diplomas
5	
4	
3	Certificates
2	
1	

The general qualification definitions are as follows:

**Certificates** may be used in a wide range of contexts across all levels up to and including level 7, and are often used to prepare learners for both employment and further education and training.

**Diplomas** often prepare learners for self-directed application of skills and knowledge. These qualifications often build on prior qualifications or experience and recognise capacity for initiative and judgement in technical, professional and/or managerial roles.

**Graduate certificates and graduate diplomas** are designed primarily as vehicles for graduates to pursue further study at an undergraduate level, either as a bridge to further study in a new area or to broaden and deepen existing knowledge areas.

**Bachelors degrees** provide a systematic and coherent introduction to the knowledge, ideas, principles, concepts, chief research methods and problem-solving techniques of a recognised major subject or subjects. These qualifications involve at least one sequential study programme that prepares learners for postgraduate study and supervised research. Bachelors degree programmes are taught mainly by people engaged in research and emphasise general principles and basic knowledge as the basis for self-directed work and learning.

A **bachelors degree with honours** may be awarded to recognise advanced or distinguished study in advance of a

level 7 bachelors degree. It typically involves an additional year of study and/or research at level 8.

**Postgraduate certificates and postgraduate diplomas** are designed to extend and deepen a learner's knowledge and skills by building on attainment in the principal subject(s) of the qualifying degree. These qualifications provide a systematic and coherent survey of current thinking and research in a particular body of knowledge and may include instruction in relevant research methodologies.

**Masters degrees** are normally designed to build on the principal subject(s) of the qualifying degree. However, the degree may build on relevant knowledge and skills derived from occupational experience, as in the Master of Business Administration (MBA). Different discipline areas have different traditions. Typically, they require learners to demonstrate mastery of theoretically sophisticated subject matter; evaluate critically the findings and discussions of literature; research, analyse and argue from evidence; apply knowledge to new situations; and engage in rigorous intellectual analysis, criticism and problem-solving. A masters degree programme contains a significant element of supervised research, usually resulting in a thesis, dissertation or substantive research paper.

**Doctoral degrees** are research degrees at a significantly higher level than masters, undertaken under the guidance of recognised experts in the field of study. A doctorate is awarded on the basis of an original and substantial contribution to knowledge as judged by independent experts, applying contemporary international standards.

A **higher doctorate** is awarded for independent work of special excellence, as judged by leading international experts. A higher doctorate does not require a learner to have enrolled for the degree; the research on which the awarding of the degree is based will have been completed, and may have been published, over many years.

**Honorary doctorates** are awarded in recognition of exceptional contributions made over time to the creation of knowledge in a discipline, to the institution awarding the degree, to a profession or to society at large.

## Research and knowledge creation and its transfer

The country's innovation system is a complex network of research organisations, educational institutions, industry associations and communities. This system relies on the supply of knowledge, highly skilled workers and financial investment to support the growth of new ideas, products and processes to create economic, social and environmental benefits.

The tertiary education system plays a key role in furthering research and innovation in New Zealand. The advancement of knowledge through education and research is a core function of the tertiary education sector. The tertiary education sector is responsible for the largest share of the country's research output. The sector also undertakes significant research focused on adapting and transferring knowledge and technology. It does this alongside, and sometimes in partnership with, other research organisations, industry and business, community organisations, and government.

In addition, the tertiary education sector is responsible for the training of the research workforce and for producing graduates with skills, knowledge and attributes that enable them to contribute to the innovation system.

The primary roles of tertiary education research activities are to:

- ▲ support degree-level teaching and ensure that degree graduates are of high quality and informed by up-to-date scholarship and developments in the knowledge base
- ▲ train New Zealand's future knowledge creators and innovators
- ▲ contribute to improving the knowledge base through research that generates new knowledge, and
- ▲ interpret new knowledge and disseminate it as a means of influencing people in communities and business.

Universities make an important contribution to the national research effort in the area of basic research,<sup>4</sup> which involves exploring and expanding the frontiers of knowledge. Whereas the Crown research institutes and many other research providers are more likely to focus on applied or strategic research, university-based researchers have greater opportunity to work in basic research because of the

<sup>4</sup> Research that is carried out for the advancement of knowledge, without seeking long-term economic or social benefits or making any effort to apply the results in business or communities.

traditional role of the universities in postgraduate training, and the nature of the funding for research in the universities. The latest available information from the Research and Development Survey, published by Statistics New Zealand in 2011, estimates that almost 50 percent of all research conducted in the tertiary education sector was basic research. The survey reports that, in 2010, around 58 percent of the basic research in New Zealand was conducted in universities.

The government has two major means of promoting and funding research in the sector.

The first is the **centres of research excellence**. The first centres were established during 2002 and 2003. The centres of research excellence have been designed to support world-class research that will contribute to New Zealand's development as a knowledge society. The centres are inter-institutional research networks with researchers working together on a commonly agreed research plan. The seven centres and the areas of study they cover are described in chapter 2, together with the name of the host university.

The second is the **Performance-Based Research Fund**, which was phased in over the period 2004 to 2007. This fund has shifted the basis of research funding from a system based on student enrolments to one where funding is allocated on the basis of research performance, as evidenced through research outputs, external research income and research degree completions by postgraduate students.<sup>5</sup> One consequence of the shift to the Performance-Based Research Fund is that much more information is now collected on research in tertiary education. This includes the quality of the research, the demographics and other characteristics of people conducting research in tertiary education organisations and the relative research performance in different research fields and organisations.

A considerable amount of tertiary education research is also funded through research contracts. Some of these come from government-managed research funds, such as those administered by the government through the Ministry of Science and Innovation. Many other research contracts come from the private sector. In some areas, universities and some polytechnics have entered into more formalised knowledge creation and transfer programmes with the private sector, involving joint research programmes, commercialisation of research outputs and development of research and technology parks.

<sup>5</sup> Detailed information on the operation of the Performance-Based Research Fund can be found in Tertiary Education Commission (2007) *Performance-Based Research Fund: evaluating research excellence – the 2006 assessment*.

## Changes to provision in 2011

### Canterbury earthquake

Following the February 2011 Canterbury earthquake, emergency arrangements were put in place to protect students. As expected, the number of domestic students in Christchurch decreased in 2011 by about 10 percent and the number of international students also fell. The government held funding in Christchurch for 2011 and 2012 at the levels agreed with tertiary education organisations in 2010 in their 2011/12 investment plans. However, as Christchurch continues to recover from the earthquake, demand for trades training is expected to rise and government established a \$48 million contingency to fund this training.

### International tertiary students

On 1 September 2011, the government established Education New Zealand – a new Crown agency to support and grow New Zealand's export education sector.

### Training Opportunities

Training Opportunities – a labour market programme for people aged 18 years and over who are considered disadvantaged in terms of employment and educational achievement – was split into two parts from 2011. Sixty percent of Training Opportunities funding will continue to provide foundation education-focussed programmes. Aimed at improving people's literacy and numeracy, the duration of these programmes has been restricted from 40 to 26 weeks and links to employment strengthened. From 2011, 40 percent of Training Opportunities funding will provide additional labour market programmes. These employment training programmes will be administered by the Ministry of Social Development (through Work and Income). Aimed at Work and Income clients who have been assessed as 'more work ready', three types of employment training will be delivered:

- ▲ programmes focused on core skills needed for first-time employment based on local industry needs, including support to get, and retain, a job on completion of the programme
- ▲ Straight 2 Work programmes, which provide pre-employment training for a particular industry or employer, including trainees being placed in pre-determined jobs and given support in work for a set period of time, and
- ▲ programmes focused on skills that a broader group of employers have expressed a need for and where local employers expect to see growth.

### Trades academies

Eight trades academies became operational in 2011, providing over 700 places for 16 and 17 year-olds.

### Adult and community education at universities

In 2011, the implementation began of university-specific adult and community education national priorities. These are:

- ▲ providing specialised and research-informed higher-level learning that contributes directly to the creation of an advanced and rapidly evolving knowledge economy
- ▲ contributing to the knowledge society through the preservation, dissemination and application of university research
- ▲ promoting the development of critical and reflective thinking, and active and informed citizenship locally, nationally and globally
- ▲ facilitating pathways into and through university education, and
- ▲ building capability in the wider adult and community education sector (while having regard to the Adult and Community Education Professional Development Strategy).

### Targeted review of qualifications

In 2011, the targeted review of level 1 to 6 qualifications on the New Zealand Qualifications Framework covered 16 groups/clusters of qualifications. Included were qualifications covering agriculture, aviation, electrical- and electro-technology, English as a Second Language and food and hospitality. The complete list of qualifications reviewed in 2011, and the proposed list for 2012, can be viewed at: [www.nzqa.govt.nz/studying-in-new-zealand/nzqf/reviews-of-qualifications/quals-review-schedule/](http://www.nzqa.govt.nz/studying-in-new-zealand/nzqf/reviews-of-qualifications/quals-review-schedule/).



## 4 OUTCOMES OF TERTIARY EDUCATION

### Overview

People's earnings reflect the quality of the skills they bring to their workplace. High-level skills help businesses to be more productive. Before the weakening of the New Zealand economy and employment market since 2008, the earnings premium for people with a bachelors or higher qualification was higher. For example, from 2000 to 2005, the earnings of people with a bachelors or higher qualification were 70 percent higher than for people without a qualification. In 2010, the earnings of people with a bachelors or higher qualification were 63 percent higher than for people with no qualification.<sup>1</sup>

People with tertiary qualifications are also more likely to be employed than people without a qualification. While the continued weak economic conditions have led to higher unemployment rates for many groups, people with no qualifications and younger people (who are developing their skills and workplace experience) have had the highest unemployment rates. In 2010, the unemployment rate for people with a bachelors or higher qualification was 4.1 percent, while it was 9.4 percent for people without a qualification. Similarly, the unemployment rate for people with level 1 to 4 certificates or a diploma was 5.8 percent, while for people with only a school qualification it was 8.3 percent.

The proportion of the population aged 15 years and over with a bachelors degree or higher qualification has increased from 10 percent in 2000 to 17 percent in 2010. In turn, the proportion of people without a qualification or only a school qualification has become smaller. The proportion of the population aged 15 years and over with a tertiary qualification increased from 45 percent in 2000 to about 50 percent in 2005. It has remained at this level since then. Of the ethnic groups, Māori had the biggest decrease in the proportion without a qualification over the last 10 years. While the proportion of Pasifika peoples without a qualification increased, those with a bachelors or higher qualification increased from 3.7 percent in 2000 to 5.2 percent in 2010. The proportion of Māori with a bachelors or

higher qualification more than doubled from 2000 to 2010 to 8.1 percent.

The proportion of the adult population holding a bachelors or higher qualification is higher for women than for men. Men continue to be more likely than women to hold tertiary certificates and diplomas. This difference reflects changes in the tertiary education participation trends over the last 15 years, with more women completing bachelors qualifications, and the expansion of industry training, which led to higher proportions of men gaining certificates and diplomas. The proportion of younger people with a bachelors or higher qualification is considerably higher than for older people. In 2010, 29 percent of people aged 25 to 34 years held a bachelors or higher qualification, compared to 18 percent for people aged 45 to 64 years.

Men continued to participate in the labour market at a higher rate than women, but the gap between them is smaller for people with higher-level qualifications. Young men aged 20 to 24 years were most affected by the continued weak employment market – 14 percent of them were not in employment, in study or in a care-giving role in 2010.

### Tertiary education outcomes in 2011

Participation in the labour force increased slightly in the March 2011 quarter for both women and men. However, the weak employment market continued and the numbers of the officially unemployed and jobless were higher in the March 2011 quarter than a year earlier. The government's Youth Guarantee programme aims to engage all young people until the age of 18 years in education that is relevant to their needs and abilities. This provision has been increasing and it is expected to reduce the rate of youth inactivity among 15 to 19 year-olds and lift their participation in tertiary education.

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Analytical tables: Data on tertiary education outcomes relating to employment, incomes and other post-study outcomes is available at: [www.educationcounts.govt.nz/statistics/tertiary\\_education/life\\_after\\_study](http://www.educationcounts.govt.nz/statistics/tertiary_education/life_after_study).

<sup>1</sup> Based on median hourly earnings from the Statistics New Zealand Household Labour Force Survey.

### TERTIARY QUALIFICATIONS

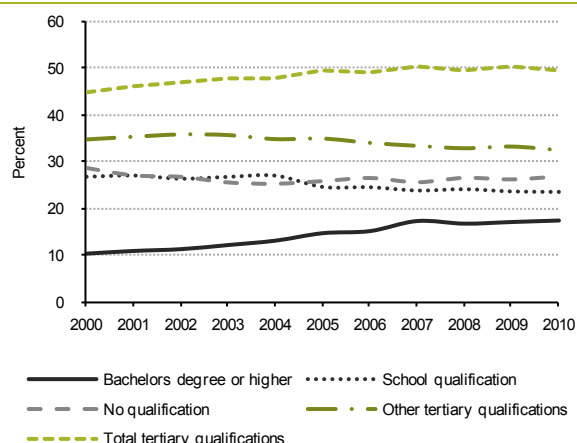
In 2010, half of the New Zealand population aged 15 years and over was tertiary qualified, compared to 45 percent in 2000. The proportion of the population with a bachelors degree increased the most from 2000 to 2010. Over the same period, the proportion without a qualification fell from 29 percent to 27 percent and the proportion with other tertiary qualifications (level 1 to 4 certificates and diplomas) declined from 35 percent to 32 percent.

#### Proportions of the population by highest qualification in 2010

	15 years and over	25 to 64 years
Total tertiary qualifications	49%	61%
Bachelors degree or higher <sup>1</sup>	17%	23%
Other tertiary qualifications <sup>2</sup>	32%	38%
School qualification	24%	18%
No qualification	27%	20%

Source: Statistics New Zealand (2011), Household Labour Force Survey.

Figure 4.1 Population aged 15 years and over (June quarter) by highest qualification



### BACHELORS AND HIGHER QUALIFICATIONS AND AGE

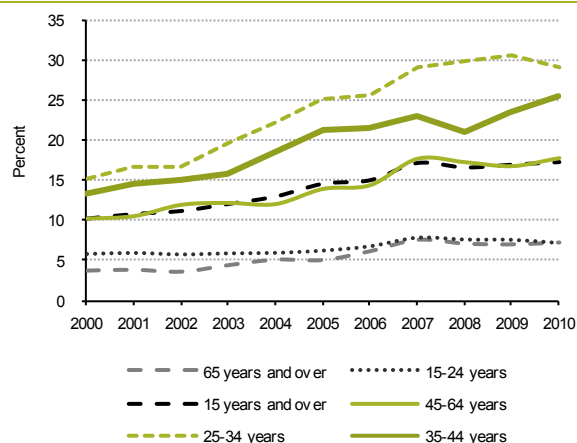
The proportion of the population with a bachelors or higher qualification has remained steady in recent years at 17 percent. Those most likely to hold a bachelors or higher qualification are people aged 25 to 35 years and least likely are younger people and those aged 65 years and over. Of those with a bachelors or higher qualification, the proportion aged 25 to 35 years has increased most rapidly, from 15 percent in 2000 to 29 percent in 2010.

#### Proportions of the population with a bachelors or higher qualification in 2010

15 years and over	17%	(15% in 2005)
15-24 years	7.2%	(6.3% in 2005)
25-34 years	29%	(25% in 2005)
35-44 years	25%	(21% in 2005)
45-64 years	18%	(14% in 2005)
65 years and over	7.1%	(4.9% in 2005)

Source: Statistics New Zealand (2011), Household Labour Force Survey.

Figure 4.2 Population aged 15 years and over (June quarter) with a bachelors or higher qualification by age group



### OTHER TERTIARY QUALIFICATIONS AND AGE

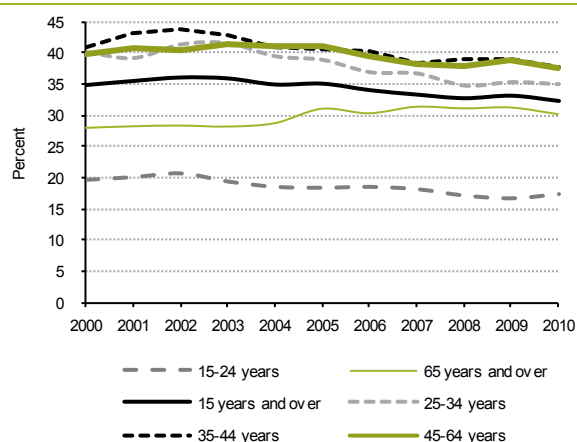
Other tertiary qualifications such as level 1 to 4 certificates or diplomas have been declining for the various age groups, except for people aged 65 years and over. Those aged 25 to 34 years had the biggest decline in the proportion holding 'other' tertiary qualifications. This trend mirrors the rise of higher-level qualifications holders in that age group. The people most likely to hold a level 1 to 4 certificate or diploma are those aged 45 to 64 years, and the least likely are those aged 15 to 24 years.

#### Proportions of the population with other tertiary qualifications in 2010

15 years and over	32%	(35% in 2005)
15-24 years	17%	(18% in 2005)
25-34 years	35%	(39% in 2005)
35-44 years	38%	(40% in 2005)
45-64 years	37%	(41% in 2005)
65 years and over	30%	(31% in 2005)

Source: Statistics New Zealand (2011), Household Labour Force Survey.

Figure 4.3 Population aged 15 years and over (June quarter) with other tertiary qualifications by age group



<sup>1</sup> Bachelors degree or higher qualifications include bachelors degrees with honours, postgraduate and graduate certificates and diplomas, and masters and doctoral degrees.

<sup>2</sup> Other tertiary qualifications include university, teaching and nursing certificates or diplomas, New Zealand certificates or diplomas, technician's certificates, local polytechnic certificates or diplomas, and trade certificates or advanced trade certificates.

**TERTIARY QUALIFICATIONS AND ETHNIC GROUP**

Māori and Pasifika are less likely to hold a bachelors or higher qualification and more likely to hold ‘other’ tertiary qualifications, or no qualification, than Europeans and people in the Other ethnic group. The proportion of Māori with a bachelors or higher qualification was 3.5 percent in 2000 and 8.1 percent in 2010. The comparable figures for Pasifika people were 3.7 percent and 5.2 percent.

**Proportions of the population aged 15 years and over with tertiary qualifications by ethnic group**

	Bachelors degree or higher		Other tertiary qualifications	
	2000	2010	2000	2010
Europeans	10%	17%	37%	34%
Māori	3.5%	8.1%	30%	30%
Pasifika	3.7%	5.2%	26%	24%
Other	20%	29%	22%	25%

Source: Statistics New Zealand (2011), Household Labour Force Survey.

**TERTIARY QUALIFICATIONS AND GENDER**

Women continue to be more likely than men to hold a bachelors or higher qualification. On the other hand, men are more likely than women to hold a level 1 to 4 certificate or diploma.

**Proportions of the population aged 15 years and over with a tertiary qualification by gender in 2010**

Bachelors degree or higher – females	18%	(14% in 2005)
Bachelors degree or higher – males	16%	(15% in 2005)
Other tertiary qualifications – females	29%	(32% in 2005)
Other tertiary qualifications – males	36%	(38% in 2005)

Source: Statistics New Zealand (2011), Household Labour Force Survey.

**EMPLOYMENT ADVANTAGE FOR THE TERTIARY QUALIFIED**

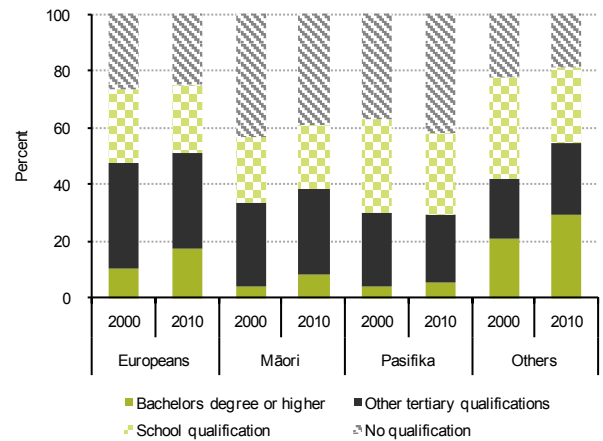
People with tertiary qualifications are more likely to be employed than those without a qualification, or only a school qualification. Unemployment has risen overall as a result of the continued weak economic conditions, but the rise was much sharper for people without a qualification, or only a school qualification. People with bachelors or higher qualifications were the only group in 2010 to have less than 5 percent unemployed. The gap in unemployment between people without a qualification and only a school qualification has narrowed in recent years.

**Unemployment rates of the population aged 15 years and over by highest qualification in 2010**

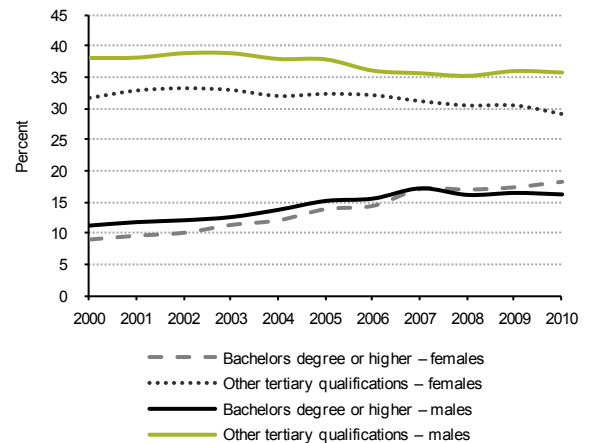
All qualification levels	6.7%	(3.7% in 2005)
Bachelors degree or higher	4.1%	(2.2% in 2005)
Other tertiary qualifications	5.8%	(2.6% in 2005)
School qualification	8.3%	(4.4% in 2005)
No qualification	9.4%	(6.7% in 2005)

Source: Statistics New Zealand (2011), Household Labour Force Survey.

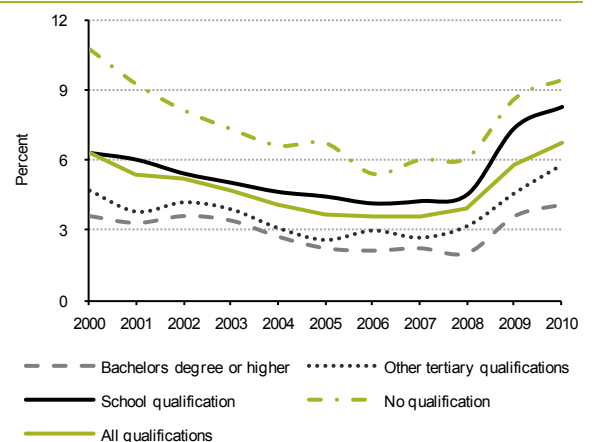
**Figure 4.4** Population aged 15 years and over (June quarter) by highest qualification and ethnic group



**Figure 4.5** Population aged 15 years and over (June quarter) with a tertiary qualification by gender



**Figure 4.6** Unemployment rates (June quarter) for the population aged 15 years and over by highest qualification



**LABOUR FORCE PARTICIPATION**

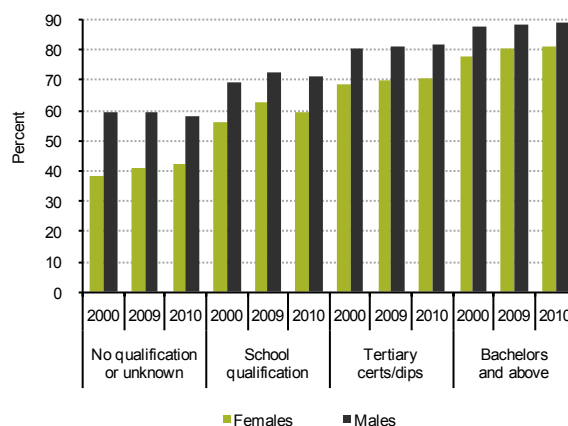
The labour force participation rate increased from 2009 to 2010 for people with bachelors or higher qualifications and it decreased for those with only a school qualification. Women participate in the labour market at lower rates than men. This gap in participation decreases for people with higher-level qualifications. The gap between men and women with bachelors or higher qualifications was 8 percentage points, compared to 16 points for those without a qualification.

**Labour force participation rates of the population aged 15 years and over by highest qualification**

	Females		Males	
	2000	2010	2000	2010
Bachelors degree or higher	78%	81%	88%	89%
Other tertiary qualifications	68%	70%	80%	82%
School qualification	56%	59%	69%	71%
No qualification	39%	42%	60%	58%

Source: Statistics New Zealand (2011), Household Labour Force Survey.

**Figure 4.7** Labour force participation rates (June quarter) by qualification level and gender



**HIGHER EARNINGS FOR THE TERTIARY QUALIFIED**

People with tertiary qualifications generally earn more than those without a qualification or with only a school qualification. The median hourly earnings of people with bachelors or higher qualifications were 63 percent higher in 2010 than for people without a qualification. In 2009, the comparable figure was 66 percent.

The median hourly earnings premium for people with tertiary certificates and diplomas also dropped in 2010. These decreases are likely to be a consequence of wage restraint as a result of the continued weak labour market.

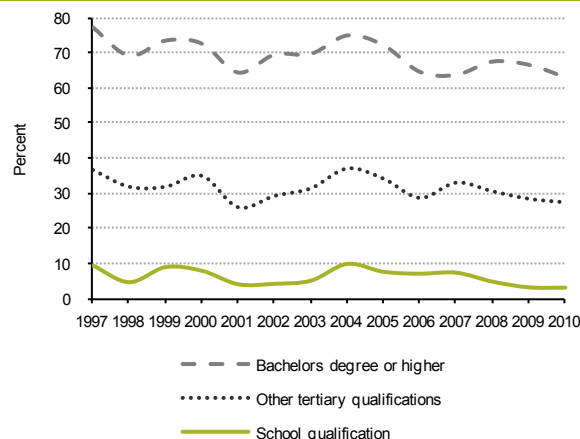
**Median hourly earnings premiums by highest qualification in 2010, compared with those with no qualification**

Bachelors degree or higher	63%	(73% in 2000)
Other tertiary qualifications	27%	(35% in 2000)
School qualification	3.0%	(8.0% in 2000)

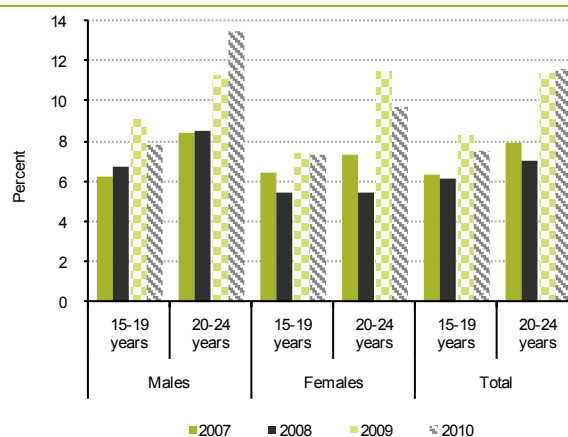
Note: Median earnings are for people aged 15 years and over receiving wages or salaries.

Source: Statistics New Zealand (2011), Household Labour Force Survey.

**Figure 4.8** Median hourly earnings (June quarter) by highest qualification, compared with those with no qualification



**Figure 4.9** Proportions of youth not in employment, formal/informal study or a care-giving role by gender and age group



**YOUTH ACTIVITY**

The proportion of the youth population not in employment, formal/informal study or a care-giving role (NEET) increased between 2009 and 2010, as a result of the continued weak labour market, especially for low-skilled occupations. Young men aged 20 to 24 years were the most affected, with 14 percent estimated to be NEET in 2010.

That younger people (15 to 19 years) have been less affected (see table below) suggests that more of them are staying at school. Also, the proportion of young women aged 20 to 24 years not in employment, formal/informal study or a care-giving role decreased from 12 percent to 10 percent.

**Proportions of youth not in employment or formal/informal study or in a care-giving role**

	2007	2008	2009	2010
15-19 years	6.3%	6.1%	8.3%	7.6%
20-24 years	7.9%	7.0%	11.4%	11.6%

## 5 OVERVIEW OF THE LEARNERS IN TERTIARY EDUCATION<sup>1</sup>

### Summary

In 2010, the proportion of the population aged 15 years and over participating in some form of tertiary learning with an education provider was 12 percent and more than 5 percent participated in learning that contributes towards a recognised qualification in the workplace.

There were 506,000 students<sup>2</sup> enrolled in tertiary education that contributes towards a recognised qualification at providers in 2010. Of these, 45,600 were international students, 24,000 were in targeted training programmes (including 1,980 students who took up Youth Guarantee places), 19,200 were in the Secondary-Tertiary Alignment Resource programme and 15,900 students were in formal study of less than one week's duration.

The number of domestic students enrolled in formal tertiary study of more than one week's duration fell slightly from 2009 to 2010. However, when converted to equivalent full-time student units, domestic enrolments increased from 2009 to 2010. That is, domestic students took on considerably higher study loads in 2010 (on average), a trend which began in 2008.

Domestic students in bachelors degrees had the largest increase in their number from 2009 to 2010, due, in part, to the population bulge of 18 to 19 year-olds continuing their move from school into tertiary education. The continued weak employment conditions also contributed to high levels of participation in tertiary education in 2010 by younger people. The number of domestic students in higher-level qualifications (levels 5 to 10) was more than 3 percent higher in 2010 than in 2009, while enrolments in level 1 to 4 certificates fell substantially. This led to the continuation of the shift from lower- to higher-level qualifications which started in 2005.<sup>3</sup>

Enrolments by international students continued to recover from their low point in 2008. From 2009 to 2010, the

number of international students increased by 5.2 percent to 45,600.

In 2010, there were 194,000 learners engaged in industry-based training, including 11,600 in Modern Apprenticeships.<sup>4</sup> The number of industry trainees fell from 2009 to 2010 as a result of a review of industry training operational policy aimed at improving the performance of industry training and getting better value for money, as well as the continued weak employment conditions in 2010.

There were 11,800 school students in Gateway programmes in 2010. Gateway is designed to help secondary school students experience work-based tertiary education and or achieve credits on the New Zealand Qualifications Framework or to gain employment.

In 2010, 145,000 qualifications were completed by domestic and international students. Of the domestic students who completed a qualification, 69,100 were women and 47,600 were men.

Tertiary education that does not contribute towards a recognised qualification, such as adult and community education, attracted an estimated 109,000 enrolments in 2010. Significant cuts to government funding of this type of tertiary education took place in 2010. There were more than twice as many enrolments in adult and community education in 2009 than in 2010.

### Learners in tertiary education in 2011

The Ministry of Education's April 2011 enrolments collection indicates that the total study load of domestic students has decreased for the first time in recent years. When the first quarter of 2011 was compared with the same quarter in 2010, both the number of students and the equivalent full-time student units showed a decrease. As these early indications represent about three-quarters of the annual enrolments collection, the information needs to be interpreted as provisional as it will be subject to change when the final data becomes available in 2012.

The 2011 decreases are likely to be mainly in non-degree qualifications and reflect a reduction in government funding of short courses and regulatory compliance courses. These decreases were signalled in the 2011 investment plans of the polytechnic sector. Also, in 2011 a portion of funding became linked to performance to provide tertiary education organisations with incentives for improving teaching and

<sup>1</sup> Data in this report and in the analytical tables on the Education Counts website has been revised back to 2003 as tertiary education organisations can submit updates for previous years.

<sup>2</sup> Total provider-based students, excluding students in non-government-funded providers.

<sup>3</sup> In 2005, the reviews by government of non-degree qualifications, and the review of the provision at private training establishments, investigated the quality, relevance and value for money of these provisions and this led to the significant decrease in level 1 to 3 certificate enrolments.

<sup>4</sup> The number of learners engaged in industry training refers to total trainees during year, while Modern Apprenticeship measures in this report are based number of apprentices at 31 December.

pastoral care. This has led to courses for some students being restricted, with the aim to have students only attempt those courses in which they are likely to succeed.

In contrast, the April 2011 snapshot suggests a continued strengthening of the number of international students. International tertiary education students are expected to increase in number by about 4 percent. The early indicator suggests a stronger increase in international equivalent full-time student units and this means higher average study loads per student in 2011.

The downward trend in early domestic enrolments suggests that a considerable number of providers are currently tracking below their investment plan targets for 2011. It is not clear whether the level of enrolments will grow as the year progresses. The displacement of students from Christchurch tertiary education providers, as a result of the February 2011 earthquake, is likely to lead to some providers going over their 103 percent caps as they take on students from Christchurch. The April 2011 enrolments collection showed most Christchurch providers tracking well below their investment plan targets.

The continued weak economic and labour market conditions also suggest that demand for tertiary education may lead to increases in the enrolments as the 2011 year progresses, especially for younger people, who are facing higher unemployment rates.

#### EQUIVALENT FULL-TIME STUDENT UNIT

- ▲ One equivalent full-time student unit is defined as the student workload that would normally be carried out in a single academic year (or a twelve month period) by a student enrolled full-time.
- ▲ The equivalent full-time student unit value of a qualification is to represent the Tertiary Education Commission's assessment of the normal minimum time for a successful full-time student to complete the qualification. The credit value assigned to the course by the quality assurance system is part of the EFTS measure.
- ▲ Qualifications are to be disaggregated into component courses. The Tertiary Education Commission is to assign each approved course an EFTS factor that represents the proportion of the whole qualification that the course constitutes.
- ▲ For courses included in the New Zealand Qualifications Framework, one equivalent full-time student unit is defined as 120 credits, representing one year of full-time study.
- ▲ The equivalent full-time student count in this report is the sum of the EFTS units for a year.

Analytical tables: Data on learners in tertiary education are available at: [www.educationcounts.govt.nz/statistics/tertiary\\_education](http://www.educationcounts.govt.nz/statistics/tertiary_education) – select 'participation' or 'retention and achievement'.

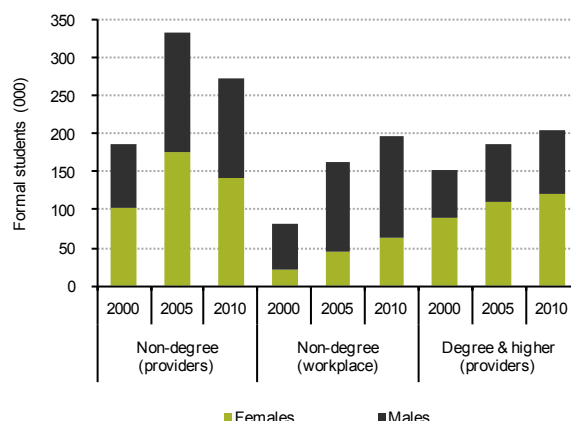
### STUDENT ENROLMENTS IN 2010<sup>1</sup>

There were approx. 684,000 students (incl. international students) in 2010.\*

Provider-based students (more than 1 week's duration)		
Levels 1 to 10		
(excluding industry training/targeted training)	447,000	(unchanged from 2009)
Training Opportunities	14,700	(down 6.9% on 2009)
Youth Training	9,150	(down 8.2% on 2009)
Skill Enhancement	83	(down 82% on 2009)
Non-government-funded (estimate)	15,000	
<b>Total</b>	<b>486,000</b>	
Workplace-based learners (more than 1 week's duration)		
Industry trainees (incl. modern apprentices)	195,000	(down 3.3% on 2009)
Modern Apprenticeships at 31 December	11,600	(down 4.0% on 2009)
Gateway in 2010	11,800	(up 9.8% on 2009)
Tertiary study of less than 1 week's duration		
Secondary-Tertiary Alignment Resource	19,200	(up 1.1% on 2009)
Other short qualifications	15,900	(down 25% on 2009)

\*Excludes students in short courses and the estimate for non-government-funded provision.  
**Notes:** 1. See Table 5.1 for fuller information on the size of the tertiary education sector. 2. The number of industry trainees refers to total trainees during year.

**Figure 5.1** Formal students by level of study, setting and gender

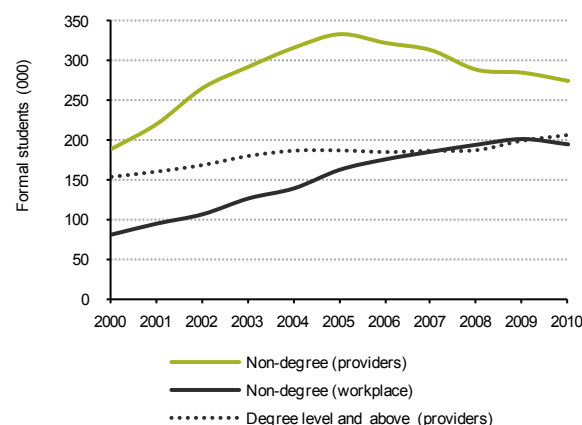


### TRENDS IN FORMAL EDUCATION

Enrolments in degree or higher qualifications increased by 3.7 percent from 2009 to 2010. There were 206,000 students in higher-level qualifications in 2010, compared to 274,000 students in lower-level certificates and level 5 to 7 diplomas. Non-degree study at providers continued its downward trend, falling by 3.7 percent from 2009 to 2010.

The number of workplace-based enrolments is expected to decrease from 2009 to 2010, after a steady upward trend in recent years. The decline reflects a review of industry training operational policy, as well as the continued weak employment conditions.

**Figure 5.2** Trends in formal students by level of study and setting



#### Students in provider-based formal study by level and setting in 2010

Non-degree	274,000	(down 3.7% on 2009)	Domestic participation rate 7.3%
Degree or higher	206,000	(up 3.7% on 2009)	Domestic participation rate 5.2%

**Source:** Ministry of Education and Tertiary Education Commission.

### NON-FORMAL STUDENTS

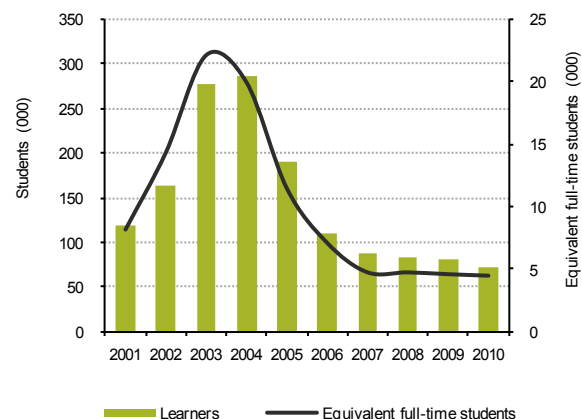
Significant cuts in government funding of adult and community education (ACE) were announced in 2009, to take effect in 2010. Twenty-three lead schools were funded in 2010 for \$2.8 million (excluding goods and services tax) which provided ACE in schools to 20,600 students. There were also 732 students in ACE in 2010 through partner schools which operate under the lead schools. Provisional data indicates that there were also some 16,900 students undertaking ACE in community organisations.

#### Estimated numbers of students in non-formal tertiary study in 2010

Adult and community education		
Tertiary education institutions	70,600	(down 12% from 2009)
Private training establishments	1,210	(up 93% on 2009)
Schools	20,600	(154,000 in 2009)

**Source:** Tertiary Education Commission.

**Figure 5.3** Non-formal students in tertiary education institutions



<sup>1</sup> These highlights refer to students enrolled at any time during the year with a tertiary education provider in formal study (that is, contributing towards a recognised qualification) of more than one week's duration, unless otherwise stated. Students are counted in each type of programme and qualification level for which they are enrolled so the sum of the components will not add to the totals.

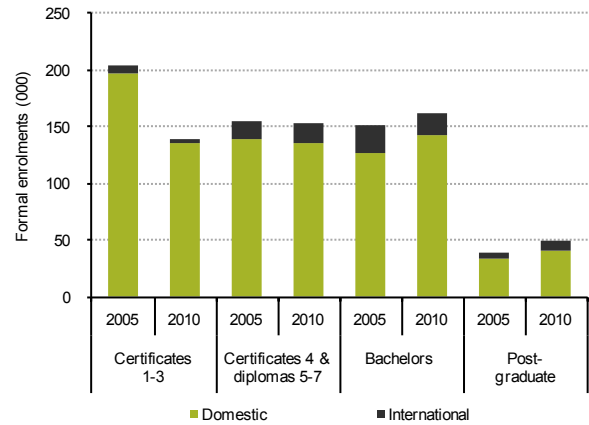
**PROVIDER-BASED ENROLMENTS BY LEVEL OF STUDY**

In 2010, the highest percentage increase in the number of domestic and international enrolments occurred at postgraduate level, followed by level 5 to 7 diplomas and bachelors degrees. The downward trend in level 1 to 4 certificates continued in 2010, although the decrease in level 4 certificates was smaller than the decrease in level 1 to 3 certificates.

**Provider-based formal enrolments in 2010**

	Domestic		International		Total	
	2010	% change from 2009	2010	% change from 2009	2010	% change from 2009
All study levels	420,000	-1.1	45,600	+5.2	466,000	-0.5
Certificates 1-3	135,000	-9.0	4,610	-1.2	139,000	-8.8
Certificates 4	69,900	-2.6	5,250	-4.3	75,100	-2.8
Diplomas 5-7	68,800	+3.5	12,100	+9.9	80,900	+4.4
Bachelors degrees	130,000	+3.2	16,900	+3.9	147,000	+3.3
Graduate certs/dips	12,800	-0.3	2,020	No change	15,000	-0.2
Postgraduate	40,700	+4.2	7,720	+12	48,400	+5.4

**Figure 5.4** Provider-based formal enrolments by level of study



**WORKPLACE-BASED LEARNERS BY LEVEL OF STUDY**

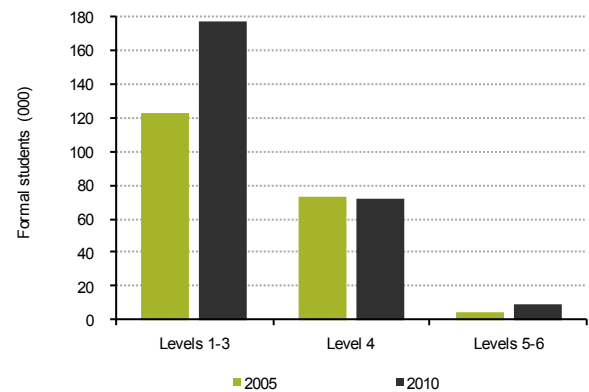
In 2010, almost 70 percent of industry trainees were enrolled in levels 1 to 3 on the New Zealand Qualifications Framework. Industry training organisations can only enrol up to a maximum of 10 percent of their learners at level 5 and above. In 2010, 3.4 percent studied for qualifications at level 5 and above.

**Industry trainees in 2010 by level of study**

All study levels	257,000	(down 2.8% on 2009)
Levels 1-3	177,000	(down 1.1% on 2009)
Level 4	71,700	(down 8.5% on 2009)
Levels 5-7	8,860	(up 16% on 2009)

Source: Tertiary Education Commission.

**Figure 5.5** Industry trainees by level of study



**PROVIDER-BASED EQUIVALENT FULL-TIME STUDENTS**

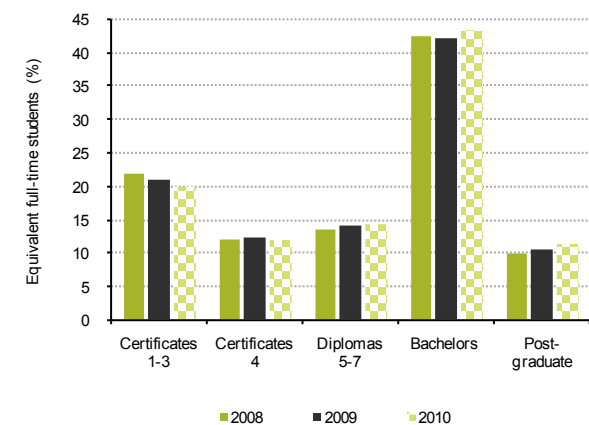
The number of equivalent full-time student units continued to increase in 2010. The total amount of study by domestic students increased by 1.6 percent and study by international students increased by 3.3 percent. Study by domestic students in 2010 continued to shift from lower-level certificates to higher-level qualifications.

**Enrolments expressed in equivalent full-time student units by level of study**

	Domestic		International		% of total enrolments
	2010	% change from 2009	2010	% change from 2009	
All study levels	255,000	+1.6	30,700	+3.3	+10.7
Certificates 1-3	54,600	-3.7	1,910	-6.5	+3.4
Certificates 4	31,000	-2.9	2,600	-7.7	+7.7
Diplomas 5-7	33,500	+2.1	6,900	+4.4	+17.1
Bachelors degrees	104,000	+4.9	12,200	+4.5	+10.5
Graduate certs/dips	6,150	+5.1	1,280	+2.1	+17.2
Honours	15,700	+6.0	2,040	+8.5	+11.5
Masters	6,390	+5.8	1,390	+5.5	+17.8
Doctorates	3,920	-0.6	2,310	+13.1	+37.1

Notes: 1. Honours includes postgraduate certs/dips and bachelors includes degrees and graduate certs/dips.  
2. The method of reporting doctorates was revised from 2009 and data for previous years has also been revised.

**Figure 5.6** Distribution of equivalent full-time students by level of study





### FORMAL STUDENTS BY PROVIDER TYPE

From 2009 to 2010, the number of equivalent full-time student units increased at universities, polytechnics and wānanga, while the amount of study at private training establishments decreased.

In all the sub-sectors the amount of level 1 to 3 certificate study fell from 2009 to 2010, while the amount of study in higher-level qualifications increased.

#### Equivalent full-time students by selected provider type in 2010

All formal enrolments	286,000	(up 1.8% on 2009)
Tertiary education institutions	243,000	(up 2.4% on 2009)
Private training establishments	42,700	(down 1.6% on 2009)
Universities	137,000	(up 2.1% on 2009)
Polytechnics	80,800	(up 2.9% on 2009)
Wānanga	25,800	(up 2.6% on 2009)

Note: Data for the colleges of education has been merged with the universities.

### PARTICIPATION RATES BY ETHNIC GROUP

The participation rate in degree and higher qualifications increased slightly for the European, Māori and Pasifika ethnic groups, while it remained stable for Asians, who have the highest rate at this level. Participation in non-degree study fell for all ethnic groups. Overall, the tertiary education participation rate fell slightly from 2009 to 2010.

#### Participation rates in formal provider-based tertiary education in 2010

	Non-degree		Degree and higher		All levels	
	2005	2010	2005	2010	2005	2010
Europeans	8.1%	6.4%	4.7%	5.1%	12.5%	11.2%
Māori	16.4%	13.2%	3.8%	4.1%	19.5%	16.7%
Pasifika	9.5%	8.7%	3.4%	3.9%	12.5%	12.3%
Asians	10.0%	5.2%	6.6%	7.3%	15.8%	12.1%
Total	9.6%	7.3%	4.8%	5.2%	14.0%	12.1%

Notes: 1. These rates are for New Zealanders aged 15 years and over. 2. The rates are age-standardised and students are counted in each ethnic group they affiliated with.

### INTERNATIONAL STUDENTS

Enrolments by international students continued to increase in 2010, after increasing by 5.2 percent from 2009 to 2010 and by 9.1 percent from 2008 to 2009. However, international enrolments were 9.4 percent down from the peak achieved in 2004. In 2010, international enrolments were higher at every qualification level than in 2009, except for level 1 to 4 certificates.

- ▲ 9.8% of tertiary education enrolments were made by overseas students (11% in terms of equivalent full-time students).
- ▲ 72% of the international students were from Asia.
- ▲ 16% more international students enrolled in doctoral studies in 2010 than in 2009.

Since 2006, doctoral study by international students has been funded on the same basis as domestic doctoral studies, and this has substantially lowered these fees for international students.

Figure 5.7 Equivalent full-time students by provider type

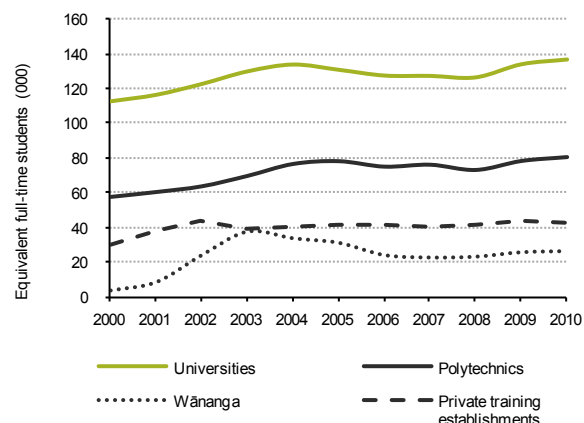


Figure 5.8 Participation rates in provider-based tertiary education by ethnic group

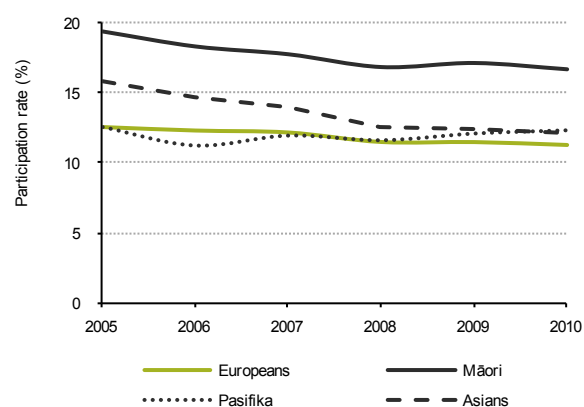
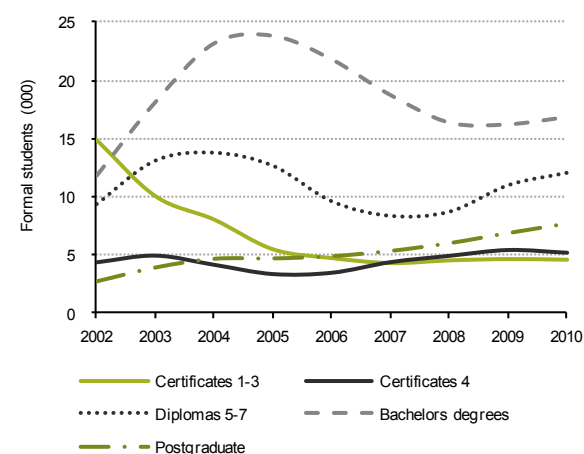


Figure 5.9 International students by level of study



### COMPLETING A QUALIFICATION

In 2010, there were 145,000 qualifications completed by domestic and international students. Of the domestic students who completed one or more qualifications in 2010, 69,100 were women and 47,600 were men.

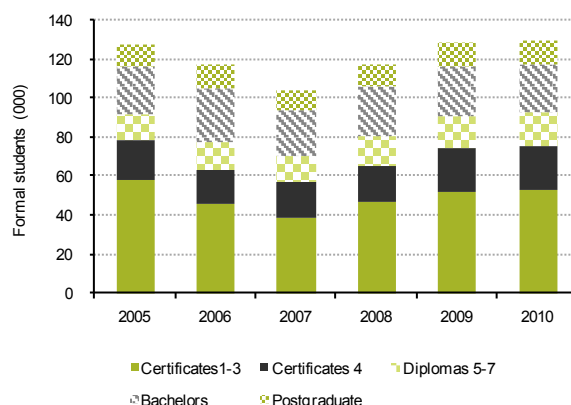
#### Formal qualifications completed in 2010

	Domestic	International
All study levels	130,000	15,000
Certificates 1-3	53,000	2,350
Certificates 4	22,700	1,830
Diplomas 5-7	17,500	4,690
Bachelors degrees	20,700	2,620
Graduate certificates/diplomas	4,220	1,100
Honours	8,300	1,200
Masters	3,040	956
Doctorates	707	283

Note: Honours includes bachelors degrees with honours and postgraduate certificates and diplomas.

In Figure 5.10 bachelors includes degrees and graduate certificates and diplomas.

Figure 5.10 Qualifications completed by formal domestic students by level of study



### WORKPLACE-BASED ACHIEVEMENT

There were 50,800 national certificates awarded in 2010. This was 16 percent higher than in 2009. However, the review of industry training operational policy and the introduction of performance-based funding have led to some shifts in the data for the 2010 year.

#### National certificates completed in 2010

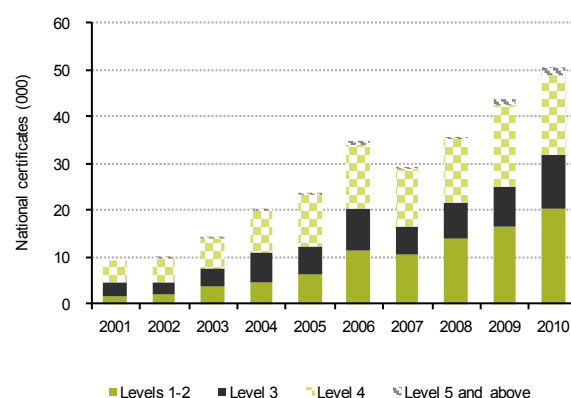
All levels of study	50,800	(up 16% from 2009)
Levels 1-2	20,500	(up 25% from 2009)
Level 3	11,300	(up 28% from 2009)
Level 4	17,100	(down 0.9% from 2009)
Level 5 and above	1,860	(up 68% from 2009)

#### Gateway students going on to further study or employment in 2010

To education	71%	(72% in 2009)
To employment	24%	(24% in 2009)

Source: Tertiary Education Commission.

Figure 5.11 National certificates completed by level of study



### MORE STUDENTS RETAINED IN STUDY IN 2010

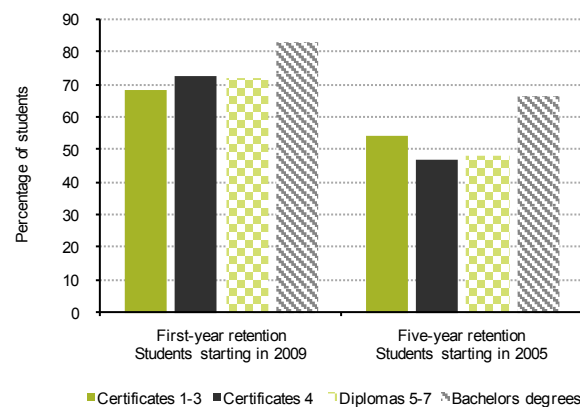
The five-year retention rates of students who started study in 2005 were higher than for students who started study in 2001 at most qualification levels. The biggest increases were for students at bachelors, masters and doctorate level.

#### Five-year retention rates for domestic formal students

	Starting year 2001	Starting year 2005
All study levels	54%	55%
Certificates 1-3	54%	54%
Certificates 4	48%	47%
Diplomas 5-7	46%	48%
Bachelors degrees	62%	66%
Graduate certificates/diplomas	49%	56%
Honours	70%	71%
Masters	59%	71%
Doctorates	72%	80%

Note: Honours includes bachelors degrees with honours and postgraduate certificates and diplomas.

Figure 5.12 First-year and five-year retention rates for domestic formal students



**Table 5.1** Size of the tertiary education sector by level of study

Estimated numbers of students/learners	Certificates 1-3	Certificates 4 and diplomas 5-7	Bachelors	Postgraduate	Total
<b>Formal students</b>					
<b>Provider based</b>					
Domestic students (excl. industry training and targeted training)*	122,466	127,544	141,577	40,675	401,606
International students (excl. industry training and targeted training)*	4,253	16,638	18,855	7,721	44,987
Students in non-government-funded providers	10,000	5,000	-	-	15,000
Targeted training programmes					
– Training Opportunities	14,729	-	-	-	14,729
– Youth Training	9,146	-	-	-	9,146
– Skill Enhancement	-	83	-	-	83
Students in qualifications of > 1 week's duration	160,594	149,265	160,432	48,396	485,551
Secondary-Tertiary Alignment Resource < 1 week's duration	18,775	389	236	-	19,228
Students in qualifications of < 1 week's duration	12,689	3,143	97	2	15,873
Total provider-based students	192,058	152,797	160,765	48,398	520,652
<b>Workplace-based</b>					
– Learners in industry training (including Modern Apprenticeships)	125,931	57,375	-	-	194,940
– Gateway	11,811	-	-	-	11,811
Total workplace-based learners	139,034	67,717	-	-	206,751
<b>Total provider- and workplace-based learners</b>	<b>331,092</b>	<b>220,514</b>	<b>160,765</b>	<b>48,398</b>	<b>727,403</b>
<b>Non-formal students</b>					
ACE** through tertiary education institutions					71,806
International students in non-formal qualifications					3,774
Adult literacy and English as a second or other language (estimated funded learners)					N/A
ACE funded through schools					20,600
ACE through community organisations (provisional)					16,900
<b>Student component-funded learners</b>	<b>119,432</b>	<b>124,152</b>	<b>142,092</b>	<b>43,336</b>	<b>400,123</b>

**Notes:**

1. Provider-based students are counted in each type of programme they enrol in, so the sum of the components will not add to the totals.
2. Training Opportunities, Youth Training, Secondary-Tertiary Alignment Resource, Gateway, and ACE programmes are included in chapters 3 and 7.
3. Industry training, including Modern Apprenticeships, is included in chapter 3.
4. Bachelors includes degrees and graduate certificates and diplomas.
5. In 2010, 55 percent of provider-based enrolments of more than one week's duration were made by women. The comparable figure in 2000 was 56 percent.

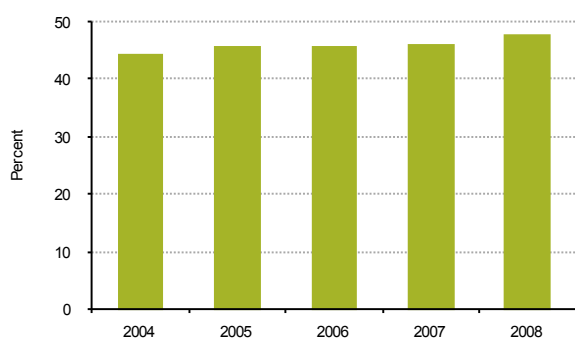
## E-LEARNING IN THE TERTIARY EDUCATION SECTOR

E-learning is learning that is enabled by, or supported with, the use of information communication technologies.<sup>1</sup> Every year more New Zealanders are using the internet and mobile devices such as cell phones. The World Internet Survey found that 83 percent of New Zealand households had a broadband connection in 2009, compared to 69 percent in 2007. The survey also showed that people are increasingly using the internet for information rather than entertainment. These trends have implications for tertiary education.

The Ministry of Education recently published the findings of a study of e-learning in the tertiary sector. This article summarises the key findings from the report, which focuses on e-learning and tertiary education provision over the years from 2004 to 2008. The full report is available at: [www.educationcounts.govt.nz/publications/ict/e-learning-provision-and-participation-trends,-patterns-and-highlights](http://www.educationcounts.govt.nz/publications/ict/e-learning-provision-and-participation-trends,-patterns-and-highlights).

Across the entire system, tertiary education provision with an e-learning component represented less than half of all provision from 2004 to 2008. However, the proportion of courses with an e-learning component rose from 42 percent in 2004 to 48 percent in 2008 (Figure 2.13).

**Figure 5.13** Tertiary education provision with an e-learning component



**Note:** Data in this graph is based on equivalent full-time student units.

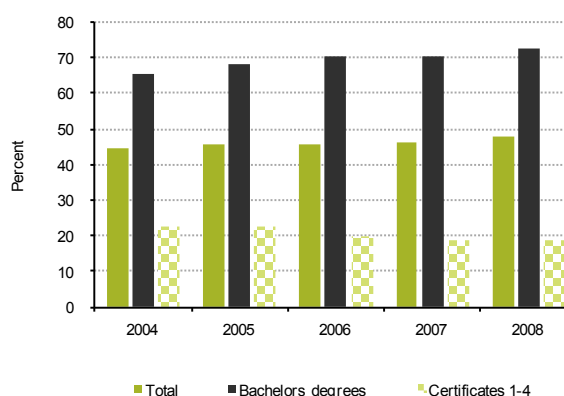
One of the main findings of the report is that provision and take-up of e-learning is influenced by the level of the course. The majority of courses at bachelors level or higher had an e-learning component, while it was much less common at certificate level. Certificate-level provision with an e-learning component decreased from 2004 to 2008, while degree-level provision with an e-learning component increased over this period. In part, the reduction at certificate level was a result of substantial declines in the provision of certificate-level qualifications, reflecting the continued effects of tighter funding rules.

Courses in the fields of information technology, management and commerce, natural and physical sciences, and society and culture had more e-learning provision than some of the more applied fields such as engineering, architecture and building, health, creative arts and education.

The one common theme among the courses in fields with high e-learning provision is that they are more theoretically based than courses in the fields with low e-learning provision. The latter all have a large practical component which does not lend itself easily to e-learning.

Consequently, some programmes of study undertaken by students will include one or more courses with an e-learning component, while other programmes may be based entirely on face-to-face provision.

**Figure 5.14** Tertiary education provision with an e-learning component by level of study



<sup>1</sup> For more details on tertiary e-learning refer to: [www.minedu.govt.nz/NZEducation/EducationPolicies/TertiaryEducation/ELearning/WhatIsELearning.aspx](http://www.minedu.govt.nz/NZEducation/EducationPolicies/TertiaryEducation/ELearning/WhatIsELearning.aspx).

There also appear to be institutional factors that influence the provision and take-up of e-learning. For example, degree-level provision at polytechnics contained fewer courses with an e-learning component than at universities, where the majority of courses in degree-level programmes had an e-learning component.

While learners studying at degree level participated more in e-learning than those studying at certificate level, there were patterns among them that suggest a preference for e-learning by some groups. For example, learners in the 18 to 19 years

age group had a higher e-learning participation rate than learners aged 40 years and over. Pasifika learners participated at a higher rate in e-learning at both degree and certificate level than Māori and Europeans. Māori had the lowest rate of participation in courses with an e-learning component. At degree level, men participated at a higher rate in e-learning courses than women. At certificate level, women had a higher e-learning participation rate than men.

## 6 WORKPLACE-BASED LEARNERS

### Overview

The number of industry trainees decreased from 2009 to 2010. A review of industry training operational policy, which led to the removal of inactive trainees from funded training, was the main reason for the decrease in the number of trainees. The decrease followed two years in which the growth in the number of trainees had slowed and since 2008 the relatively high levels of unemployment continued. In 2010, the total number of workers trained throughout the year decreased by 6,660 to 194,000. The removal of inactive trainees from funded training, as part of the industry training operational policy review, led to a stronger decrease in the number of active trainees at 31 December – down by 23,600 to 102,000 trainees.

Modern Apprenticeship numbers also fell from 2009 to 2010. This was the first decrease in the number of modern apprentices since the introduction of the scheme in 2000. Young people who wish to enter a Modern Apprenticeship have to be aged between 16 and 21 years. The decline in the number of modern apprentices may reflect the reluctance of some employers to take on new apprentices at a time of low economic growth. For example, Modern Apprenticeships are widely used by the building and construction industry and the number of trainees in this industry has declined since 2008. In 2009, the government introduced initiatives to extend the timeframe for trainees to find work while still being eligible for training subsidies. These initiatives may counter, or delay, some of the effects of the weak labour market for young people in industries where Modern Apprenticeships are widely used. Trainees who change employers, or lose their jobs, can now continue their training for 12 weeks, double the previous limit.

In contrast, Gateway placements increased from 2009 to 2010 by almost 10 percent. Aimed at offering senior secondary students workplace-based learning, Gateway has expanded substantially since its introduction in 2001. There were also 1,980 places made available in 2010 for 16 to 17 year-olds through Youth Guarantee (see chapter 3 for more information about this programme).

Both the removal of inactive trainees from funded training and the weak labour market have affected industries differently. Based on the number of trainees active on 31 December, four out of every five industry training organisations had fewer industry trainees in 2010 than in

2009. Also, while there were seven industry training organisations with more trainees in 2010 than in 2009, only four of these were medium-sized or large organisations, that is, organisations with over 3,000 trainees. Of these four organisations there were only two – retail trade, and sport, fitness and recreation – which had an increase in the number of trainees in 2009 and in 2010.

There were five industry training organisations each with over 5,000 trainees, which had decreases from 2009 to 2010 of 20 percent and over. New Zealand Industry Training Organisation, which covers leather, meat, dairy and other industries, had the biggest decrease in the number of trainees, down from 12,000 in 2009 to just below 6,000 in 2010. Competenz, which covers engineering, food and manufacturing, had 25 percent fewer learners in 2010 than in 2009. At 9,960 learners, it is now New Zealand's biggest industry training organisation. The other three large organisations with a 20 percent or higher decrease in the number of trainees from 2009 to 2010 were building and construction services, the hospitality trade, and community support services.

## Industry training in 2011

Eight trades academies were established in 2011, providing over 700 places for 16 and 17 year-olds. The academies allow students to earn both National Certificate of Educational Achievement credits and a tertiary qualification, while gaining practical skills in the workplace. The initiative operates through partnerships between schools, tertiary institutions, industry training organisations and employers. A further 13 trades academies are expected to open in 2012, providing at least 2,000 places.

The recent introduction of an online industry training register is expected to cause some delays in publishing industry training statistics for 2011. The new system is intended to enable industry training organisations to eventually report trainee progress on a near real-time basis.

Economic indicators suggest mixed results for the number of learners in industry training in 2011. While gross domestic product increased for the year ended March 2010 for the first time since 2007, unemployment has remained between 6 and 7 percent overall, which is almost double the rate before the New Zealand economy started to contract in 2008. The unemployment rate for people aged 15 to 19 years continued to be high in the first two quarters of 2011, at 28 percent. The continuing effects of the relatively high overall unemployment rate and the high unemployment rate for young people, plus the full-year effect of the changes in industry training which started in mid-2010, mean that the number of industry trainees, including Modern Apprenticeships, is likely to decrease in 2011.

### INDUSTRY TRAINING

Workplace-based learning is designed to facilitate a more skilled and productive workforce. The provision of workplace-based learning is industry led, while jointly funded by government and industry. Those participating in industry training are in employment. They enter individual training agreements with industry training organisations that lay out a programme of learning. Most of the training takes place on-job. The learning can be self-paced, or the training can be delivered by an experienced staff member or an external trainer. In some cases, on-job training is complemented by off-job training.

Industry training, Modern Apprenticeships, Gateway (a programme designed to help secondary school students experience workplace-based learning) and Youth Guarantee (a programme aimed at providing fees-free places for 16 to 17 year-olds to study vocational certificates at tertiary providers) are linked to the New Zealand Qualifications Framework, which means that participants earn credits towards national qualifications. Gateway also aims to assist students to gain employment.

Participation in industry training programmes, including Modern Apprenticeships, is linked to the completion of national certificates and diplomas. Learners can also gain credits through limited credit programmes and supplementary credit programmes.

Analytical tables: Data on workplace-based learners is available at: [www.educationcounts.govt.nz/statistics/tertiary\\_education](http://www.educationcounts.govt.nz/statistics/tertiary_education) – select 'participation' or 'retention and achievement'.

**INDUSTRY TRAINEES<sup>1</sup>**

The number of industry trainees decreased in 2010 due to a review of industry training operational policy, which led to the removal of inactive trainees from the register, and the continuing effects of relatively high levels of unemployment. There were 3.3 percent fewer trainees in 2010 than in 2009. This compared to an increase of 3.6 percent in the total number of industry trainees from 2008 to 2009. Before this, the number of trainees had increased strongly. From 2004 to 2008, the number of trainees increased, on average, by 9.3 percent per year.

**Number of workplace-based learners in 2010**

Total per year (incl. modern apprentices)	195,000	(down 3.3% on 2009)
Males at 31 December	72,600	(down 18% on 2009)
Females at 31 December	29,700	(down 21% on 2009)

**Notes:** 1. There were 102,000 trainees at 31 December 2010 (down 19 percent on 2009). 2. Women are unevenly spread among the various industries and this may reflect employment patterns in the labour market. For example, over 90 percent of hairdressing and community support services trainees were women in 2010. Overall, the proportion of female trainees was 32 percent in 2010.

**Source:** Tertiary Education Commission.

**Figure 6.1** Learners in industry training



**PARTICIPATION IN INDUSTRY TRAINING**

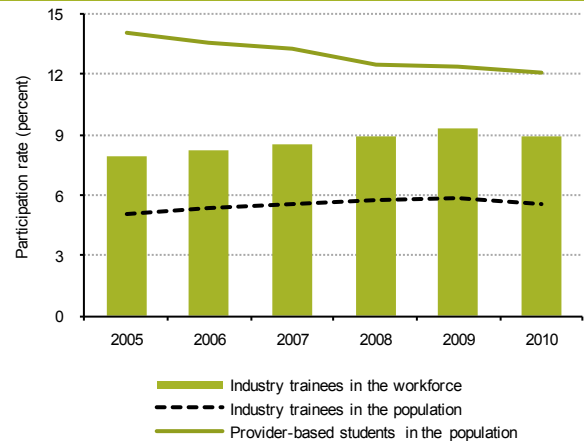
The proportion of the workforce in industry training decreased for the first time in many years. From 2009 to 2010, the proportion of industry trainees decreased from 9.3 percent of the workforce to 8.9 percent. This measure is shown in Figure 6.2, together with the proportions of industry trainees and provider-based students in the population aged 15 years and over.

**Estimates of participation in industry training in the workforce**

	2005	2006	2007	2008	2009	2010
Industry trainees in the workforce	7.9%	8.3%	8.6%	8.9%	9.3%	8.9%

**Source:** Tertiary Education Commission and Statistics New Zealand (2011) *Household Labour Force Survey*.

**Figure 6.2** Participation rates for industry trainees and domestic provider-based students



**EMPLOYERS PARTICIPATING IN TRAINING**

The number of employers providing industry training has decreased since 2007, reflecting more difficult trading conditions in most industries since that time, as well as, the impact of the operational policy review which led to removal of inactive trainees from funded training. From 2009 to 2010, the number of employers providing industry training fell by 1.3 percent.

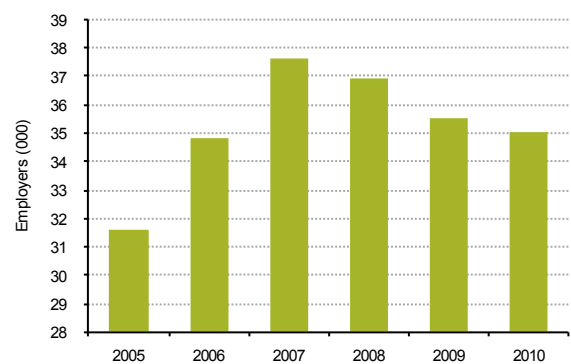
The Tertiary Education Commission estimates that two out of three employers and almost three out of four employees are potentially covered by an industry training organisation in New Zealand. All primary industries and 96 percent of manufacturing and construction industries are covered.

**Number of employers involved in training**

	2005	2008	2009	2010
Employers involved in training	31,600	36,900	35,500	35,000

**Source:** Tertiary Education Commission.

**Figure 6.3** Employers providing workplace-based learning



<sup>1</sup> Unless otherwise stated, industry training numbers are for the whole year, and include modern apprentices.



**INDUSTRY TRAINING ORGANISATIONS**

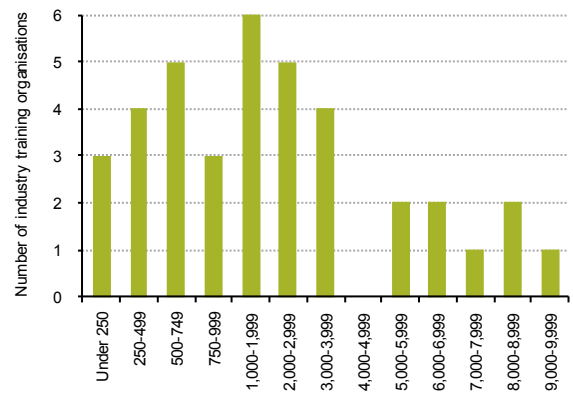
Industry training occurs on the job and industry training organisations make arrangements for workplace assessment and off-job training. Each of the 38 organisations covers a number of specific industry areas.

Industry training organisations vary greatly in size. At 31 December there was an average of 2,690 learners per organisation in 2010 and 3,310 in 2009. The median number of learners per organisation was 1,900 in 2010, 1,970 in 2009 and 1,480 in 2005.

Four out of five industry training organisations had fewer learners in 2010 than in 2009. The largest organisation in 2010, Competenz, which covers engineering, food and manufacturing, had 25 percent fewer learners than in 2009, down to 9,960 learners. New Zealand Industry Training Organisation, which covers leather, meat, dairy and other industries, had over 12,000 learners in 2009 and around 6,000 in 2010.

Source: Tertiary Education Commission.

**Figure 6.4** Distribution of industry training organisations by number of learners (December 2010)



**LEVEL OF TRAINING AND ETHNIC GROUP**

In 2010, almost two-thirds of industry trainees were enrolled in levels 1 to 3 on the New Zealand Qualifications Framework and 31 percent were enrolled at level 4 and above. Less than 3 percent studied for qualifications at level 5 and above – industry training organisations can only enrol up to a maximum of 10 percent of their learners at level 5 and above.

**Proportions of industry trainees by ethnic group in 2010**

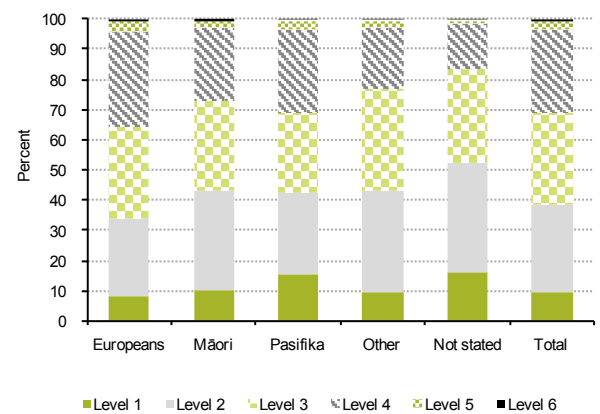
Europeans	60%	(64% in 2005)
Māori	17%	(18% in 2005)
Pasifika	7.2%	(5.7% in 2005)
Other	11%	(7.0% in 2005)

**Notes:**

1. Ethnic group is based on the single prioritised method of reporting.
2. Trainees may be enrolled in programmes at more than one level.

Source: Tertiary Education Commission.

**Figure 6.5** Distribution of industry trainees by level and ethnic group



**AGE PROFILE OF INDUSTRY TRAINEES**

Trainees aged 15 to 19 years had the largest decrease in their number from 2009 to 2010. Trainees aged 30 to 39 years also had a substantial decrease in their number, while the numbers for the groups aged 20 to 29 years and 40 years and over had smaller declines. Consequently, the proportions of trainees aged 15 to 19 years and 30 to 39 years decreased slightly from 2009 to 2010, while the proportions aged 20 to 29 years and 40 years and over increased slightly.

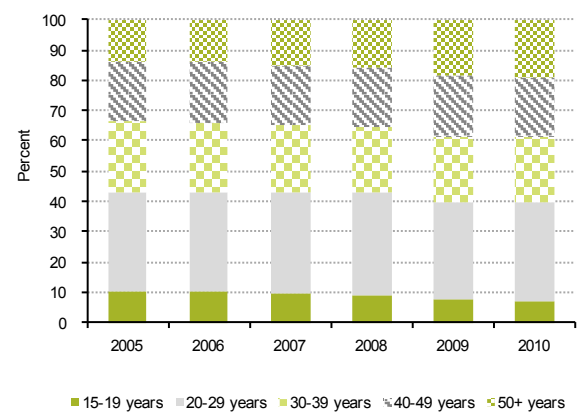
The workforce participation in industry training by age group increased slightly for 15 to 19 year-olds and for people aged 40 years and over.

**Workforce participation in industry training by age group (Household Labour Force Survey)**

	2006	2007	2008	2009	2010
15-19 years	12.4%	12.1%	12.6%	12.4%	12.6%
40+ years	5.3%	5.6%	5.9%	6.4%	6.8%

Source: Tertiary Education Commission and Statistics New Zealand.

**Figure 6.6** Distribution of industry trainees by age group



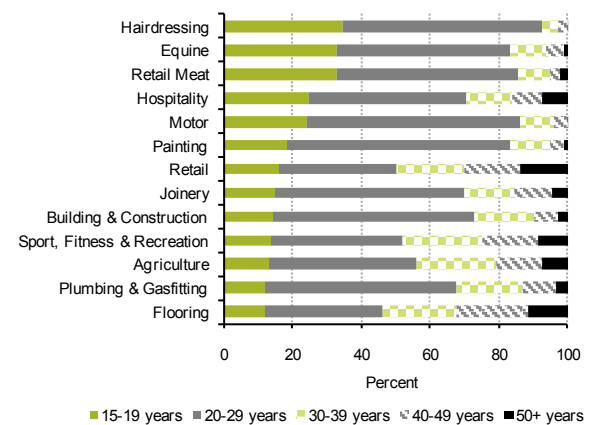
**AGE GROUPS VARY BY INDUSTRY**

The age distribution of trainees varies considerably across industries. In 2010, younger trainees – those aged 15 to 19 years – comprised one-third of the trainees in the equine industry and in meat retailing and a quarter of the trainees in the hospitality and motor trades. The highest proportion of trainees aged 15 to 19 years worked in the hairdressing trade (35 percent).

In 2010, 72 percent of trainees in community support services were aged 40 years and over. Also, the majority of trainees were aged 40 years and over in the following industries: apparel and textile, building service contractors, road transport, extractives, opportunity training, local government and plastics.

Source: Tertiary Education Commission.

**Figure 6.7** Distribution of learners by selected industry and age group (December 2010)



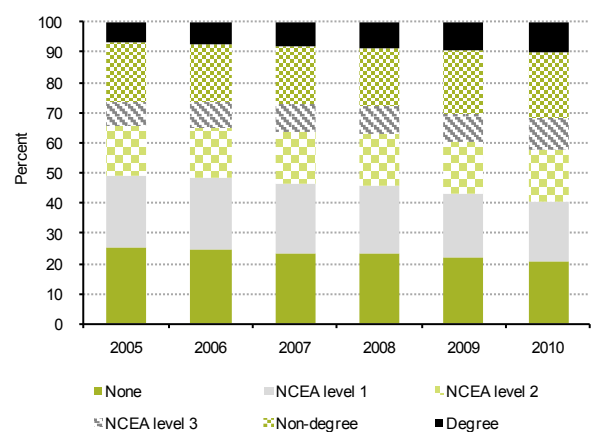
**PROVIDING ACCESS TO QUALIFICATIONS**

In recent years, the number of workers entering training without qualifications has decreased and those with a qualification have increased in number. This trend may partly reflect the improvements in school retention and attainment levels. In 2010, 21 percent of industry trainees had no previous qualification compared to 26 percent in 2005. The proportions of trainees with qualifications have increased from 2005 to 2010: NCEA level 3 up from 8.0 percent to 10 percent; bachelors degrees up from 6.8 percent to 9.7 percent; and non-degree up from 19 percent to 22 percent. The proportion of trainees with NCEA level 2 remained stable over the last five years at 17 percent, while the proportion with NCEA level 1 decreased from 23 percent to 20 percent.

Notes: 1. This is an estimate based on the participants whose previous qualification is known. Previous qualification data is self-reported and is not verified. 2. Qualification categories used here include equivalent qualifications: 5th form refers to attainment at year 11 or equivalent, 6th form to year 12 or equivalent and 7th form to year 13 or equivalent. 3. Non-degree qualifications are level 1 to 4 certificates and level 5 to 7 diplomas/certificates listed on the New Zealand Qualifications Framework.

Source: Tertiary Education Commission.

**Figure 6.8** Distribution of learners by previous highest qualification



**NATIONAL QUALIFICATION ACHIEVEMENT<sup>1</sup>**

There were 50,800 national certificates awarded in 2010. This was 16 percent higher than in 2009. However, the review of industry training operational policy and the introduction of performance-based funding have led to some shifts in the data for the 2010 year.

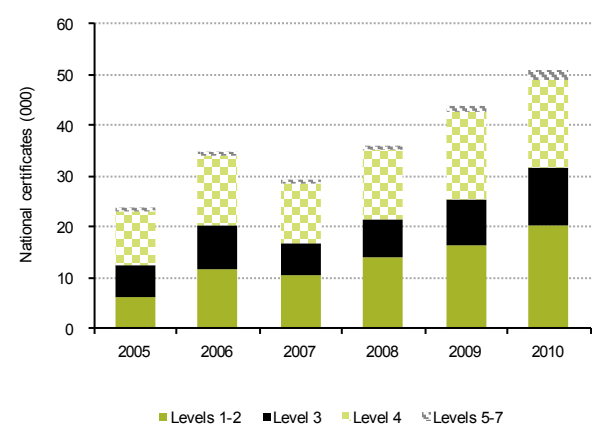
From 2009 to 2010, the number of certificates awarded increased by 25 percent for levels 1 and 2, by 28 percent for level 3 and by 68 percent for levels 5 to 7. National certificates awarded at level 4 decreased in number from 2009 to 2010 by 1.5 percent.

**Number of national certificates awarded**

	2005	2008	2009	2010
Total	23,900	36,000	43,800	50,800
Level 1-2	6,400	14,100	16,400	20,500
Level 3	6,110	7,560	8,880	11,300
Level 4	10,800	13,600	17,300	17,100
Levels 5-7	570	701	1,110	1,860

Source: Tertiary Education Commission.

**Figure 6.9** National certificates gained by qualification level



<sup>1</sup> Industry training data may be revised for previous years and may not match figures previously published.

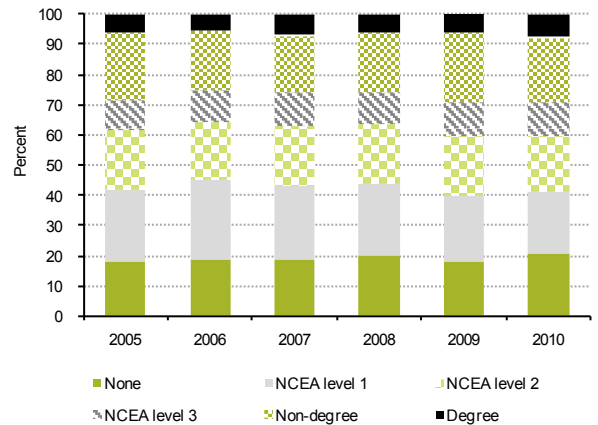
**ACHIEVEMENT BY PREVIOUS QUALIFICATION**

The review of industry training operational policy included the removal of inactive trainees from the register and this, together with the introduction of performance-based funding, has led to some shifts in the data for the 2010 year. For example, the proportion of learners with no previous qualification entering training has decreased, while the proportion of national certificates gained by this group has increased. In contrast, the proportion of learners who entered training with NCEA level 2 has been stable, while the proportion of national certificates gained by this group decreased from 2009 to 2010.

Proportion of national certificates awarded by previous qualification level					
	2006	2007	2008	2009	2010
None	19%	19%	20%	18%	21%
NCEA level 1	26%	24%	24%	22%	20%
NCEA level 2	19%	20%	20%	20%	19%
NCEA level 3	10%	11%	11%	11%	11%

Source: Tertiary Education Commission.

**Figure 6.10** National certificates gained by previous highest qualification



**CREDIT ACHIEVEMENT**

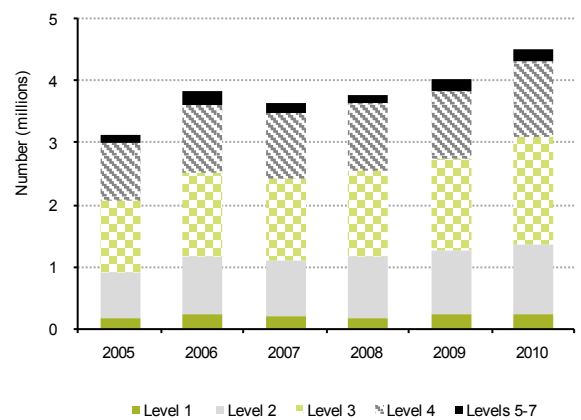
Workplace-based learners achieved 4.5 million credits towards national qualifications in 2010. Credit achievement has become one aspect of performance based funding that began in 2010. Additionally, the credit achievement reporting requirements were reviewed in 2010 by the New Zealand Qualifications Authority. These changes in the reporting requirements require caution to be used when comparing the 2010 credit achievement to previous years.

Proportionately, credit achievement at levels 1 and 2 has been stable, while levels 4 and higher have decreased slightly in favour of credit achievement at level 3.

Proportion of credits achieved by qualification level					
	2006	2007	2008	2009	2010
Level 1	6.0%	5.8%	4.9%	5.7%	5.3%
Level 2	24%	25%	26%	26%	25%
Level 3	36%	36%	37%	36%	38%
Level 4	28%	29%	29%	27%	27%
Levels 5-7	5.8%	4.2%	3.4%	4.6%	4.2%

Source: Tertiary Education Commission.

**Figure 6.11** Credits gained by qualification level



**COHORT PROGRAMME COMPLETION RATE**

Of the industry trainees who started study in 2006, 33 percent of learners had completed their programme of study and gained a national qualification by 2010. Of the cohort of learners who started study in 2003, 36 percent had completed at least one programme after eight years.

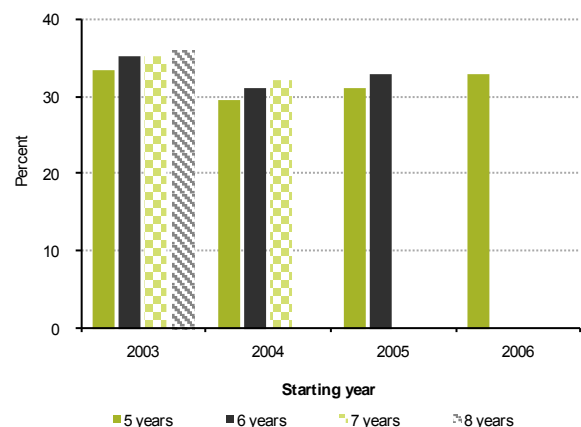
Proportion of learners gaining a qualification by starting year				
	2003	2004	2005	2006
After 5 years	33%	29%	31%	33%
After 6 years	35%	31%	33%	
After 7 years	35%	32%		
After 8 years	36%			

Notes:

1. These programme completion rates are for industry trainees excluding modern apprentices.
2. The 8-year completion rates are only available for learners who commenced study in 2002 and 2003.
3. These completion rates cover all programmes of study of varying durations.

Source: Ministry of Education and Tertiary Education Commission.

**Figure 6.12** Industry training cohort programme completion rates by starting year



### MODERN APPRENTICESHIPS<sup>1</sup>

The number of modern apprentices decreased by 4.0 percent from 2009 to 2010, following a stable year from 2008 to 2009. Over the previous six years, the number of modern apprentices increased, on average, by 17 percent per year. The recent decline may reflect the reluctance of some employers to take on new apprentices at a time of low economic growth. Young people who wish to enter an apprenticeship are mostly aged between 16 and 21 years.

The number of female modern apprentices increased from 2009 to 2010 by 4.7 percent; however, women only accounted for 13 percent of the total number of modern apprenticeships in 2010.

#### Number of modern apprentices at December 2010

All apprentices	11,600	(down 4.0% on 2009)
Males	10,200	(down 5.2% on 2009)
Females	1,460	(up 4.7% on 2009)
Proportion of the workforce (15-19 years)	10%	(9.7% in 2009)

Source: Tertiary Education Commission and Statistics New Zealand.

Figure 6.13 Number of modern apprentices



### APPRENTICES BY ETHNIC GROUP

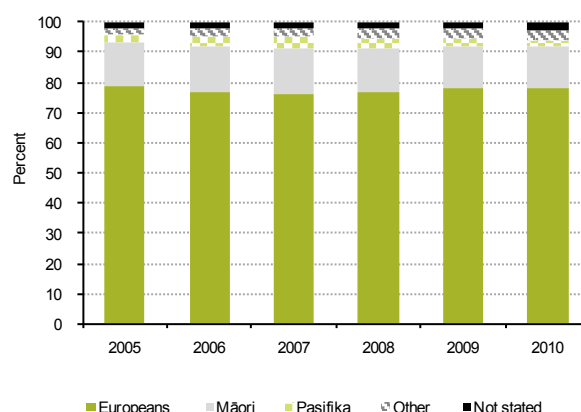
The distribution of modern apprentices by ethnic group remained unchanged from 2009 to 2010. The proportions of modern apprentices in the workforce who were in the European, Māori and Pasifika ethnic groups remained similar from 2009 to 2010. For the other ethnic group the proportion fell from 2.4 percent in 2009 to 0.2 percent in 2010, due to there being more employees and fewer apprentices in this group. Modern apprentices study mainly level 4 training programmes and 78 percent are European.

#### Proportion of modern apprentices by ethnic group in 2010

	People employed in the labour force	Percentage of modern apprentices
Europeans	0.6%	78%
Māori	0.7%	14%
Pasifika	0.4%	2.4%
Other	0.2%	3.3%

Note: The ethnic group data from the Tertiary Education Commission is based on the single prioritised method of reporting, while the data from the Household Labour Force Survey is based on a total response method.

Figure 6.14 Distribution of apprentices by ethnic group



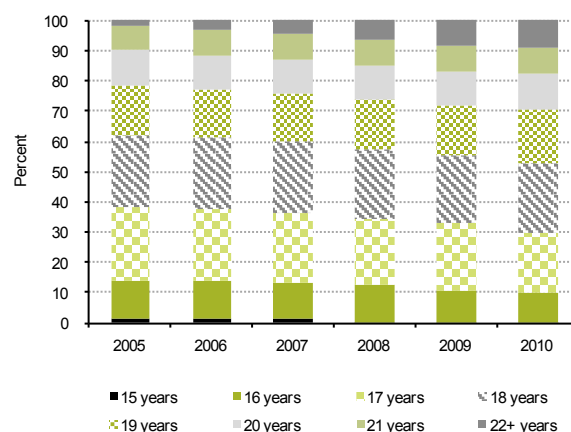
### INCREASE IN AGE OF PARTICIPANTS

The average starting age of modern apprentices continued to trend upwards and, in 2010, it was just under 19 years. Of the active trainees in 2010, 43 percent started training at age 17 and 18, 17 percent at age 19, 21 percent at ages 20 and 21, and the remaining 9.2 percent started training at age 22 years and over.

While Modern Apprenticeships are aimed at young people – those aged 16 to 21 years – there were 1,070 apprentices in 2010 that had started their training at age 22 years and over. In contrast to the overall downward trend in apprenticeships, those aged 19, 20 and 22 years and over increased in number in 2010.

Source: Tertiary Education Commission.

Figure 6.15 Distribution of apprentices by starting age



<sup>1</sup> Unless otherwise stated, Modern Apprenticeship measures are based on the number of apprentices at 31 December.

**APPRENTICESHIPS BY INDUSTRY**

Modern Apprenticeships were active in 34 industries in 2010. There were 342 apprentices on average per industry.

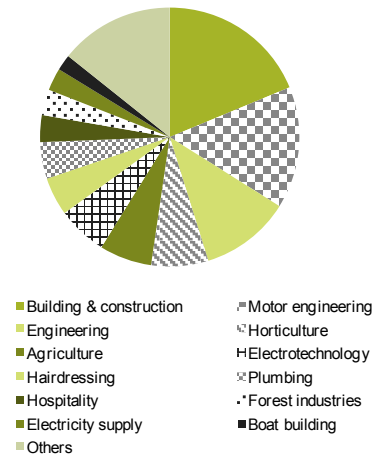
Women accounted for over 40 percent of all trainees in the industries of hairdressing (94 percent), tourism (84 percent), public sector (83 percent), equine industry (53 percent), retail trade (50 percent), road transport (48 percent) and hospitality industry (39 percent).

**Largest changes in the number of apprentices from 2009 to 2010 by industry**

Aluminium joinery (architectural)	+63%	(down 20% in 2009)
Extractives	+40%	(no change in 2009)
Baking	+31%	(down 30% in 2009)
Road transport	-55%	(down 73% in 2009)
Telecommunications	-53%	(up 43% in 2009)
Dairy manufacturing	-50%	(down 60% in 2009)

Source: Tertiary Education Commission.

**Figure 6.16** Distribution of apprentices by selected industries



**COHORT PROGRAMME COMPLETION RATE**

Of the modern apprentices who started study in 2003, 44 percent of learners had completed at least one programme by 2010. Of the cohort of modern apprentices who started study in 2002, 43 percent had completed their apprenticeship after eight years.

**Eight-year programme completion rates for apprentices by ethnic group**

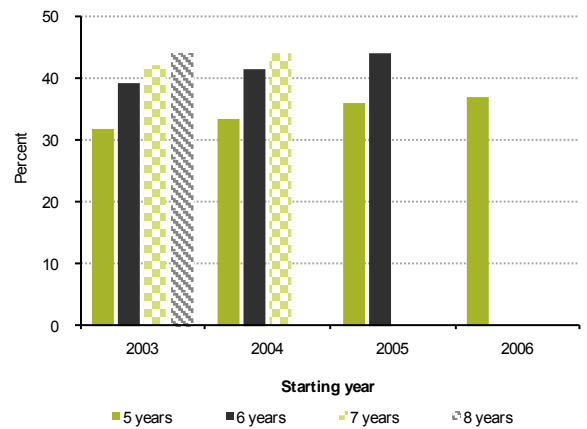
Starting year:	2003
Europeans	47%
Māori	29%
Pasifika	23%
Other	49%

**Notes:**

1. Qualification attainment rates are for modern apprentices excluding industry trainees.
2. The 8-year completion rates are only available for learners who commenced study in 2002 and 2003.
3. These completion rates cover all programmes of study of varying durations.
4. Because of the small numbers in industry training by ethnic group changes between years have to be interpreted with caution.

Source: Ministry of Education and Tertiary Education Commission.

**Figure 6.17** Modern apprentices' programme completion rates by starting year



**MORE GATEWAY STUDENTS**

The Gateway programme was introduced in 2001 to provide school students with workplace experience while learning. The programme is now open to all schools after a progressive rollout across schools of different deciles.

Participation in Gateway has increased significantly since the introduction of the programme in 2001. From 2009 to 2010, the number of Gateway students increased by 9.8 percent.

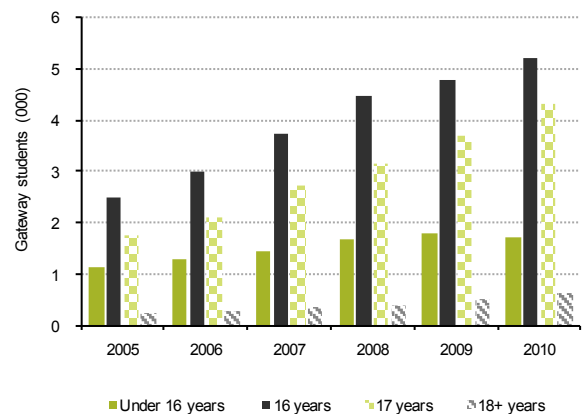
**Number of Gateway students**

	2005	2006	2007	2008	2009	2010
Gateway students	5,620	6,690	8,240	9,690	10,800	11,800
% change from previous year	34%	19%	23%	18%	11%	9.8%

Note: Data relates to trainees who started a placement during that year.

Source: Tertiary Education Commission.

**Figure 6.18** Gateway students by age group



**OUTCOMES OF GATEWAY**

Gateway students continued to achieve positive outcomes at a similar rate to previous years, with 96 percent of students progressing to a higher level of education or employment.

Twenty-four percent of Gateway students entered employment in 2010, compared to 34 percent in 2005. The decrease in recent years in the proportion of Gateway students entering employment may reflect the higher levels of unemployment for young people.

**Proportion of students progressing to further education or employment**

	2005	2006	2007	2008	2009	2010
To education	61%	64%	61%	67%	72%	71%
To employment	34%	32%	35%	29%	24%	24%

Source: Tertiary Education Commission.

**Figure 6.19** Gateway students by outcome achieved



# 7 PROVIDER-BASED STUDENTS IN LEVELS 1 TO 3

## Overview

The total number of students participating in provider-based level 1 to 3 certificates has decreased steadily since 2005. This trend continued to decrease between 2009 and 2010. The largest decrease was in the number of students in level 1 to 2 certificates, while there was a relatively smaller decrease in the number of level 3 certificate students. Learners in Training Opportunities and Youth Training also decreased in number from 2009 to 2010, while the Youth Guarantee programme, introduced in 2010, provided nearly 2,000 fees-free places for 16 and 17 year-olds.

The decreases in enrolments at this level reflect continued tightening of funding allocations. Therefore the weak economic conditions and labour market have not resulted in more people studying at this level.

The number of international students studying at levels 1 to 3 decreased slightly in 2010, following a small increase in 2009. Asia is still the largest source region for students studying at these levels.

There are big differences in achievement between full-time and part-time students in student component-funded qualifications at these levels. Of students starting in 2008, 73 percent of full-time students had completed a certificate by 2010, compared to only 36 percent of part-time students. Similarly, full-time students are twice as likely to progress to further study compared with part-time students.

In level 1 and 2 qualifications, full-time students make up only 34 percent of students. However, most of the decrease in student numbers at this level has been in part-time students, meaning that more of the provision is focusing on full-time students. At level 3, full-time students make up 56 percent of students. The number of part-time students has also decreased at this level.

## PROVIDER-BASED LEARNING AT LEVELS 1 TO 3

- ▲ Provision of level 1 to 3 qualifications is funded through the student achievement component, or through targeted training, and includes enrolments in level 1 to 3 certificates at polytechnics, wānanga and private training establishments.
- ▲ Level 1 to 3 qualifications can be divided into vocational certificates, which focus on specific work-related skills, and foundation certificates, which focus on general skills, literacy and language. For people who are disadvantaged in the labour market, the government provides targeted training programmes through Training Opportunities and Youth Guarantee. In addition, schools purchase courses at levels 1 to 3 from tertiary education providers through the Secondary-Tertiary Alignment Resource.

## Level 1 to 3 certificate provision in 2011

Information available as at April 2011 indicates that the number of domestic students enrolled at providers in level 1 to 3 certificates will continue to decline. However, a smaller decline in equivalent full-time students suggests that the proportion of full-time students is likely to continue to increase.

Based on early indications, the number of level 1 to 3 international students in 2011 is expected to be similar to that in 2010.

The number of students funded through the Secondary-Tertiary Alignment Resource to attend courses at tertiary providers may be decreasing in 2011 compared with 2010.

In 2011, the Youth Guarantee programme was expanded to 2,500 places. It is being delivered in 18 polytechnics, 18 private training providers and one wānanga. In 2012, the programme will be further expanded when Youth Training is incorporated into Youth Guarantee.

The government has refocused the Training Opportunities fund, but the total amount of funding has remained the same. From 2011, funding is split between the Tertiary Education Commission and the Ministry of Social Development. The Tertiary Education Commission will allocate 60 percent of the funding through Foundation-Focused Training Opportunities. These programmes will target learning to people with the highest risk of long-term unemployment and will have an explicit focus on improving literacy and numeracy skills. The Ministry of Social Development will allocate the other 40 percent of funding through Training for Work programmes, which focus more on local employment needs.

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Analytical tables: Data on learners in level 1 to 3 qualifications is available at: [www.educationcounts.govt.nz/statistics/tertiary\\_education](http://www.educationcounts.govt.nz/statistics/tertiary_education) – select ‘participation’ or ‘retention and achievement’.



**STUDENTS IN LEVEL 1 TO 3 QUALIFICATIONS**

Most students in level 1 to 3 qualifications are enrolled in level 1 to 3 certificates funded through the student achievement component fund. In 2010, the number enrolled at level 3 was slightly higher than the number at levels 1 and 2.

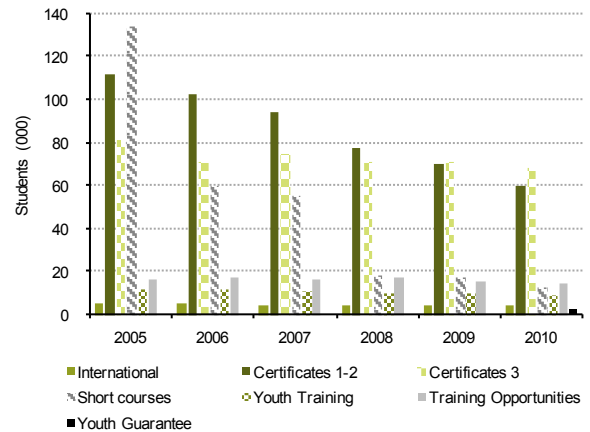
The overall number of students in level 1 to 3 qualifications decreased. The large decreases in numbers have been in short courses and level 1 and 2 certificates. This has been a result of tightening of funding rules. In 2010, new Youth Guarantee places were introduced.

The weak economic conditions and labour market have not resulted in increased enrolments at this level.

In 2010, literacy and numeracy was embedded into a proportion of level 1 to 3 tertiary education provision and from 2011 information on this will be included here.

Source: Ministry of Education and Tertiary Education Commission.

**Figure 7.1** Students in level 1 to 3 qualifications



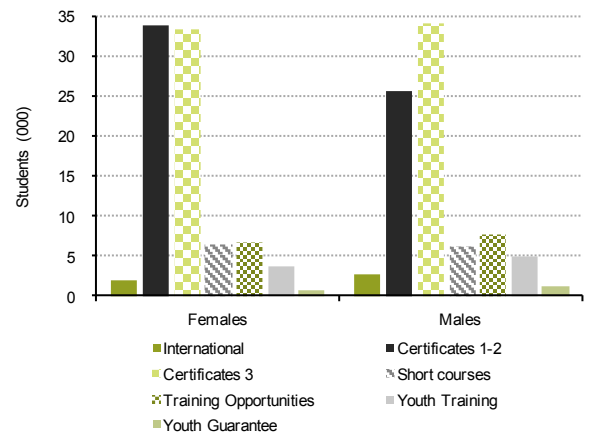
**LEVEL 1 AND 3 STUDENTS BY GENDER**

Women are more likely than men to be enrolled in level 1 and 2 certificates.

A higher proportion of men than women were enrolled in level 3 certificates, Training Opportunities, Youth Training and Youth Guarantee, and as international students.

Source: Ministry of Education and Tertiary Education Commission.

**Figure 7.2** Students in level 1 and 3 certificates by gender



**INTERNATIONAL STUDENTS IN LEVEL 1 TO 3 QUALIFICATIONS**

The number of international students in level 1 to 3 qualifications decreased slightly in 2010, after an increase from 2007 to 2009. The largest number of students continued to come from Asia. The decrease in numbers was from students from Europe, while numbers from other regions increased.

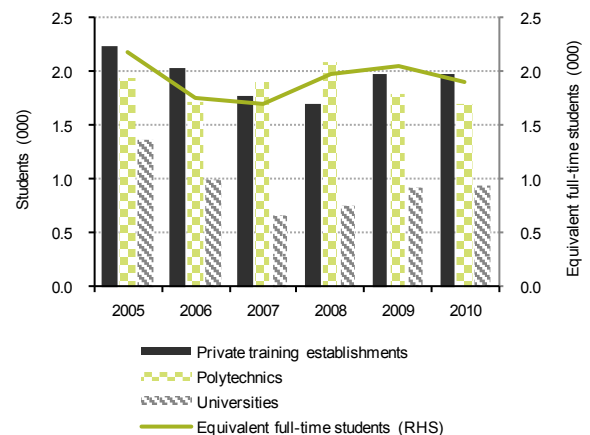
**International students in level 1 to 3 qualifications in 2010**

Total	4,610	(down 1.2% on 2009)
Private training establishments	1,970	(down 0.6% on 2009)
Polytechnics	1,710	(down 4.6% on 2009)
Universities	950	(up 2.4% on 2009)

**Region of origin for international students in level 1 to 3 qualifications in 2010**

Asia	3,220	(up 0.7% on 2009)
Middle East	410	(up 2.5% on 2009)
Pacific	366	(up 12% on 2009)
Europe	267	(down 23% on 2009)

**Figure 7.3** International students in level 1 to 3 qualifications



## STUDENT ACHIEVEMENT COMPONENT-ELIGIBLE LEARNERS

### STUDENTS BY QUALIFICATION LEVEL

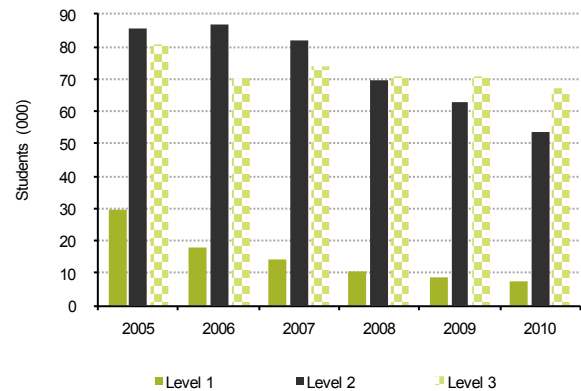
Level 1 to 3 certificates provide foundation skills and entry-level job skills. Qualifications at levels 1 and 2 are considered to be equivalent to secondary school education. Level 3 provides entry to vocational qualifications. The largest number of learners study towards level 3 certificates. The numbers studying at levels 1 and 2 have been decreasing, while numbers at level 3 have been steadier in recent years.

#### Student achievement component-eligible learners in 2010

Level 1	7,430	(down 18% on 2009)
Level 2	53,800	(down 14% on 2009)
Level 3	67,300	(down 4.9% on 2009)
Total	119,000	(down 10% on 2009)

Expressed as equivalent full-time student units, enrolments in student achievement component-eligible certificates totalled 45,400, down 6.7 percent on 2009.

Figure 7.4 Student achievement component-funded students by qualification level



### LEVEL 1 AND 2 STUDENTS BY SUB-SECTOR

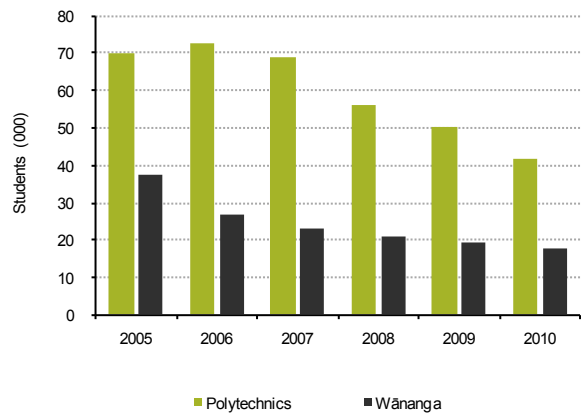
The number of students studying towards level 1 and 2 certificates has been decreasing. The majority study at polytechnics. This is where there has been the largest decrease since 2007, while numbers at wānanga have been smaller and steadier.

#### Students in level 1 and 2 certificates in 2010

Total	59,700	(down 15% on 2009)
Polytechnics	41,900	(down 16% on 2009)
Wānanga	18,000	(down 7.5% on 2009)

Note: Private training establishments cannot take funded enrolments in level 1 and 2 qualifications.

Figure 7.5 Students in level 1 and 2 certificates by sub-sector



### LEVEL 1 AND 2 STUDENTS BY FIELD OF STUDY

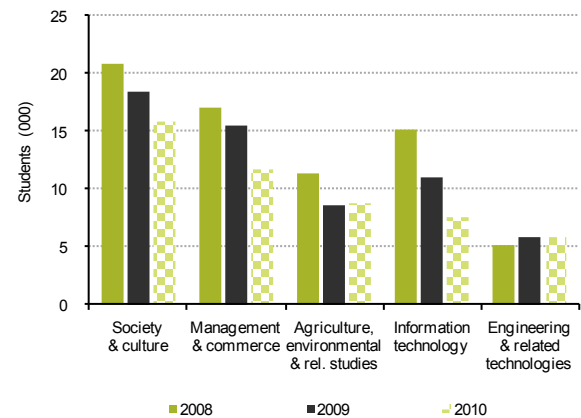
The largest number of students at levels 1 and 2 were studying towards certificates in society and culture. These were mostly in Māori language and culture and English as an additional language. Management and commerce was the next largest field of study, with business administration and office studies being the main areas of focus.

#### Students in level 1 and 2 certificates in 2010

##### Top five fields of study

Society and culture	15,800	(down 14% on 2009)
Management and commerce	11,700	(down 24% on 2009)
Agriculture, environmental and related studies	8,730	(up 1.4% on 2009)
Information technology	7,630	(down 31% on 2009)
Engineering and related technologies	5,910	(up 2.7% on 2009)

Figure 7.6 Students in level 1 and 2 certificates by top five fields of study



## STUDENT ACHIEVEMENT COMPONENT-ELIGIBLE LEARNERS

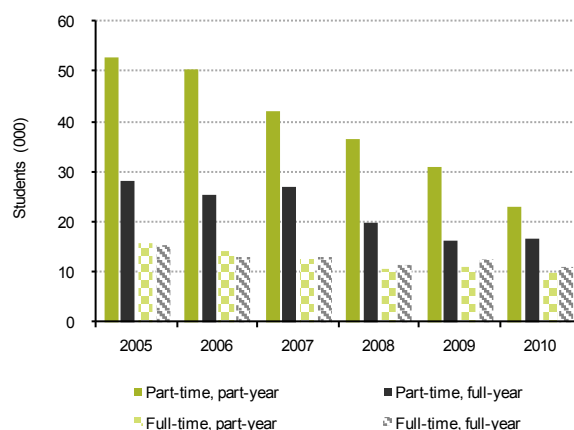
### LEVEL 1 AND 2 STUDENTS BY STUDY TYPE

In 2010, 40 percent of students studying towards level 1 and 2 qualifications were studying part-time for part of the year. The number of students in this group has decreased markedly since 2005. Full-time students made up 34 percent of level 1 and 2 students. The number of students in this group has been steadier since 2005.

#### Students in level 1 and 2 certificates in 2010

Part-time, part-year	23,000	(down 25% on 2009)
Part-time, full-year	16,500	(up 1.8% on 2009)
Full-time, part-year	9,570	(down 10% on 2009)
Full-time, full-year	10,600	(down 15% on 2009)

Figure 7.7 Students in level 1 and 2 certificates by study type

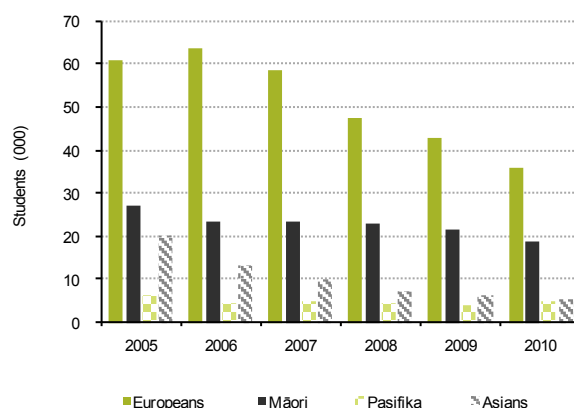


### CHARACTERISTICS OF LEVEL 1 AND 2 STUDENTS

#### Characteristics of level 1 and 2 students in 2010

Employed in year prior to enrolment	53%
No school qualification	37%
Females	57%
Aged under 25 years	27%
Aged 25 to 39 years	30%
Aged 40 years and over	43%
Europeans	60%
Māori	31%
Pasifika	7.8%
Asians	8.8%

Figure 7.8 Level 1 and 2 students by ethnic group



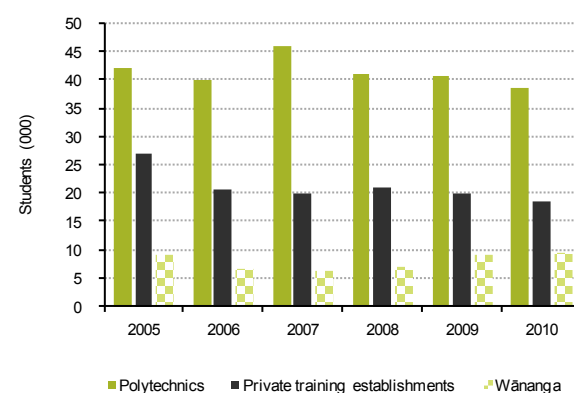
### LEVEL 3 STUDENTS BY SUB-SECTOR

The number of students studying towards level 3 certificates has fluctuated. The majority study at polytechnics, followed by private training establishments and wānanga. A very small number also study at other tertiary education providers and universities.

#### Students in level 3 certificates in 2010

Total	67,300	(down 4.9% on 2009)
Polytechnics	38,600	(down 4.7% on 2009)
Private training establishments	18,600	(down 0.2% on 2009)
Wānanga	9,640	(up 4.3% on 2009)

Figure 7.9 Students in level 3 certificates by sub-sector



## STUDENT ACHIEVEMENT COMPONENT-ELIGIBLE LEARNERS

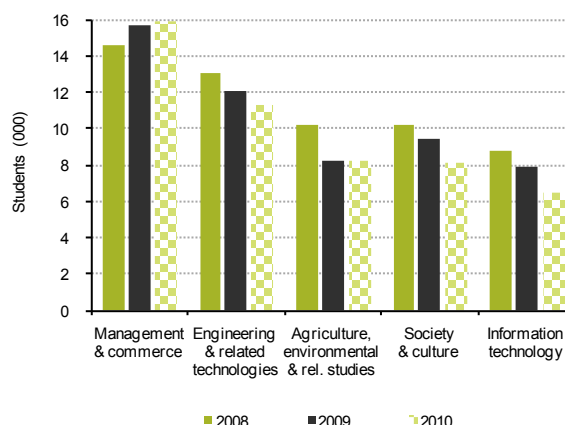
### LEVEL 3 STUDENTS BY FIELD OF STUDY

The largest numbers of students at level 3 were studying towards certificates in management and commerce. These were mostly in business administration and computing. Engineering and related technologies was the next largest field, with the certificate in road transport being the dominant qualification in this field.

#### Students in level 3 certificates in 2010

Top five fields of study		
Management and commerce	15,900	(up 1.8% on 2009)
Engineering and related technologies	11,200	(down 7.0% on 2009)
Agriculture, environmental and related studies	8,180	(down 0.6% on 2009)
Society and culture	8,070	(down 15% on 2009)
Information technology	6,450	(down 19% on 2009)

Figure 7.10 Students in level 3 certificates by field of study



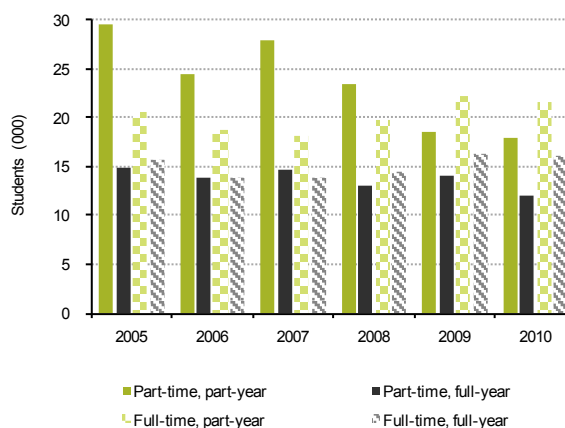
### LEVEL 3 STUDENTS BY STUDY TYPE

In 2010, 27 percent of students studying towards level 3 qualifications were studying part-time for part of the year. The number of students in this group has decreased since 2005. Full-time students made up 56 percent of level 3 students. The number of students in this group has been generally increasing since 2005.

#### Students in level 3 certificates in 2010

Part-time, part-year	17,900	(down 3.6% on 2009)
Part-time, full-year	12,000	(down 14% on 2009)
Full-time, part-year	21,400	(down 2.8% on 2009)
Full-time, full-year	16,000	(down 0.9% on 2009)

Figure 7.11 Level 3 students by study type

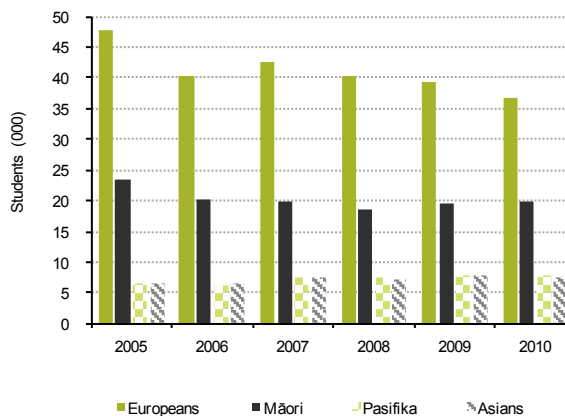


### CHARACTERISTICS OF LEVEL 3 STUDENTS

#### Characteristics of level 3 students in 2010

Employed in year prior to enrolment	51%
No school qualification	35%
Females	49%
Aged under 25 years	38%
Aged 25 to 39 years	29%
Aged 40 years and over	32%
Europeans	55%
Māori	30%
Pasifika	11%
Asians	11%

Figure 7.12 Level 3 students by ethnic group



## STUDENT ACHIEVEMENT COMPONENT-ELIGIBLE LEARNERS

### STUDENTS IN SHORT COURSES

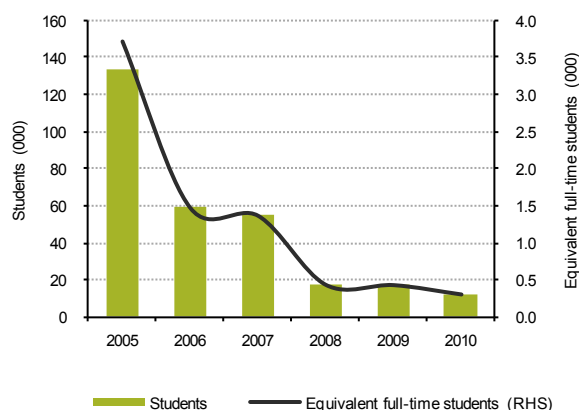
The number of students enrolled in courses of one week or less remained low in 2010. Nearly all of these courses were delivered at polytechnics.

#### Students in short courses in 2010

Total students	12,400	(down 27% on 2009)
Equivalent full-time students	315	(down 28% on 2009)

**Note:** Data includes students who were enrolled for a course of one week or less that is part of a longer qualification.

**Figure 7.13** Students and equivalent full-time student units in courses of less than one week's duration



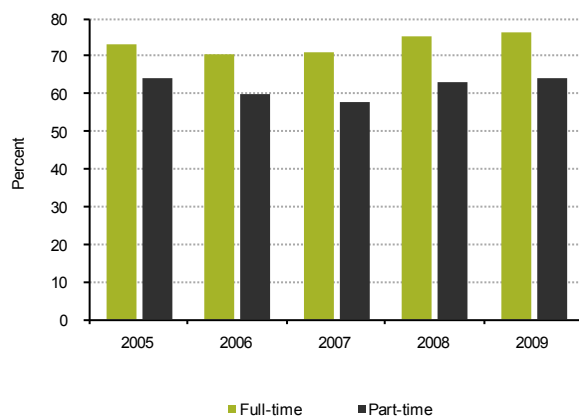
### FIRST-YEAR RETENTION

Sixty-eight percent of students who started a level 1 to 3 certificate in 2009 either completed it in the same year or were still studying towards it in 2010. The rate was higher for full-time students, at 76 percent, and lower for part-time students, at 64 percent. In both cases rates have been increasing since 2007.

#### First-year retention rates in 2010 (for students who started study in 2009)

	Part-time	Full-time
Polytechnics	56%	75%
Private training establishments	79%	81%
Wānanga	96%	76%
Māori	74%	70%
Pasifika	74%	73%
Asians	76%	84%
Europeans	60%	78%

**Figure 7.14** First-year retention rates of students in level 1 to 3 certificates by study type



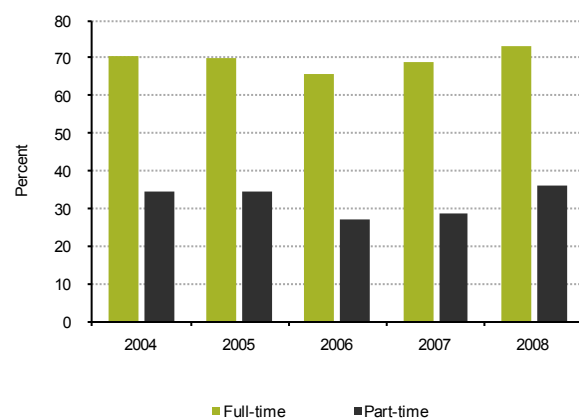
### THREE-YEAR COMPLETION

Forty-five percent of students who started a level 1 to 3 certificate in 2008 completed it by 2010. The rate was higher for full-time students, at 73 percent, and much lower for part-time students, at 36 percent. In both cases rates have been increasing over the last three years.

#### Three-year completion rates in 2010 (for students who started study in 2008)

	Part-time	Full-time
Polytechnics	29%	71%
Private training establishments	48%	79%
Wānanga	67%	73%
Māori	41%	66%
Pasifika	43%	67%
Asians	49%	79%
Europeans	33%	76%

**Figure 7.15** Three-year completion rates of students in level 1 to 3 certificates by study type



## STUDENT ACHIEVEMENT COMPONENT-ELIGIBLE LEARNERS

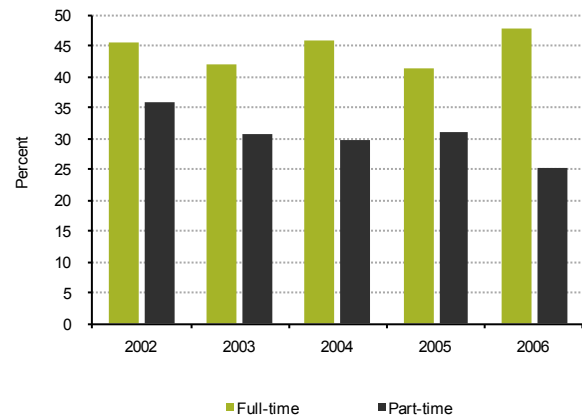
### FIVE-YEAR PROGRESSION

Twenty-nine percent of students who started a level 1 to 3 certificate in 2006 had gone on to study at a higher level by 2010. The rate was higher for full-time students, at 48 percent, and much lower for part-time students, at 25 percent. The five-year progression rates for part-time students in level 1 to 3 certificates are generally decreasing.

#### Progression rates in 2010 (for students who started study in 2006)

	Part-time	Full-time
Polytechnics	22%	46%
Private training establishments	29%	38%
Wānanga	31%	50%
Māori	29%	45%
Pasifika	32%	41%
Asians	34%	52%
Europeans	23%	48%

**Figure 7.16** Five-year progression rates of students in level 1 to 3 certificates by study type



## TARGETED TRAINING PROGRAMMES

### PARTICIPATION IN TRAINING OPPORTUNITIES

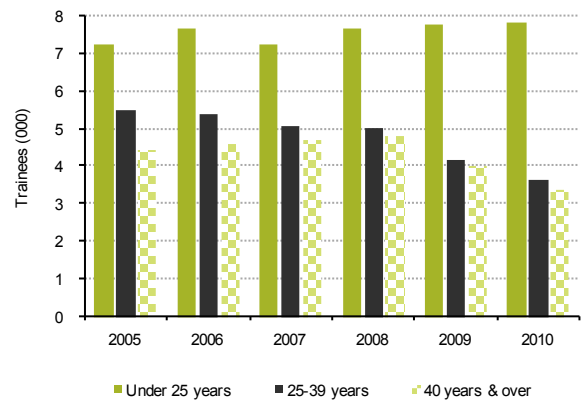
Training Opportunities is a full-time, fully funded labour market programme providing vocational and foundation skills for people who are disadvantaged in terms of employment and educational achievement. The number of trainees in Training Opportunities decreased between 2009 and 2010, mostly in the older age groups.

#### Numbers of trainees in 2010

Total	14,300	(down 6.5% on 2009)
Women	46%	
Māori 39%, Europeans 36%, Pasifika 14%, Asians 6.1%, Other ethnic group 4.9%.		
Aged 18 to 24 years 54%, aged 25 to 39 years 25%, aged 40 years and over 23%.		

Source: Tertiary Education Commission.

Figure 7.17 Trainees in Training Opportunities by age group



### CREDITS GAINED IN TRAINING OPPORTUNITIES

The proportion of trainees gaining more than 20 credits on the New Zealand Qualifications Framework increased in 2010.

#### Credits gained through Training Opportunities in 2010

No credits	23%	(36% in 2009)
1-20 credits	34%	(32% in 2009)
More than 20 credits	43%	(32% in 2009)

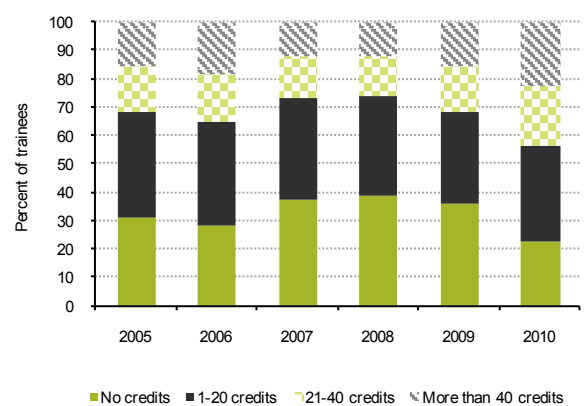
Proportion with more than 20 credits:

Māori 45%, Pasifika 45%, Asians 43%, Europeans 42%, Other ethnic group 38%.

Women 47%, Men 41%.

Source: Tertiary Education Commission.

Figure 7.18 Credits gained by trainees in Training Opportunities



### OUTCOMES OF TRAINING OPPORTUNITIES

In 2010, a slightly higher proportion of trainees went on to employment than in the previous year and a lower proportion to further education and training.

#### Outcomes achieved by trainees in Training Opportunities in 2010

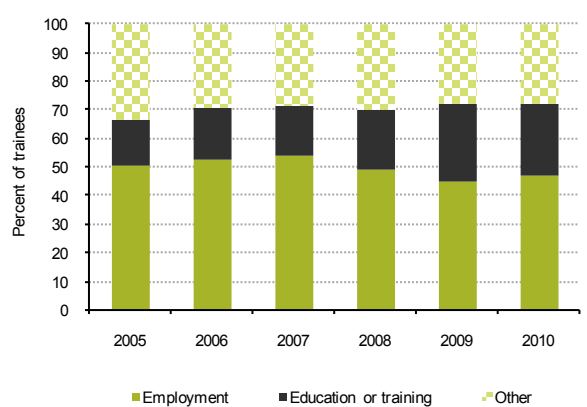
To employment	47%	(45% in 2009)
To education and training	25%	(27% in 2009)

European trainees were more likely to move to employment than trainees in other ethnic groups and Asian trainees were more likely to move to further education and training. Men were more likely than women to move to employment and less likely to move to further education and training.

Note: Outcomes are measured within two months of trainees finishing their course.

Source: Tertiary Education Commission.

Figure 7.19 Outcomes achieved by trainees in Training Opportunities



## TARGETED TRAINING PROGRAMMES

### PARTICIPATION IN YOUTH TRAINING

Youth Training provides full-time, fully funded vocational and foundation skills training to young people who have left school with no or lower-level qualifications. The number of trainees in Youth Training continued to decrease in 2009. The decrease continued to be in trainees aged less than 17 years, as the access to early leaving exemptions from schools was further tightened.

#### Numbers of trainees in 2010

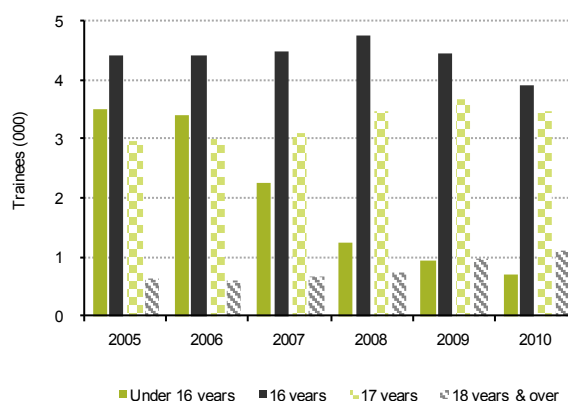
Total	8,750	(down 8.8% on 2009)
Women	42%	

Māori 48%, Europeans 40%, Pasifika 14%, Other ethnic group 1.6%, Asians 1.1%.

Aged under 16 years 7.9%, aged 16 years 45%, aged 17 years 40%, and aged 18 years and over 13%.

Source: Tertiary Education Commission.

Figure 7.20 Trainees in Youth Training by age group



### CREDITS GAINED IN YOUTH TRAINING

The proportion of trainees who did not gain any credits on the New Zealand Qualifications Framework decreased in 2010. The proportion gaining larger numbers of credits increased.

#### Credits gained through Youth Training in 2010

No credits	19%	(29% in 2009)
1-20 credits	36%	(32% in 2009)
More than 20 credits	45%	(38% in 2009)

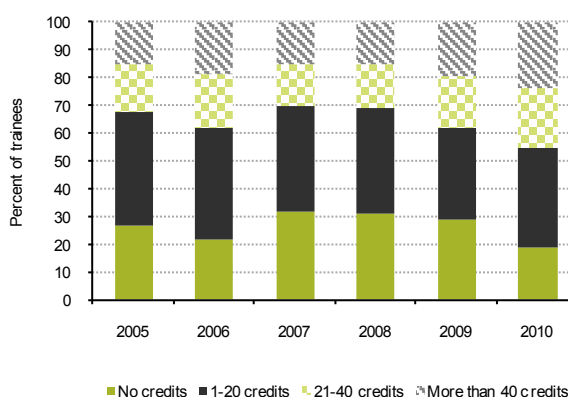
Proportion with more than 20 credits:

Pasifika 52%, Other ethnic group 52%, Asians 45%, Europeans 45%, Māori 43%.

Women 48%, men 43%.

Source: Tertiary Education Commission.

Figure 7.21 Credits gained by trainees in Youth Training



### OUTCOMES OF YOUTH TRAINING

In 2010, the proportions of trainees going on to employment and further education and training were similar to the previous year.

#### Outcomes achieved by trainees in Youth Training in 2010

To employment	40%	(38% in 2009)
To education and training	36%	(36% in 2009)

European and Asian trainees were more likely to go on to employment than trainees in other ethnic groups and Pasifika trainees were more likely to go on to further education and training. Males were more likely than females to go on to employment and less likely to go on to further education.

Note: Outcomes are measured within two months of trainees finishing their course.

Source: Tertiary Education Commission.

Figure 7.22 Outcomes achieved by trainees in Youth Training





### YOUTH GUARANTEE PLACES

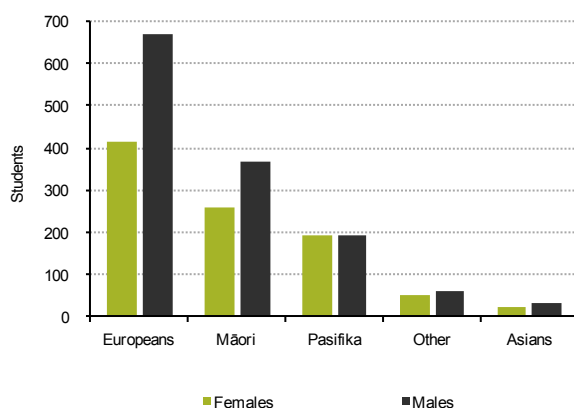
The Youth Guarantee programme was implemented in 2010, providing fees-free places for 16 to 17 year-olds to study for vocational certificates at tertiary providers.

In 2010, 1,980 students took up these places at 18 polytechnics and 10 private training establishments. Sixty percent of students were male. Fifty-five percent were European, 32 percent Māori and 20 percent Pasifika.

#### Top five course subjects for Youth Guarantee places in 2010

Management and commerce	45%
Mixed field studies	36%
Engineering and related technologies	28%
Health	27%
Architecture and building	22%

Figure 7.23 Students in Youth Guarantee by gender and ethnic group



## TERTIARY EDUCATION AT SCHOOLS

### SECONDARY-TERTIARY ALIGNMENT RESOURCE

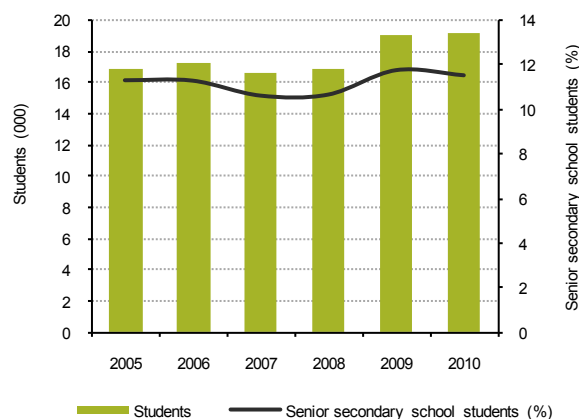
The Secondary-Tertiary Alignment Resource (STAR) assists schools to meet the needs of their senior secondary students by providing funding to access a wide range of courses that provide greater learning opportunities. Courses can be work-based and/or lead towards credits on the New Zealand Qualifications Framework. Funding can be used to purchase courses from tertiary education providers or help schools provide courses themselves.

In 2010, 423 schools used STAR funding to enrol students in tertiary courses. This represents 88 percent of schools with a secondary roll. The number of senior secondary school students enrolled in STAR-funded courses at tertiary education providers increased slightly. This reflected the larger school rolls. The average length of courses decreased.

#### STAR students at tertiary education providers in 2010

Students	19,200	(up 1.0% on 2009)
Equivalent full-time student units	1,790	(down 5.9% on 2009)

Figure 7.24 Students in STAR courses at tertiary education providers



### STAR PROVIDERS AND FIELDS OF STUDY

#### STAR students in 2010

At 20 polytechnics	84%
At 12 private training establishments	17%
At 4 universities	2.6%
In food, hospitality and personal services	20%
In engineering and related technologies	15%
In agriculture, environmental and related studies	12%
In society and culture	11%
In education	10%

STAR students represent 12 percent of senior secondary school students (year 11 and above).

Note: Students are counted in each type of programme they are enrolled in, so the sum of the components may not add to the total.

## 8 PROVIDER-BASED STUDENTS IN NON-DEGREE LEVELS 4 TO 7

### Overview

In 2010, the number of students enrolled in level 4 to 7 non-degree study increased slightly. This was made up of an increase in enrolments in level 5 to 7 certificates and diplomas and a decline in enrolments in level 4 certificates. The overall study load, as measured in equivalent full-time student units, remained almost unchanged from the 2009 level. These patterns were the same for domestic and international students. In 2010, there were 135,000 domestic students enrolled in level 4 to 7 non-degree study and 17,000 international students.

As a proportion, enrolments by men in these qualification levels increased more than those by women, although women still dominate this level of study.

By age group, there was little or no change for the older age groups, while the number of students aged 18 years and under fell substantially from 2009 to 2010. However, there are relatively few under 18 year-olds enrolled in these levels. The majority of students in these levels are aged 25 years and over.

Māori and Asian student numbers increased at a higher rate than the average increase for these levels, while European students showed a slightly lower than average increase.

Most students in level 4 to 7 non-degree qualifications are enrolled in polytechnics, and the number of enrolments at these institutions showed a slight increase over the 2009 figures. Universities, which have the lowest proportion of these students, showed a substantial decline in enrolments at these qualification levels.

The increasing number of level 5 to 7 diploma students is resulting in increased numbers of qualifications completed at this level. The rate at which students complete level 5 to 7 diplomas and level 4 certificates is about the same.

The rates at which students complete these qualifications and progress on to higher-level study have fluctuated over recent years. Progression rates decrease as the qualification level increases, so progression is more likely for level 4 certificate students.

While domestic students are enrolled in about equal numbers in level 4 certificates and level 5 to 7 diplomas, international students are predominately enrolled in the diploma-level

qualifications. Enrolments by international students in level 5 to 7 diploma-level study increased by 10 percent in 2010, compared with 2009.

### Level 4 to 7 non-degree study in 2011

Based on the April 2011 enrolments, which provide an indication of the trends in enrolment numbers, there is likely to be a decline in the number of domestic students in both level 4 certificates and level 5 to 7 diplomas in 2011. This appears to be across all age groups, ethnic groups and providers. Overall, the data indicates about a 9 percent drop in domestic student enrolments.

The April 2011 data also shows a slight increase in the number of international students. The increase in equivalent full-time student units was stronger, indicating higher study loads for international students in 2011.

Level 4 to 7 qualifications provide continuing pathways for students progressing from school and create entry points into the system for those seeking to gain vocational qualifications or a change in career. The level of complexity of study approximates to advanced trades, technical and business qualifications. They can also be used as prerequisite qualifications for higher-level programmes such as bachelors degrees. All qualifications at level 4 are certificates, while those at levels 5 to 7 are either certificates or diplomas.

Analytical tables: Data on learners in level 4 to 7 non-degree qualifications is available at: [www.educationcounts.govt.nz/statistics/tertiary\\_education](http://www.educationcounts.govt.nz/statistics/tertiary_education) – select 'participation' or 'retention and achievement'.

**ENROLMENTS IN LEVEL 4 TO 7 NON-DEGREE STUDY**

Domestic and international students enrolled in level 4 to 7 non-degree study increased in number by 1.3 percent, comparing 2010 with 2009. Since 2005, enrolments by women have dropped by 3.4 percent, while for men the enrolments in 2010 were at the 2005 level.

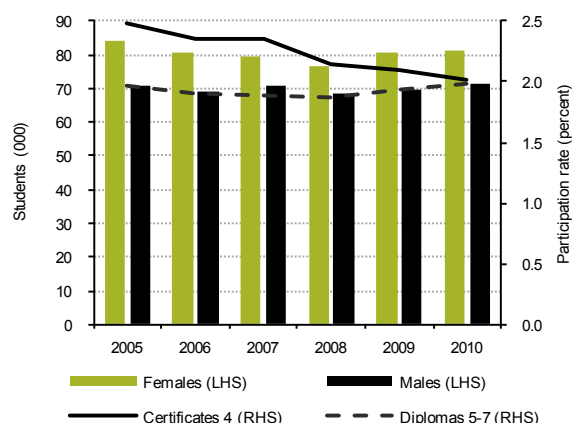
The participation rate for level 5 to 7 diploma study, at 2.0 percent, continued to be steady, with little year-on-year change. However, the rate for level 4 certificates continued to decline from 2.5 percent in 2005 to 2.0 percent in 2010.

**Students in level 4 to 7 non-degree study by gender in 2010**

Total	152,000	(up 1.3% on 2009)
Females	81,000	(up 0.3% on 2009)
Males	71,100	(up 2.4% on 2009)

When expressed as equivalent full-time student units, enrolments in level 4 to 7 non-degree study totalled 74,000 in 2010, down 0.2 percent on 2009.

**Figure 8.1** Participation in level 4 to 7 non-degree study by gender\*



**ENROLMENTS BY LEVEL OF STUDY**

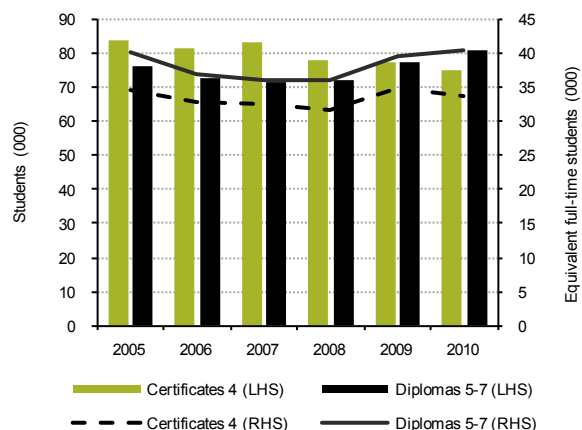
Student numbers increased for level 5 to 7 diploma study, while they declined for level 4 certificate study. These trends have been consistent for both levels of study since 2007.

**Students in level 4 to 7 non-degree study by level in 2010**

	Students	% change from 2009	Equivalent full-time student units	% change from 2009
<b>All students</b>	152,000	+1.3%	74,000	-0.2%
Certificates 4	75,100	-2.8%	33,600	-3.3%
Diplomas 5-7	80,900	+4.4%	40,400	+2.5%
<b>Domestic students</b>	135,000	+0.8%	64,500	-0.3%
Certificates 4	69,900	-2.6%	31,000	-2.9%
Diplomas 5-7	68,800	+3.5%	33,500	+2.1%

Note: Diplomas 5-7 include certificates at levels 5 to 7.

**Figure 8.2** Students in level 4 to 7 non-degree study



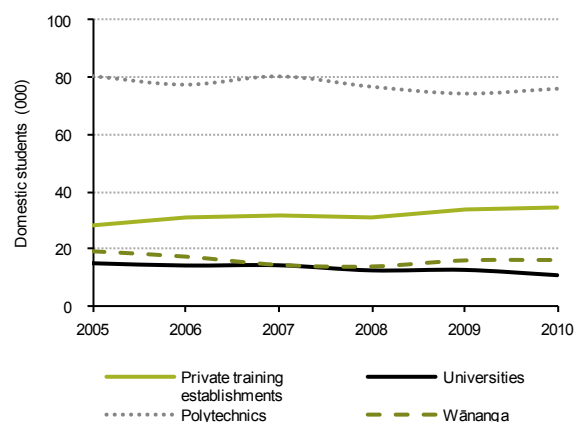
**TYPE OF PROVIDER**

Most people who study level 4 to 7 non-degree qualifications are enrolled at polytechnics. While enrolments at these institutions have fallen since 2007, this year student numbers have increased again. Numbers at university dropped markedly to their lowest levels since 2003.

**Domestic students in level 4 to 7 non-degree study by provider type in 2010**

Total	135,000	(up 0.8% on 2009)
Polytechnics	76,000	(up 2.2% on 2009)
Private training establishments	34,300	(up 1.9% on 2009)
Wānanga	16,000	(up 1.0% on 2009)
Universities	11,100	(down 13% on 2009)

**Figure 8.3** Domestic students in level 4 to 7 non-degree study by type of provider



\* The participation rate is the percentage of New Zealanders aged 15 years and over enrolled at this level.

**FIELD OF STUDY**

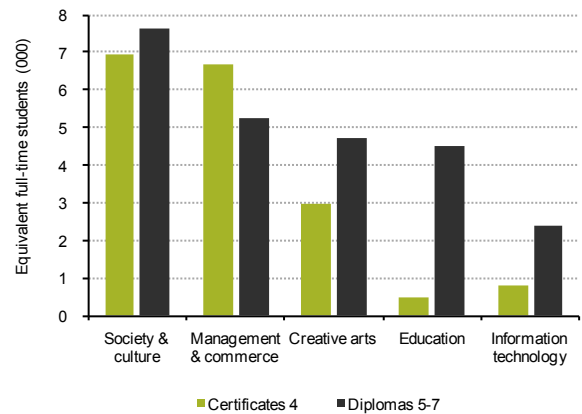
The most common fields of study continue to be society and culture and management and commerce. Study loads in the five most common fields of study listed below all increased, apart from education. Generally, the amount of study in level 5 to 7 diplomas increased while study of level 4 certificates decreased.

**Domestic equivalent full-time student units in level 4 to 7 non-degree study by selected fields of study in 2010**

Society and culture	14,600	(up 6.5% on 2009)
Management and commerce	11,900	(up 1.6% on 2009)
Creative arts	7,680	(up 1.8% on 2009)
Education	5,040	(down 3.6% on 2009)
Information technology	3,200	(up 0.9% on 2009)

Note: Figure 4.4 uses equivalent full-time student units.

**Figure 8.4** Domestic students in level 4 to 7 non-degree study for top five fields of study in 2010



**ETHNIC GROUP**

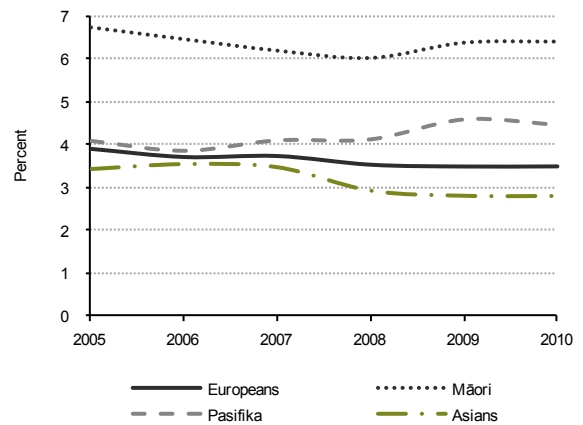
While the majority of domestic enrolments in level 4 to 7 non-degree study are by students of the European ethnic group, Māori have the highest participation rate at this level of study.

All ethnic groups showed increases in enrolments in 2010.

**Domestic students enrolled in level 4 to 7 non-degree study in 2010**

Europeans	84,900	(up 0.3% on 2009)
Māori	32,300	(up 3.5% on 2009)
Pasifika	12,200	(up 0.9% on 2009)
Asians	12,500	(up 3.3% on 2009)
Other	5,580	(up 2.2% on 2009)

**Figure 8.5** Participation rates in level 4 to 7 non-degree study by ethnic group



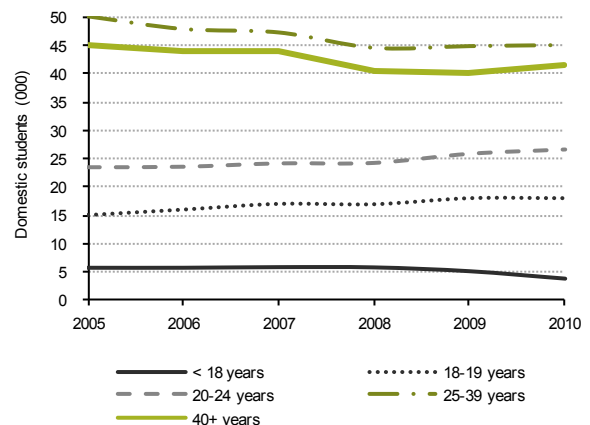
**AGE**

Most people who study level 4 to 7 non-degree qualifications are aged 25 years and over. The proportions of students in the age groups above 20 years increased in 2010, while there was a marked decline in the number of students aged less than 18 years. This decline for under-18-year-olds occurred for both level 4 certificates and level 5 to 7 diplomas and certificates.

**Domestic students in level 4 to 7 non-degree study by age group in 2010**

Under 18 years	3,910	(down 23% on 2009)
18-19 years	17,900	(no change on 2009)
20-24 years	26,700	(up 3.0% on 2009)
25-39 years	45,100	(up 0.4% on 2009)
40 years and over	41,500	(up 3.1% on 2009)

**Figure 8.6** Domestic students in level 4 to 7 non-degree study by age group



### FIRST-YEAR RETENTION

First-year retention rates for level 4 certificates and level 5 to 7 diplomas have been increasing over recent years.

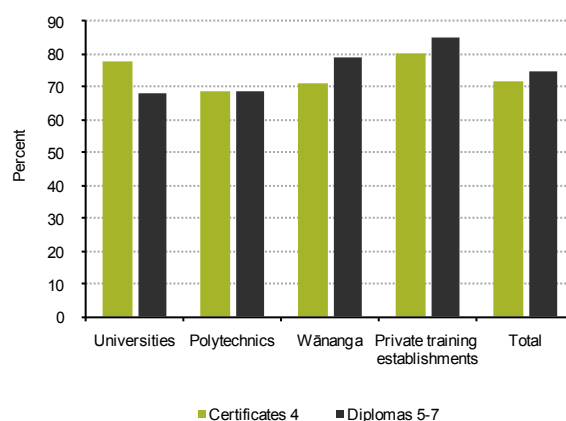
There are slight differences in the retention rates by sub-sector. Wānanga and private training establishments have higher rates for level 5 to 7 diplomas than for level 4 certificates, while for universities the order is reversed.

#### Percent of domestic students who either completed a qualification or continued study in the year after starting their studies

Year study started	2005	2006	2007	2008	2009
Certificates 4	66	68	67	69	72
Diplomas 5-7	66	67	70	73	75

Note: Diplomas 5-7 include level 5 to 7 certificates.

Figure 8.7 First-year retention rates for domestic students who started a level 4 to 7 non-degree qualification in 2009 by sub-sector



### PROGRESSION TO HIGHER-LEVEL STUDY

Students who completed a level 4 certificate were more likely to progress on to higher-level study than students who completed a level 5 to 7 diploma. In the past two years, the direct-progression rate for level 4 certificates has increased and remained at a 10-year high.

#### Progression rates to higher-level study for domestic students in level 4 to 7 non-degree qualifications

First-year progression – for students who completed a qualification in 2009:

Certificates 4	27%	(27% for students who completed in 2008)
Diplomas 5-7	18%	(19% for students who completed in 2008)

Five-year progression rates – for students who completed a qualification in 2005:

Certificates 4	35%	(38% for students who completed in 2004)
Diplomas 5-7	30%	(30% for students who completed in 2004)

Note: Diplomas 5-7 include level 5 to 7 certificates.

Figure 8.8 Progression to higher levels of study for domestic students in level 4 to 7 non-degree study by completion year

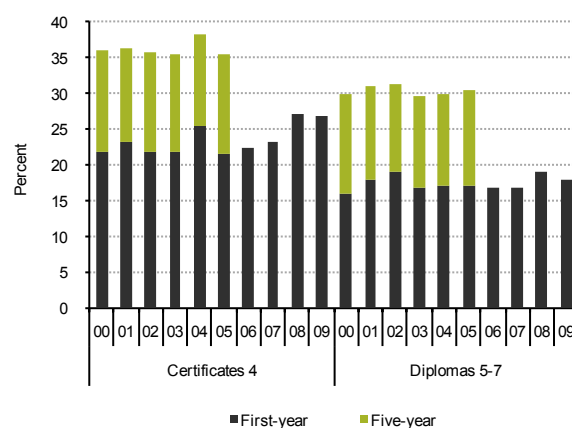


Figure 8.9 Domestic students who completed a level 4 to 7 non-degree qualification by level

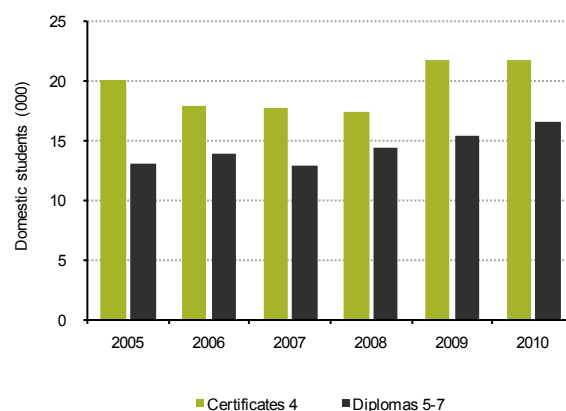
### COMPLETION OF QUALIFICATIONS

While more students completed a level 4 certificate in 2010 than the numbers completing a level 5 to 7 diploma, there was virtually no change from 2009 for level 4 certificates. This contrasts with a 7.6 percent increase for level 5 to 7 diploma completions from 2009 to 2010.

#### Domestic students who completed a qualification in 2010

Certificates 4	21,700	(up 0.1% on 2009)
Diplomas 5-7	16,600	(up 7.6% on 2009)

Note: Diplomas 5 to 7 include level 5 to 7 certificates.



**FIVE-YEAR COMPLETION RATES**

Overall, five-year completion rates for level 4 certificates and level 5 to 7 diplomas are similar. However, there are differences both between and within ethnic groups.

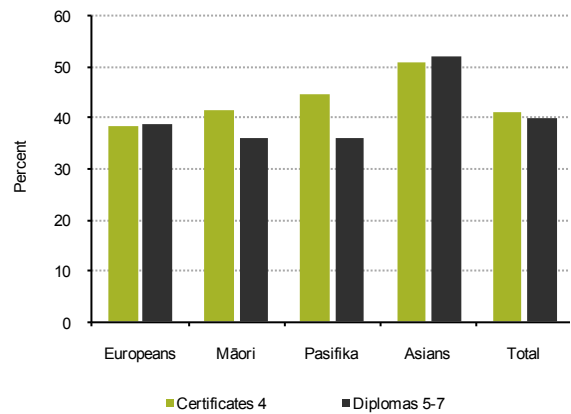
Māori and Pasifika students are more likely to complete a level 4 certificate than a level 5 to 7 diploma within five years. There is no difference in the completion rates at these levels for European and Asian students. In addition, Asian students have the highest likelihood of completing either of these qualifications.

**Percentage of domestic students who completed a qualification within five years**

Year study started	2002	2003	2004	2005	2006
Certificates 4	46	40	40	40	41
Diplomas 5-7	38	38	41	39	40

Note: Diplomas 5-7 include level 5 to 7 certificates.

**Figure 8.10** Five-year completion rates for domestic students who started a level 4 to 7 non-degree qualification in 2006 by ethnic group



**INTERNATIONAL STUDENTS**

In 2010, international students made up 13 percent of all students studying at these levels, up from 12 percent in 2009. This proportion has been increasing since 2007, when the level was 9.0 percent.

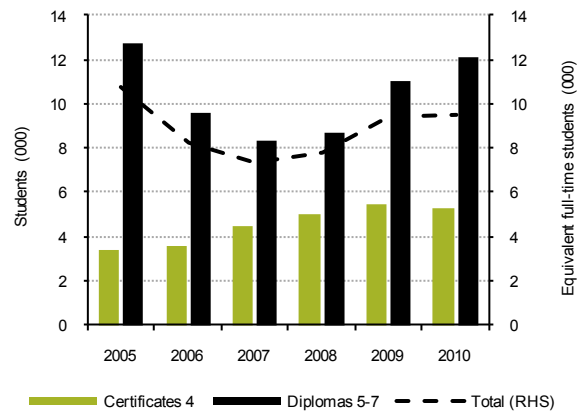
Enrolments in level 5 to 7 diplomas rose strongly again this year, contrasting with a decline in enrolments in certificates at level 4. These trends mirror those for domestic students.

**International students in level 4 to 7 non-degree study in 2010**

	Students	% change from 2009	Equivalent full-time student units	% change from 2009
Total	17,000	+5.9%	9,510	+0.8%
Certificates 4	5,250	-4.3%	2,600	-7.7%
Diplomas 5-7	12,100	+9.9%	6,900	+4.4%

Note: Diplomas 5-7 include level 5 to 7 certificates.

**Figure 8.11** Participation in level 4 to 7 non-degree study by international students



## 9 PROVIDER-BASED STUDENTS IN BACHELORS AND POST-GRADUATE QUALIFICATIONS

### Overview

The number of students enrolled in bachelors and higher qualifications increased in 2010, up nearly 4 percent on the 2009 figures. Equivalent full-time student units increased slightly more, indicating that the study load of students in these qualifications increased in 2010.

Student numbers increased at all qualification levels, with honours degrees, postgraduate certificates and diplomas, and masters degrees showing increases above the average for these levels.

Most students in bachelors or higher qualifications study at a university. From 2009 to 2010, universities showed an increase in their domestic student numbers below the average increase for these levels. Polytechnics, wānanga and private training establishments showed substantial increases, albeit from small bases.

The numbers of Māori and Pasifika students also showed above average increases, as did students aged 20 to 24 years. The number of students aged less than 18 years continued to decline in 2010. This decline is likely to be because of the tendency for students to stay longer at school, partly due to the weak labour market.

Business and management is the largest field of study for bachelors degrees. Teacher education is the largest field of study for students in bachelors or higher qualifications, with a large amount of study at graduate certificate and diploma level. The numbers of students in business and management and teacher education showed little change from 2009 to 2010. The largest increase was in nursing, with the number of students in this field increasing by 10 percent from 2009 to 2010.

The retention and completion rates have been relatively stable over the short term, but showed longer-term increases. There is a big difference in completion rates between part-time and full-time students, especially at bachelors level. Seventy-one percent of the domestic full-time students who started a bachelors degree in 2005 had completed this qualification by 2009, compared to 42 percent of part-time students.

International students enrolled in bachelors and higher qualifications increased by nearly 6 percent from 2009 to 2010, with increases above the average for these levels in honours degrees, postgraduate certificates/diplomas, masters degrees and doctoral studies. Almost two-thirds of international students are enrolled in bachelors degrees, and these students increased by over 4 percent from 2009 to 2010. This was the first increase after several years of declining numbers.

### Bachelors and postgraduate study in 2011

Early indications are that domestic enrolments in bachelors and higher qualifications will remain relatively steady overall in 2011. This is likely to be driven by government funding of tertiary education providers, who will be aiming to keep within their investment plan targets.<sup>1</sup> There also appears to be a shift from students undertaking graduate and postgraduate certificates and diplomas and honours degrees, to masters and doctoral studies.

One factor that will play a part in the enrolments at this level over the next few years is the effects of the Christchurch earthquakes. The April 2011 data collection suggests that there has been a sharp reduction in first-year students in Christchurch institutions.

Bachelors and higher qualifications are largely theoretically based qualifications that make up four levels of the New Zealand Qualifications Framework. Level 7 is made up of bachelors degrees, graduate certificates and diplomas, and certificates of proficiency. Level 8 qualifications comprise postgraduate certificates and diplomas, and bachelors degrees with honours. Level 9 qualifications are masters degrees. Level 10 qualifications are doctoral degrees, including doctor of philosophy, professional doctorates and higher doctorates.

Analytical tables: Data on learners in bachelors and postgraduate qualifications is available at: [www.educationcounts.govt.nz/statistics/tertiary\\_education](http://www.educationcounts.govt.nz/statistics/tertiary_education) – select ‘participation’ or ‘retention and achievement’.

<sup>1</sup> Developing an investment plan is the first prerequisite for eligibility for public funding for quality-assured providers. The investment plan sets targets for outcomes and describes the provision aimed at achieving those outcomes and how success will be measured. In assessing a plan with a tertiary education organisation, the Tertiary Education Commission looks for evidence of alignment with the organisation’s core role, and with the priority outcomes of the tertiary education strategy.

**ENROLMENTS IN BACHELORS AND HIGHER QUALIFICATIONS<sup>1</sup>**

The number of domestic and international students in bachelors and higher qualifications increased by 3.7 percent from 2009 to 2010, with similar percentage increases for both men and women.

The participation rate in these levels of study also increased, suggesting that enrolments are increasing at a faster rate than would be expected from changes in population size alone. It is likely the continued weak labour market is contributing to this trend.

**Students in bachelors and higher qualifications by gender in 2010**

Total	206,000	(up 3.7% on 2009)
Females	122,000	(up 3.9% on 2009)
Males	84,500	(up 3.5% on 2009)

When expressed as equivalent full-time student units, enrolments in bachelors and higher qualifications totalled 156,000 in 2010, up 5.0 percent on 2009.

**ENROLMENTS BY LEVEL OF STUDY**

The increase in the number of domestic and international students in bachelors and higher qualifications in 2010 was not as strong as in 2009. Student numbers at postgraduate level increased substantially, while the number of graduate certificates/diplomas declined. Enrolments at these levels increased more strongly in terms of equivalent full-time student units, suggesting that more students were studying full-time in 2010 compared with 2009.

**Students in bachelors and higher qualifications by level of study in 2010**

	Students	% change from 2009	Equivalent full-time student units	% change from 2009
Total	206,000	+3.7%	156,000	+5.0%
Bachelors degrees	147,000	+3.3%	116,000	+4.8%
Graduate certs/dips	14,800	-0.2%	7,430	+4.6%
Honours	27,400	+4.4%	17,700	+6.3%
Masters	13,900	+5.4%	7,770	+5.8%
Doctorates	7,960	+7.5%	6,240	+4.0%

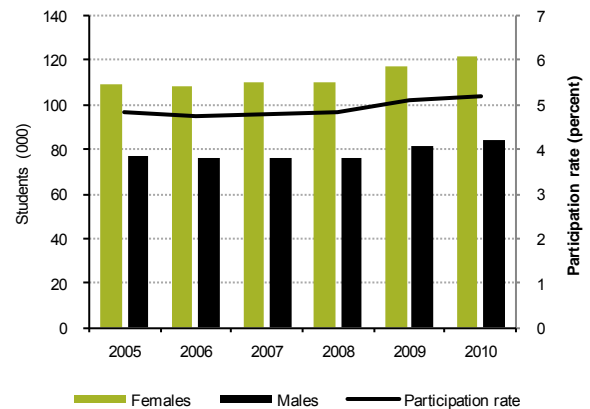
**TYPE OF PROVIDER**

Increasing demand for bachelors and higher-level study by domestic students was seen in all tertiary provider types. Wānanga had the largest percentage increase in the number of students from 2009 to 2010, but their enrolments at these levels are relatively small. Universities continue to dominate enrolments at this level, and they had the largest increase in number of students from 2009 to 2010. The increases in 2010 were lower than those in 2009, indicating that tertiary education providers are keeping within their investment plan targets.

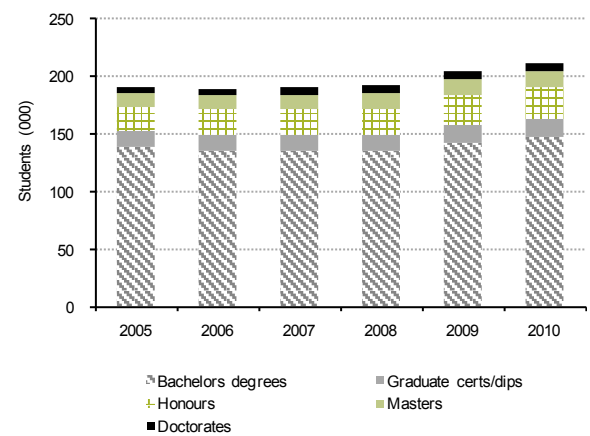
**Domestic students in bachelors and higher qualifications by sub-sector in 2010**

Total	180,000	(up 3.3% on 2009)
Universities	147,000	(up 1.7% on 2009)
Polytechnics	26,500	(up 8.1% on 2009)
Wānanga	2,780	(up 40% on 2009)
Private training establishments	5,260	(up 13% on 2009)

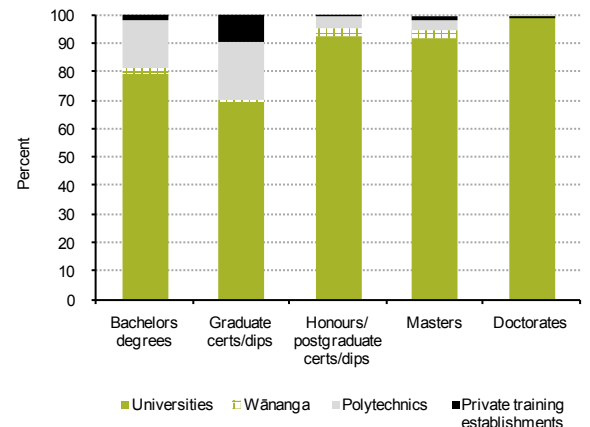
**Figure 9.1** Participation in bachelors and higher qualifications by gender



**Figure 9.2** Participation in bachelors and higher qualifications by level of study



**Figure 9.3** Domestic students in bachelors and higher qualifications by sub-sector



<sup>1</sup> In this chapter bachelors includes graduate diplomas and certificates, and honours includes bachelors degrees with honours and postgraduate diplomas and certificates.



**FIELD OF STUDY**

The nine fields of study listed below comprise 45 percent of all study. Of this group, only the number of students in accountancy declined from 2009 to 2010, while the number in nursing had the highest increase. Figure 5.4 shows that the proportion of students in the different levels of study varies by field of study.

**Domestic equivalent full-time student units in bachelors and higher qualifications by selected fields of study in 2010**

Teacher education	9,640	(up 0.5% on 2009)
Business and management	9,500	(up 0.6% on 2009)
Studies in human society	7,670	(up 6.7% on 2009)
Nursing	6,980	(up 9.8% on 2009)
Biological sciences	6,530	(up 6.3% on 2009)
Law	6,460	(up 2.3% on 2009)
Language and literature	5,670	(up 3.6% on 2009)
Behavioural science	4,950	(up 4.3% on 2009)
Accountancy	4,300	(down 3.7% on 2009)

**ETHNIC GROUP**

While more than 60 percent of domestic students in bachelors and higher qualifications were in the European ethnic group in 2010, the highest rates of participation at this level were for Asian students.

The number of students increased for all ethnic groups from 2009 to 2010, but the number of Māori and Pasifika students increased by a greater percentage than the average.

**Domestic students enrolled in bachelors and higher qualifications in 2010**

Europeans	124,000	(up 3.3% on 2009)
Māori	20,700	(up 7.6% on 2009)
Pasifika	10,700	(up 8.9% on 2009)
Asians	32,500	(up 2.9% on 2009)
Other	10,500	(up 3.0% on 2009)

**AGE AND GENDER**

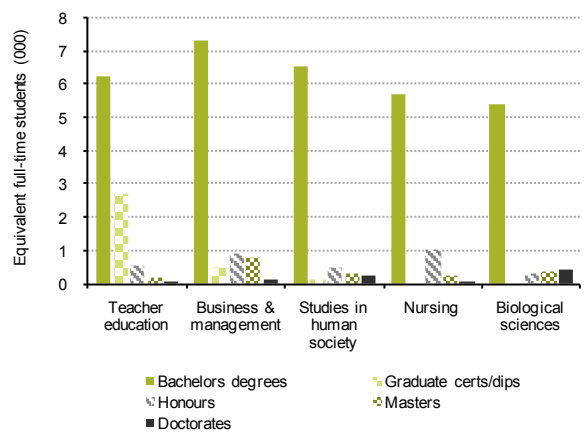
The number of domestic students aged 18 years and under studying bachelors or higher qualifications continued to decline in 2010, and there was also a slight decline in those aged 40 years and over. The increase in the number of students aged 20 to 24 years, at 5.9 percent, was higher than the average increase for domestic students at these levels.

Women made up 60 percent of enrolments in bachelors and higher qualifications. The number of men increased by 3.6 percent from 2009 to 2010, while the number of women was 3.2 percent higher than in 2009.

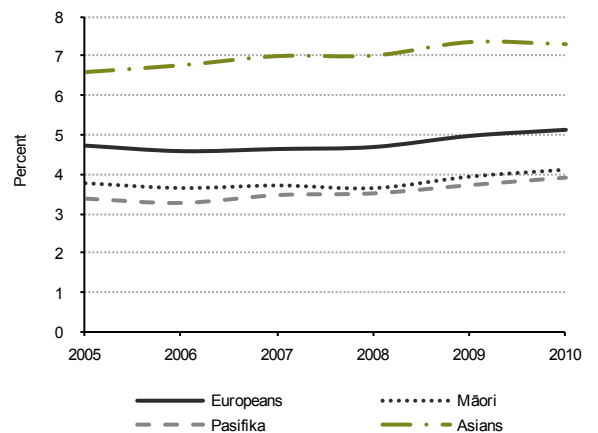
**Domestic students in bachelors and higher qualifications by age group in 2010**

Under 18 years	991	(down 15% on 2009)
18-19 years	35,400	(up 3.8% on 2009)
20-24 years	66,000	(up 5.9% on 2009)
25-39 years	47,700	(up 2.4% on 2009)
40 years and over	29,700	(down 0.5% on 2009)

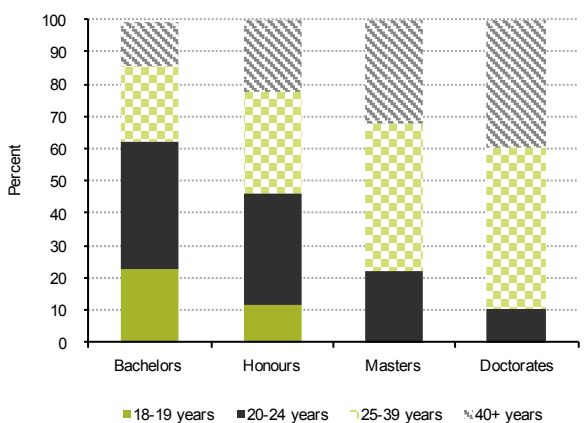
**Figure 9.4** Students in bachelors and higher qualifications for top five fields of study in 2010



**Figure 9.5** Participation rates in bachelors and higher qualifications by ethnic group



**Figure 9.6** Domestic students in bachelors and higher qualifications by age group



**FIRST-YEAR RETENTION**

The first-year retention rates for bachelors and higher qualifications were higher than those for lower-level qualifications.

While the proportion of students who continued to study the following year was similar for students who started study in 2008 and 2009, there have been increases in the first-year retention rates over the period from 2004 to 2009 (see Figure 5.7).

**Percent of domestic students who started study in 2009 and either completed a qualification or continued studying in 2010**

Bachelors degrees	83%	(83% for 2008 starters)
Graduate certificates/diplomas	71%	(72% for 2008 starters)
Honours	79%	(79% for 2008 starters)
Masters	87%	(86% for 2008 starters)
Doctorates	97%	(97% for 2008 starters)

**FIVE-YEAR RETENTION**

The proportion of students still studying in 2010 after starting a bachelors or higher qualification in 2005 remained relatively stable compared with the five-year rates for previous years.

Although there are differences between ethnic groups, there was more variation in the five-year retention rates for students in bachelors and masters degrees.

**Percent of domestic students who started a bachelors or higher qualification in 2005 and either completed it or continued studying by 2010**

Total	68%	(67% for 2004 starters)
Asians	74%	(75% for 2004 starters)
Europeans	67%	(67% for 2004 starters)
Pasifika	54%	(53% for 2004 starters)
Māori	53%	(53% for 2004 starters)

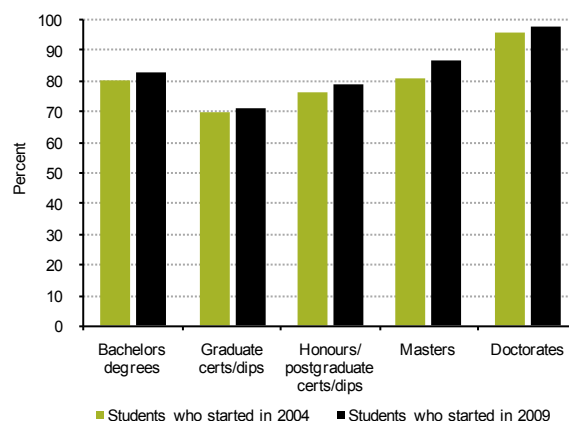
**FIVE-YEAR COMPLETION**

The five-year completion rates varied with the level of study. The year-on-year changes were relatively small for students who started study in 2005 and 2006. More variation occurred between full-time and part-time students.

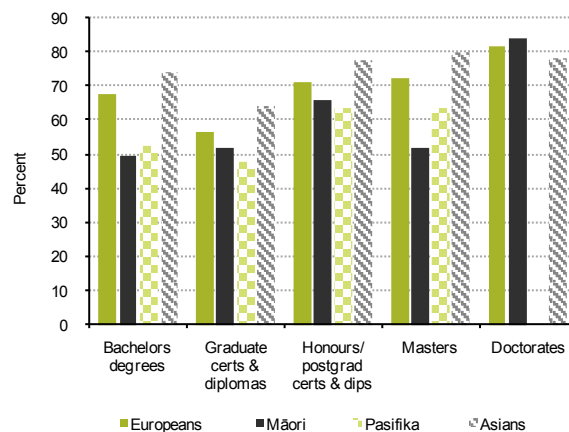
**Five-year completion rates for domestic students who started study in 2006**

<b>Full-time</b>		
Bachelors degrees	71%	(70% for 2005 starters)
Graduate certificates/diplomas	88%	(86% for 2005 starters)
Honours	82%	(81% for 2005 starters)
Masters	79%	(79% for 2005 starters)
Doctorates	43%	(30% for 2005 starters)
<b>Part-time</b>		
Bachelors degrees	42%	(43% for 2005 starters)
Graduate certificates/diplomas	40%	(37% for 2005 starters)
Honours	59%	(59% for 2005 starters)
Masters	65%	(63% for 2005 starters)
Doctorates	35%	(37% for 2005 starters)

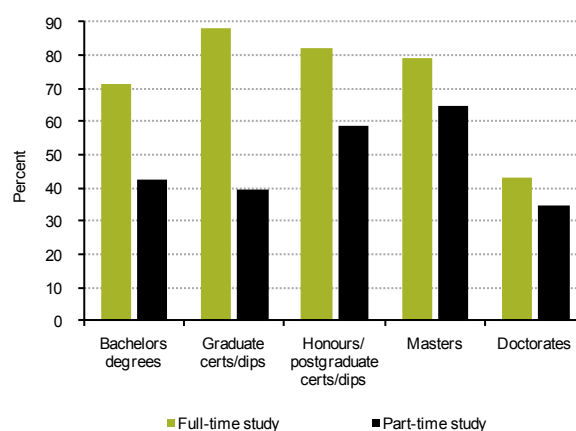
**Figure 9.7** First-year retention rates for students who started a bachelors or higher qualification in 2004 and 2009 by level of study



**Figure 9.8** Five-year retention rates for students who started a bachelors or higher qualification in 2005 by ethnic group and level of study



**Figure 9.9** Five-year completion rates for students who started a bachelors or higher qualification in 2006 by level of study



## COMPLETION OF QUALIFICATIONS

The number of domestic students completing bachelors and higher qualifications decreased in 2010, compared with 2009. The number of students completing qualifications is generally expected to increase over the next few years, reflecting the higher numbers of students enrolled recently and rising completion rates.

### Domestic students who completed a bachelors or higher qualification in 2010

Total	36,300	(down 2.8% on 2009)
Bachelors degrees	20,200	(down 4.4% on 2009)
Graduate certificates/diplomas	4,170	(down 4.3% on 2009)
Honours	8,260	(up 0.5% on 2009)
Masters	3,040	(down 1.0% on 2009)
Doctorates	707	(up 7.1% on 2009)

**Figure 9.10** Domestic students completing bachelors and higher qualifications by level of study



## INTERNATIONAL STUDENTS

In 2010, international students made up 13 percent of all students studying at these levels, unchanged since 2008.

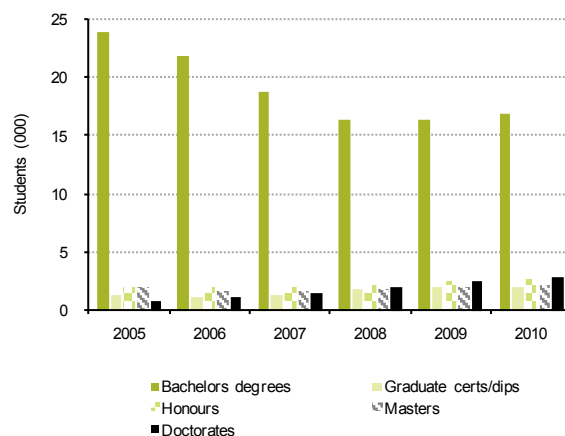
International student numbers increased in 2010 at a higher rate than for domestic students. The largest proportional increases continue to be by doctoral students, but, in general, the increases in 2010 were lower than in 2009. The trend in bachelors-degree students moved upwards in 2010 for the first time since 2005.

### International students in bachelors and higher qualifications in 2010

Total	26,400	(up 5.8% on 2009)
Bachelors degrees	16,900	(up 3.9% on 2009)
Graduate certificates/diplomas	2,020	(no change on 2009)
Honours	2,830	(up 9.0% on 2009)
Masters	2,230	(up 7.4% on 2009)
Doctorates	2,800	(up 16% on 2009)

In terms of equivalent full-time student units, total international enrolments in these levels of study were at 19,200, up 5.8 percent on 2009.

**Figure 9.11** Enrolments by international students in bachelors and higher qualifications by level of study



# 10 NON-FORMAL EDUCATION

## Adult and community education

Adult and community education is provided by community groups, secondary schools and tertiary education providers. In 2010, the national priorities for adult and community education were reduced from five to the following three priorities:

- ▲ engaging learners whose initial learning was not successful
- ▲ improving the literacy, language and numeracy of individuals and whānau, and
- ▲ strengthening social cohesion.

In 2010, adult and community education included ACE networks; English language services to adult migrant and refugee New Zealanders from non-English-speaking backgrounds; rural education activities programmes; some community-based groups funded indirectly through schools, and adult education through other government initiatives, including health and prisoner education.

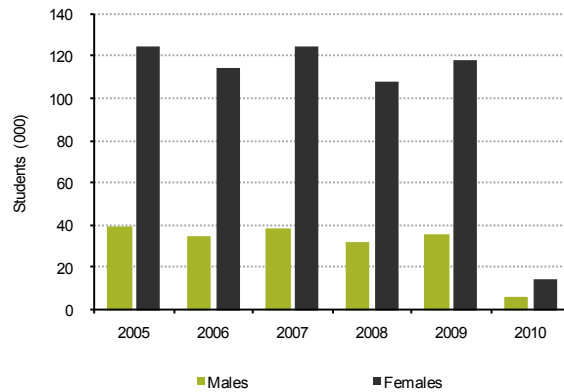
### ACE IN SCHOOLS

Secondary schools provide community education programmes for adults in addition to their regular daytime curriculum. In 2009, the government announced that significant cuts in government funding for this provision would come into effect in 2010. It was agreed that the remaining funding would be allocated through a contestable funding round targeting priority areas of provision (English language, literacy and numeracy, New Zealand Sign Language and Te Reo Māori).

In 2010, there were 20,561 enrolments in funded school community education programmes compared to 154,000 enrolments in 2009.

Sixty-nine percent of enrolments in community education in schools were by women and 57 percent of students had English as a second language. The participation by New Zealand Europeans fell from 83 percent in 2009 to 30 percent in 2010, due to an increase in Asian participation (28 percent in 2010, compared to 8.5 percent in 2009), as well as increases in both Māori participation (12 percent in 2010 and 5.7 percent in 2009) and Pasifika participation (9 percent in 2010 and 2.4 percent in 2009).

Figure 10.1 Students in community education in schools



### ACE IN TERTIARY EDUCATION INSTITUTIONS

In 2010, 70,600 students enrolled in community education programmes, down 13 percent on 2009. Enrolments represented 4,340 equivalent full-time students, down by 3.5 percent from 2009. Since 2004, the number of students enrolled in community education at tertiary education institutions decreased due to a shift from demand-led funding to capped funding.

Sixty-four percent of domestic ACE students were enrolled at polytechnics and 33 percent at universities. There were also 3,680 international students enrolled at tertiary education institutions, representing 5.1 percent of total ACE enrolments at public providers. Sixty-two percent of international ACE students were enrolled at universities and 38 percent at polytechnics.

Overall, 63 percent of students in 2010 were European, 16 percent were Māori, 11 percent Asian, 4.7 percent Pasifika and 4.9 percent identified with other ethnic groups.

Women made up 56 percent of students and those aged 25 years and over made up 76 percent. The most common fields of study were society and culture, management and commerce, and creative arts. Courses were provided by all 20 polytechnics, 7 universities and 1 wānanga. In 2010, 72 percent of these students were subsidised through student achievement-component funding.

### ACE IN COMMUNITIES

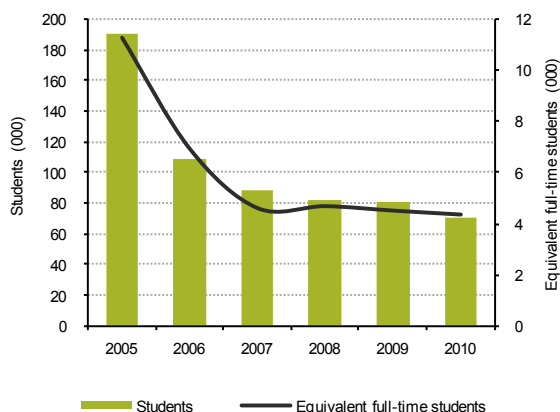
In 2010, a total of 55 organisations provided ACE courses in communities with a government subsidy of \$11.8 million. In 2009, the number of community ACE providers and government funding was the same. In 2010, community ACE courses were provided by 30 community education providers, 5 private training establishments, 13 rural education activities programme providers and 7 other tertiary education providers.

### CHANGES TO ADULT AND COMMUNITY EDUCATION IN 2011

The 2010 Budget included significant cuts to funding for community education in tertiary education providers. Funding for adult and community education in tertiary education providers is expected to decrease by about 50 percent in 2011. Adult and community education provision in universities, focused on the following five priorities, is being implemented in 2011:

- ▲ providing specialised and research-informed higher-level learning that contributes directly to the creation of an advanced and rapidly evolving knowledge economy
- ▲ contributing to the knowledge society through the preservation, dissemination and application of university research
- ▲ promoting the development of critical and reflective thinking, and active and informed citizenship locally, nationally and globally
- ▲ facilitating pathways into and through university education, and
- ▲ building capability in the wider adult and community education sector (while having regard to the Adult and Community Education Professional Development Strategy).

**Figure 10.2** Students in community education in tertiary education institutions



### Adult literacy, language and numeracy

Adult literacy, language and numeracy are delivered through formal and non-formal education in workplaces and through providers.

In 2010, provision commenced under the Intensive Literacy, Language and Numeracy Fund, which replaced funding under the Foundation Learning Pool. The new fund provides support for the intensive provision of quality literacy and numeracy learning, which is delivered in an appropriate, structured context with strong community links. Provision is intended for learners with very low literacy and numeracy. In 2010, 44 providers received a total of \$12.8 million in funding. Intensive literacy programmes were provided at polytechnics, universities, private training establishments, other tertiary education providers, rural education activity programmes and schools.

The Workplace Literacy fund provides support for employees to increase their literacy, language and numeracy skills. In 2010, workplace literacy programmes were delivered by 25 providers and 10 employers. A total of \$15 million was provided in funding.

English Language Partners New Zealand<sup>1</sup> provided services to 7,950 learners who were recent migrants and refugees in 2010. The number of learners was down from 8,390 in 2009. Services were provided by 3,200 volunteers and 1,030 new volunteers were trained to certificate level during 2010, down from 1,100 the previous year.

As signalled in 2009, government funding for English as a Second or Other Language Assessment Services ceased in 2010.

<sup>1</sup> Formerly known as the National Association of English as a Second or Other Language Home Tutors.

# 11 FINANCIAL SUPPORT FOR STUDENTS

## Overview

Following changes made by government to widen access to student allowances in 2006, the number of recipients has increased by more than 10 percent, on average, per year. In 2010, there were 95,900 student allowances recipients.

More students have taken up loans since the introduction of interest-free loans in 2006. However, from 2009 to 2010 the number of first-time borrowers decreased slightly. Overall, the number of student loan borrowers increased from 2009 to 2010 to 212,000, including 63,500 first-time borrowers.

In 2010, the average amount borrowed was \$16,700 and the median amount borrowed was \$11,400. In 2005, before the introduction of interest-free loans, the median balance was \$10,400.

There were 587,000 New Zealanders with a student loan balance with Inland Revenue in 2010, up 4.6 percent on the previous year. However, 60 percent of people with a student loan owed less than \$15,000, compared to 61 percent in 2009.

Loan repayments to Inland Revenue and the Ministry of Social Development totalled \$754 million for the year ended June 2010. Over 70 percent of repayments are collected via the PAYE system.

## STUDENT LOAN SCHEME

The Student Loan Scheme was established in 1992. It provides for the costs of tertiary education to be shared between the government, students and their families. The number of New Zealanders who have accessed the scheme has grown from 44,000 in 1992 to 212,000 in 2010. Participation in tertiary education provides an opportunity for individuals to develop skills and knowledge to make a better contribution to the workforce and hence, the economy.

## STUDENT ALLOWANCES

The current form of student allowances was introduced in 1989 to provide allowances to New Zealand students aged 16 years and over who were studying recognised tertiary courses and to some senior secondary school students. The aim of the scheme is to ensure daily living expenses do not act as a barrier to full-time education for students from low and medium income backgrounds. There are different allowance types to cover different personal circumstances. Students who live away from home can also receive an accommodation benefit, subject to some eligibility criteria.

## Changes to student support in 2011

Some major changes to student support policy were announced in 2011 that will be implemented in 2012 and 2013, covering both the Student Loan Scheme and the Student Allowances Scheme. Some of these changes will require a legislative amendment which is expected to be passed in 2012.

### ELIGIBILITY CHANGES IN THE STUDENT LOAN SCHEME

#### Removing course-related cost entitlements for part-time full-year students

From 1 January 2012, part-time, full-year students will no longer be able to borrow through the Student Loan Scheme for course-related costs. Part-time, full-year students will be entitled to borrow for compulsory fees only. Part-time, full-year is defined as being in study for a minimum of 32 weeks in one year and with a course load of less than 0.8 equivalent full-time student units (EFTS).

#### Restricting student loan eligibility for borrowers aged 55 years and over to tuition fees only

From 1 January 2013, people aged 55 years and over will not be eligible to borrow for living and course-related costs from the Student Loan Scheme. All current students over the age

limit at the date of announcement (19 May 2011), or who will reach the age limit before 1 January 2013, are eligible to borrow after this date to complete the qualification they were enrolled in on 19 May 2011 (but only that qualification and not any related follow-on qualification), or until 1 January 2015, whichever comes first.

#### **Restricting student loan eligibility for those with an overdue student loan repayment obligation**

From 7 February 2013, borrowers who have overdue payments amounting to \$500 or more and have been in default for one or more years will not be eligible to access the Student Loan Scheme.

This change relates to borrowers who are in default from February 2012 and affects new lending from 7 February 2013.

Borrowers who successfully apply for hardship to the Inland Revenue will not be affected by this change.

#### **REPAYMENT POLICY CHANGES**

##### **Holding repayment threshold set at \$19,084 until 2015**

Inflation adjustments to the student loan repayment threshold will be suspended until 31 March 2015. The repayment threshold was set at \$19,084 from 1 April 2009 and will remain at that level until 31 March 2015.

##### **Adding back losses to income for student loan repayment purposes**

From 1 April 2012, New Zealand-based borrowers will no longer be able to claim business and investment losses against their repayment obligation for their student loan.

##### **One-year application-based repayment holiday**

The automatic three-year repayment holiday for borrowers who go overseas is being reduced to one year. Borrowers will also be required to apply to Inland Revenue for the repayment holiday and provide, or confirm, contact details for an alternative New Zealand contact. Borrowers who do not do so will not receive a repayment holiday.

The one-year holiday will be for borrowers leaving New Zealand from 1 April 2012. Borrowers who are already overseas on 1 April 2012 will receive the lesser of one year or the period remaining of their existing holiday.

Further details on these initiatives can be found on the Ministry of Education website: [www.minedu.govt.nz/theMinistry/Budget/Budget2011/Factsheets2011/StudentSupport.aspx](http://www.minedu.govt.nz/theMinistry/Budget/Budget2011/Factsheets2011/StudentSupport.aspx).

#### **OTHER CHANGES**

##### **Requiring a contact person for all new loan applications**

Beginning 1 January 2013, borrowers of the Student Loan Scheme will be required to provide details of a contact person.

##### **Extending the exemption to the two-year stand-down for new permanent residents to sponsored family members of 'protected persons'**

The two-year residency stand-down exemption will be extended to the sponsored family members of protected persons for both student loans and allowances.

When a student applies for a student loan or allowance for study starting on or after 1 January 2012 and provides evidence that they were granted permanent residency via sponsorship by a family member holding protected persons status, they will be exempt from the two-year residency stand-down.

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Analytical tables: Data on the Student Loan Scheme is available at: [www.educationcounts.govt.nz/statistics/tertiary\\_education/financial\\_support\\_for\\_students](http://www.educationcounts.govt.nz/statistics/tertiary_education/financial_support_for_students).

### STUDENT ALLOWANCES RECIPIENTS

In 2010, 13,300 more students received allowances, a 16 percent increase on 2009. The number of student allowances recipients reached 95,900 in 2010. This compares to 82,600 recipients in 2009 and 56,800 in 2005.

In 2010, 53 percent of allowances recipients were females. In comparison, 50 percent of allowances recipients were females in 2001.

#### Number of student allowances recipients by gender in 2010

Females	50,800	(up 16% on 2009)
Males	45,100	(up 16% on 2009)
Total	95,900	(up 16% on 2009)

Source: Ministry of Social Development.

Figure 11.1 Student allowances recipients by gender



### MOST ALLOWANCES HOLDERS AGED UNDER 24 YEARS

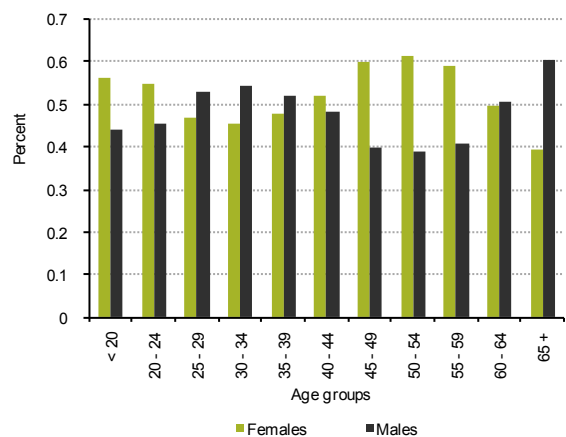
In 2010, there were 54,900 student allowances recipients under 24 years of age, comprising 57 percent of the total. The majority of students under 24 years are subject to parental income testing. The exceptions are those under-24-year-old students who have a dependent child or children or those who are awarded an Independent Circumstances Allowance because of exceptional family circumstances. The average age of allowances recipients in 2010 was 26.0 years.

#### Distribution of student allowances recipients by age group in 2010

Under 20 years	21%	(22% in 2009)
20-24 years	41%	(40% in 2009)
25-29 years	16%	(16% in 2009)
30-39 years	11%	(11% in 2009)
40-49 years	6.2%	(6.6% in 2009)
50-59 years	3.2%	(3.2% in 2009)
60 years and over	1.1%	(1.1% in 2009)

Source: Ministry of Social Development.

Figure 11.2 Student allowances recipients by age group and gender



### MORE YOUNGER ALLOWANCES RECIPIENTS

The distribution of the various types of allowances did not change between 2009 and 2010. Fifty-five percent of student allowances recipients were under 24 years of age and received a parental-income-tested allowance. This group increased by 17 percent from 2009 to 2010 to 53,000 recipients. Single allowances recipients aged 24 years and over comprised 29 percent of the total in 2010. The largest increase from 2009 to 2010 occurred for students with an earning spouse – up 26 percent.

#### Number of student allowances recipients in 2010

Under 24 years parental-income-tested	53,000	(up 17% on 2009)
Single – 24 years and over	27,500	(up 16% on 2009)
Independent circumstances	2,080	(down 5.8% on 2009)
Student with earning spouse	2,150	(up 26% on 2009)
Other	11,300	(up 14% on 2009)

Note: From January 2009, the age for exemption from parental income testing decreased from 25 years to 24 years. Figure 11.3 shows the discontinuation in the data due to this change.

Source: Ministry of Social Development.

Figure 11.3 Student allowances recipients by type of allowance





**ALLOWANCES RECIPIENTS BY SUB-SECTOR**

In 2010, 52 percent of student allowances recipients were studying at a university, 27 percent at polytechnics, 16 percent at private training establishments, 3.8 percent at wānanga and 2.3 percent at schools.

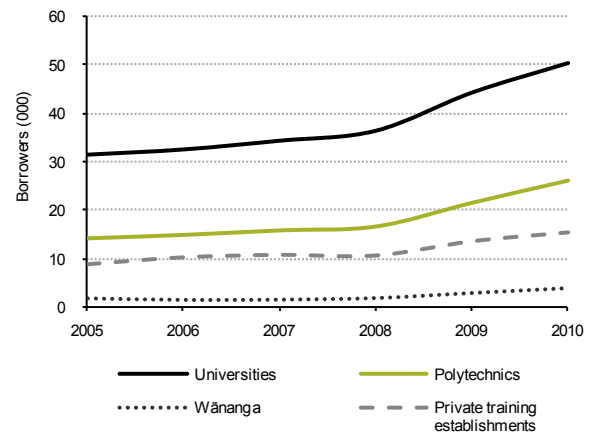
From 2009 to 2010, the number of allowances recipients increased for each tertiary education provider type with the highest increase occurring at wānanga.

**Number of student allowances recipients by sub-sector in 2010**

Universities	50,400	(up 14% on 2009)
Polytechnics	26,000	(up 21% on 2009)
Wānanga	3,750	(up 34% on 2009)
Private training establishments	15,200	(up 13% on 2009)

Source: Ministry of Social Development.

**Figure 11.4** Student allowances recipients by sub-sector



**ALLOWANCES RECIPIENTS BY ETHNIC GROUP**

In 2010, 52 percent of allowances recipients who provided their ethnic group were Europeans. Māori comprised 15 percent, Pasifika 7.9 percent, Asians 20 percent and the Other ethnic group 3.5 percent. Less than 2 percent of recipients did not provide their ethnic group. The highest percentage increase in the number of allowances recipients was for Pasifika students and the lowest percentage increase was for Asian students.

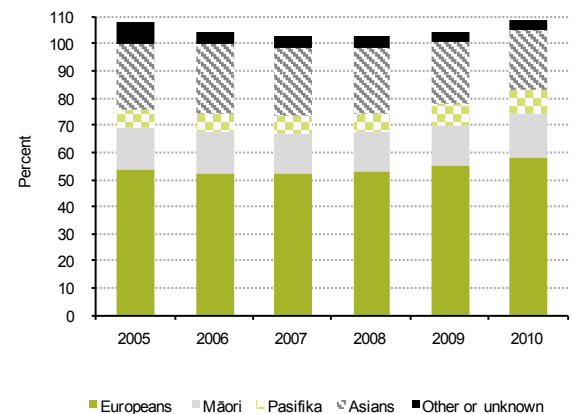
**Student allowances recipients by ethnic group**

	2008	2009	2010	% change 2009-10
Europeans	34,900	45,300	55,200	22
Māori	9,260	12,500	15,900	27
Pasifika	4,490	6,460	8,400	30
Asians	16,000	18,900	21,000	11
Other	2,580	3,020	3,680	22

Note: As recipients who indicated two ethnic groups are counted in each group the total in Figure 11.5 will not add up to 100 percent.

Source: Ministry of Social Development.

**Figure 11.5** Student allowances recipients by ethnic group



**ACCOMMODATION BENEFIT UPTAKE RATE**

In 2010, 71 percent of student allowances recipients also received an accommodation benefit, compared to 74 percent in 2007 and 79 percent in 2004.

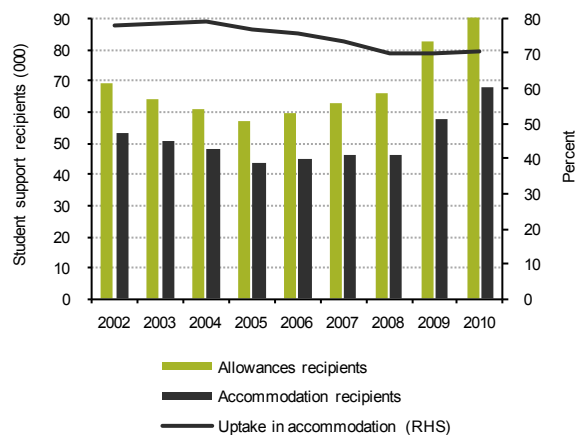
In 2010, the parental-income-tested allowances holders had the lowest accommodation benefit rate at 60 percent and among single parent allowances holders the rate was the highest, at 91 percent. Seventy percent of allowances recipients at polytechnics had an accommodation benefit and 81 percent of the recipients at wānanga.

**Uptake of accommodation benefit by student allowances recipients**

	2008	2009	2010
	70.2%	70.2%	70.7%

Source: Ministry of Social Development.

**Figure 11.6** Uptake in accommodation benefit



### EXPENDITURE ON ALLOWANCES

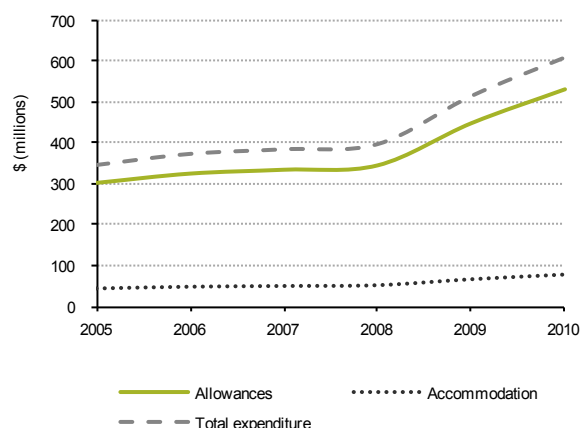
In 2010, the total expenditure on student allowances and accommodation benefits increased by 18 percent. The total average allowance increased from 2009 to 2010 by 2.0 percent overall. The average main allowance increased by 2.0 percent and the average accommodation benefit increased by 1.3 percent.

#### Student allowances expenditure and average allowances by component in 2010

Expenditures		
Total	\$609 million	(up 18% on 2009)
Main student allowances	\$531 million	(up 18% on 2009)
Accommodation benefits	\$79 million	(up 19% on 2009)
Average annual allowances		
Total allowance	\$6,350	(up 2.0% on 2009)
Main allowances	\$5,530	(up 2.0% on 2009)
Accommodation benefit	\$1,160	(up 1.3% on 2009)

Source: Ministry of Social Development.

Figure 11.7 Student allowances and accommodation benefit payments



### MORE STUDENTS BORROWED

Since the introduction of interest-free loans for all New Zealand-based borrowers in 2006, more students have taken up loans. In 2010, there were 27 percent more students with a loan than in 2006. From 2009 to 2010, the number of borrowers increased by 6.9 percent.

After a 13 percent increase in the number of first-time student loan borrowers from 2008 to 2009, the number of first-time borrowers decreased by 1.1 percent from 2009 to 2010.

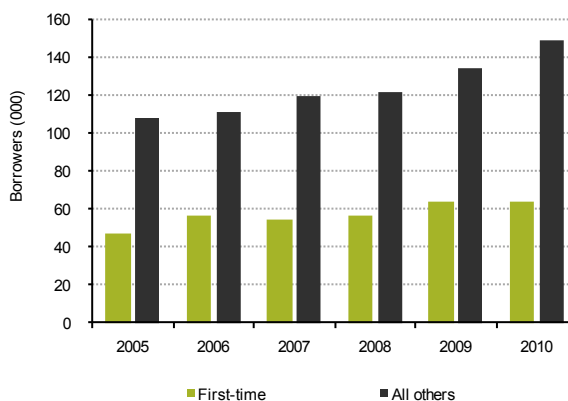
#### Number of student loan borrowers in 2010

First-time	63,500	(down 1.1% on 2009)
All others	149,000	(up 11% on 2009)
Total	212,000	(up 6.9% on 2009)

Notes: 1. This data is provisional. 2. First-time borrowers are those who have not borrowed in 2000 or subsequently.

Source: Ministry of Social Development.

Figure 11.8 Student loan borrowers



### INCREASE IN STUDENT LOANS UPTAKE

The student loan uptake rate increased overall from 71 percent in 2009 to 74 percent in 2010. For full-time students the uptake rate increased by 3.5 percentage points to 83 percent of eligible students and for part-time students it increased by 1.6 percentage points to 50 percent of eligible students.

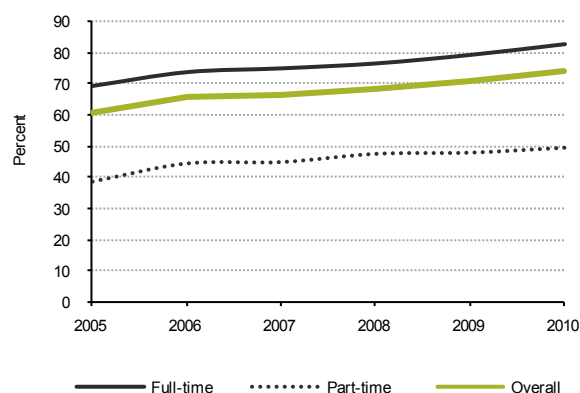
#### Proportion of eligible students who borrowed in 2010

Full-time	82%	(79% in 2009)
Part-time	50%	(48% in 2009)
Overall	74%	(71% in 2009)

Note: Overall uptake rates depend on the mix of full-time and part-time borrowers. The lower uptake of part-time borrowers, compared with the high uptake of full-time borrowers, reduces the overall uptake rate.

Source: Ministry of Social Development.

Figure 11.9 Student loan uptake rates by study status



### MORE BORROWED TO PAY THEIR FEES

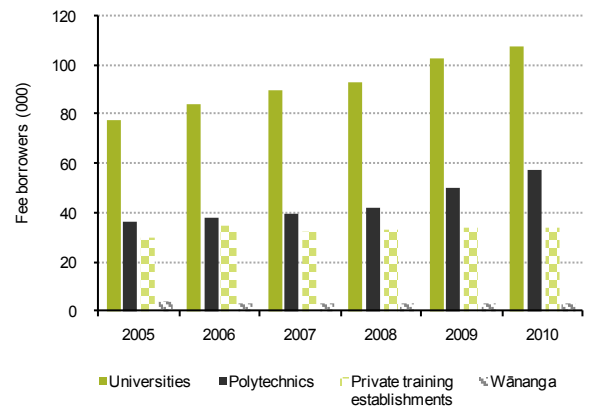
In 2010, the number of students borrowing to cover the cost of their tuition fees increased by 6.9 percent overall. Most of the increase was generated by polytechnic and university students.

#### Number of students borrowing their fees by sub-sector in 2010

Universities	108,000	(up 5.0% on 2009)	96% of total borrowers
Polytechnics	57,500	(up 15% on 2009)	95% of total borrowers
Private training establishments	33,800	(unchanged from 2009)	89% of total borrowers
Wānanga	3,200	(up 15% on 2009)	58% of total borrowers
<b>Total</b>	<b>199,000</b>	<b>(up 6.9% on 2009)</b>	<b>93% of total borrowers</b>

Source: Ministry of Social Development.

Figure 11.10 Student fee borrowers by sub-sector



### MOST BORROWERS AGED UNDER 30 YEARS

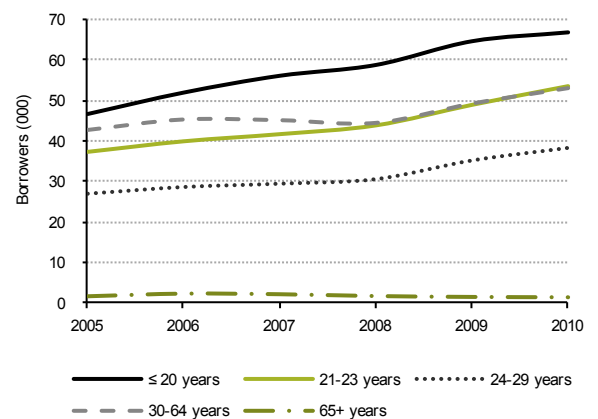
The age distribution of borrowers in 2010 was similar to that in 2009. In 2010, 32 percent of all borrowers were under 21 years of age and those aged 21 to 29 years represented 43 percent.

#### Borrowers by age group

	2009	2010	% change 2009-10
≤ 20 years	64,400	66,600	+3.4%
21-23 years	48,800	53,400	+9.5%
24-29 years	35,200	38,300	+8.9%
30-64 years	49,200	53,100	+7.9%
65 years and over	1,210	1,110	-8.2%

Source: Ministry of Social Development.

Figure 11.11 Borrowers by age group



### MORE BORROWERS IN EACH ETHNIC GROUP

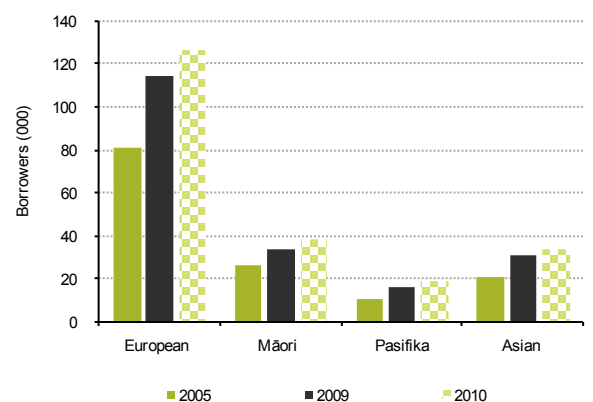
Comparing 2010 with 2005 shows that the number of borrowers has increased for all ethnic groups.

#### Borrowers by ethnic group

	2005	2010	% change 2005-10	Proportion of students in 2010	Proportion of borrowers in 2010
Europeans	81,200	126,000	+56%	59%	60%
Māori	26,000	38,300	+47%	18%	19%
Pasifika	10,800	18,300	+69%	7.6%	8.6%
Asians	20,700	33,200	+60%	18%	16%

Source: Ministry of Social Development.

Figure 11.12 Borrowers by ethnic group



**MORE WOMEN THAN MEN BORROWED**

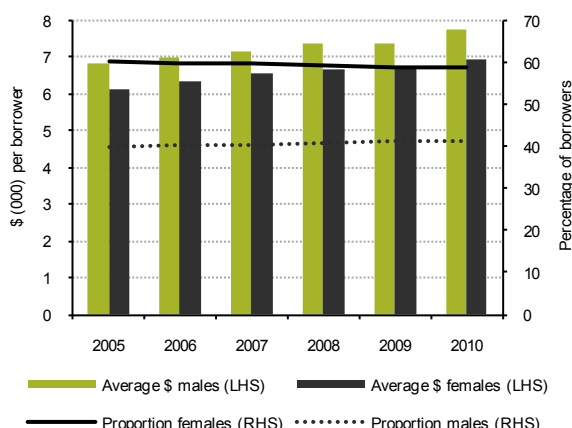
In 2010, 59 percent of loan scheme borrowers were women, consistent with the higher proportion of women enrolled in tertiary education. In 2010, male students borrowed \$813 more, on average, than female students.

**Average amount borrowed by gender in 2010**

Females	\$6,960	(up 3.8% on 2009)
Males	\$7,770	(up 5.2% on 2009)

Source: Ministry of Social Development.

**Figure 11.13** Average amount borrowed and borrowers by gender



**TOTAL AMOUNT BORROWED INCREASED**

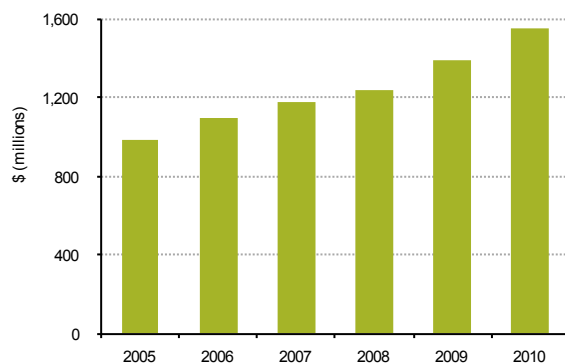
At \$1.55 billion, the amount borrowed under the Student Loan Scheme was \$161 million more in 2010 than in 2009. The amount borrowed increased by 12 percent in 2009 and 2010. Contributing to the higher amount borrowed was an increase of 4.3 percent in the number of domestic equivalent full-time students in level 5 to 7 diplomas and higher-level qualifications. The annual cost of tertiary education also continued to increase in 2010.

**Amounts borrowed in 2010 by loan component**

Total amount borrowed	\$1,550 million	(up 12% on 2009)
Course fees	\$1,010 million	(up 14% on 2009)
Course-related costs	\$143 million	(up 16% on 2009)
Living costs	\$389 million	(up 4.9% on 2009)

Source: Ministry of Social Development.

**Figure 11.14** Annual amount borrowed



**AVERAGE AMOUNT BORROWED INCREASES**

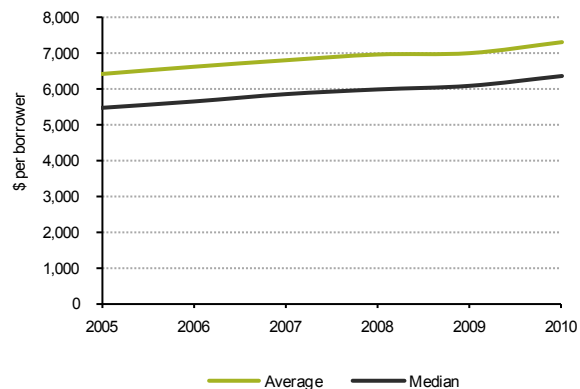
From 2009 to 2010, the median amount borrowed increased by \$274, and the average amount increased by \$307.

**Average and median amount borrowed in 2010**

Average	\$7,300	(up 4.4% on 2009)
Median	\$6,380	(up 4.5% on 2009)

Source: Ministry of Social Development.

**Figure 11.15** Average and median amount borrowed



**INCREASE IN AMOUNT BORROWED**

The average amounts borrowed for course fees, course-related costs and living costs increased from 2009 to 2010. The average amount borrowed for course fees increased by 6.5 percent, while the average amount of course-related costs and living costs increased by about half a percent.

**Average amount drawn from loan accounts by loan component in 2010**

Course fees	\$5,080	(up 6.5% on 2009)
Living costs	\$3,830	(up 0.4% on 2009)
Course-related costs	\$992	(up 0.5% on 2009)

Source: Ministry of Social Development and Ministry of Education.

**Figure 11.16** Average amount borrowed by loan component



**ALLOWANCES AND LOAN COMBINATIONS**

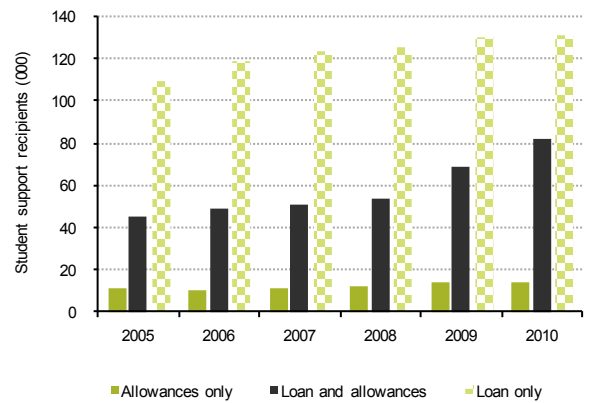
In 2010, 85 percent of student allowances recipients also received a loan for course fees and/or their living costs. The number of people with both a loan and an allowance continued to increase substantially from 2009 to 2010 – up by 19 percent. Student loans continue to be the most common support for people in tertiary study.

**Number of student loan borrowers and student allowances recipients**

	2008	2009	2010	% change 2009-10
Allowances only	12,200	13,900	14,000	+0.8
Allowances and living costs loans	53,500	68,700	81,900	+19
Loan only	125,000	130,000	131,000	+0.4

Source: Ministry of Social Development.

**Figure 11.17** Student allowances recipients and student loan borrowers



**ALLOWANCES AND LOAN COMBINATIONS**

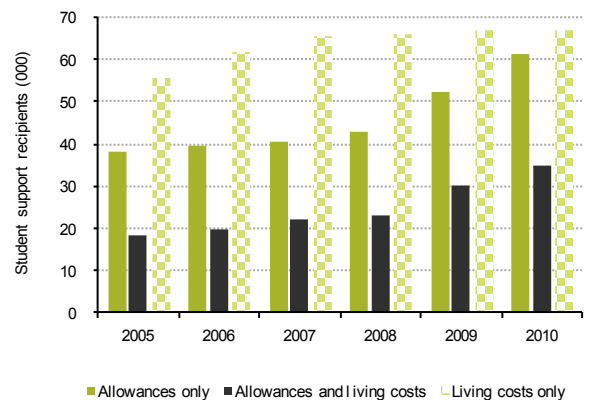
In 2010, 36 percent of student allowances recipients also borrowed for their living costs through the Student Loan Scheme.

**Student allowances recipients and students who borrowed for living costs**

	2008	2009	2010	% change 2009-10
Allowances only	42,800	52,300	61,200	+17
Living costs loans and allowances	22,900	30,300	34,800	+15
Living costs loans without allowances	65,900	66,900	66,800	-0.2

Source: Ministry of Social Development.

**Figure 11.18** Recipients of student allowances and living costs loans



**PEOPLE WITH STUDENT LOANS**

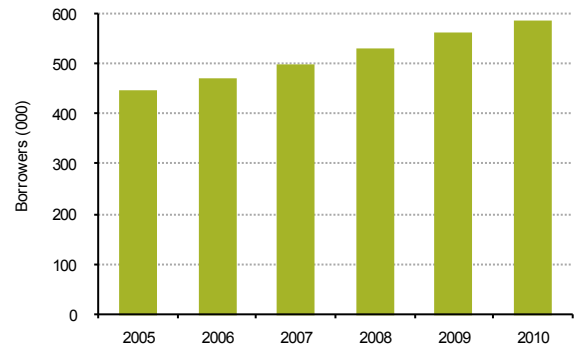
The number of people with a student loan balance with Inland Revenue at 30 June 2010 increased compared with the previous year. This reflects new borrowers entering the scheme throughout the year in greater numbers than those who completely repaid.

**Number of borrowers with Inland Revenue**

2005	445,000	(up 6.3% on 2004)
2006	471,000	(up 5.7% on 2005)
2007	499,000	(up 6.1% on 2006)
2008	530,000	(up 6.2% on 2007)
2009	562,000	(up 5.9% on 2008)
2010	587,000	(up 4.6% on 2009)

Source: Inland Revenue.

**Figure 11.19** Borrowers with Inland Revenue at 30 June



**STUDENT LOAN BALANCE**

The student loan debt held by Inland Revenue and the Ministry of Social Development at 30 June 2010 was 8.6 percent higher than the previous year.

**Nominal student loan balance at 30 June**

	Inland Revenue \$ (millions)	% change from previous year	Total \$ (millions)	% change from previous year
2005	6,680	12	7,500	10
2006	7,470	12	8,370	12
2007	8,400	13	9,410	12
2008	8,550	1.8	9,570	1.7
2009	9,110	6.5	10,300	7.2
2010	9,830	7.9	11,145	8.6

Note: In 2007, balances were calculated including accrued interest which was to be written off under the interest-free policy.

Source: Student Loan Scheme financial statements as published in the annual reports.

**Figure 11.20** Nominal value of student loans held at 30 June



**AVERAGE AND MEDIAN LOAN BALANCE**

The average loan balance held with Inland Revenue increased by 3.2 percent from 2009 to 2010. The increase in the median loan balance was slightly smaller at 2.8 percent.

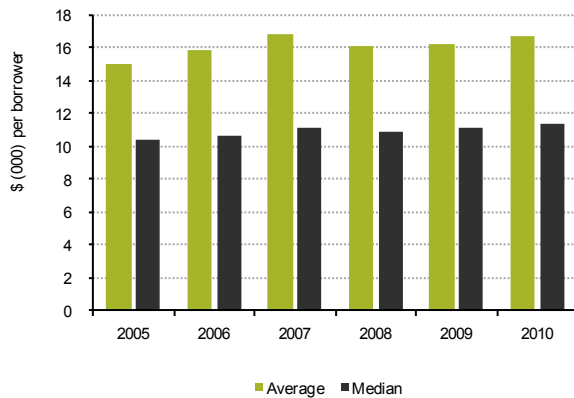
**Average and median loan balances at 30 June**

	Average \$	% change from previous year	Median \$	% change from previous year
2005	15,000	+5.3	10,400	+4.3
2006	15,900	+5.9	10,700	+2.4
2007	16,800	+6.0	11,100	+4.1
2008	16,100	-4.2	10,900	-1.8
2009	16,200	+0.5	11,100	+1.9
2010	16,700	+3.2	11,400	+2.6

Note: In 2007, balances were calculated including accrued interest which was to be written off under the interest-free policy.

Source: Inland Revenue.

**Figure 11.21** Average and median student loan balances at 30 June



**MOST BORROWERS OWE LESS THAN \$15,000**

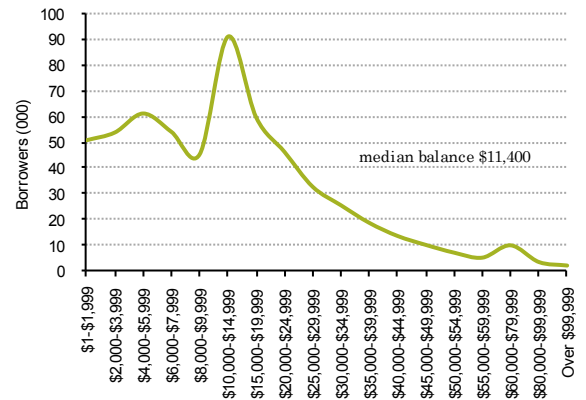
More than 60 percent of borrowers owed less than \$15,000 at 30 June 2010, compared to 61 percent at 30 June 2009.

**Proportion of borrowers by loan balance at 30 June 2010**

Value of loan	Percentage
Under \$10,000	45
\$10,000-\$14,999	15
\$15,000-\$19,999	10
\$20,000-\$29,999	13
\$30,000-\$39,999	7.5
\$40,000-\$49,999	4.0
\$50,000-\$59,999	2.1
\$60,000 and above	2.6

Source: Inland Revenue.

**Figure 11.22** Borrowers at 30 June 2010 by range of loan balance



**RISE IN LOAN REPAYMENTS**

Inland Revenue has collected \$5.62 billion in loan repayments since the loan scheme began. In the year ended June 2010, \$652 million was collected in repayments. This was a 5.3 percent increase on the previous year. Over 70 percent of repayments are collected via the PAYE system.

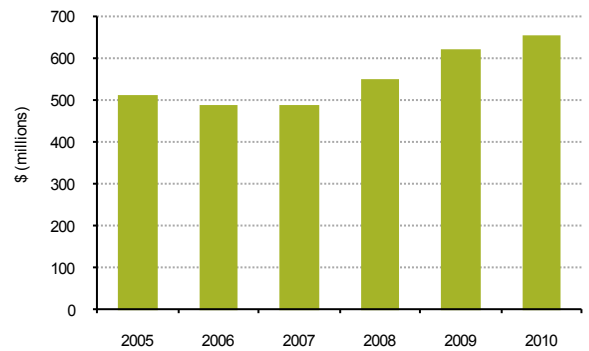
**Annual value of student loan repayments to Inland Revenue (June years)**

2005	\$510,000 million	(up 14% on 2004)
2006	\$486,000 million	(down 4.6% on 2005)
2007	\$487,000 million	(up 0.02% on 2006)
2008	\$550,000 million	(up 13% on 2007)
2009	\$619,000 million	(up 13% on 2008)
2010	\$652,000 million	(up 5.3% on 2009)

Note: Because a student loan account can be finalised after the end of the fiscal year, the number of loans repaid for a previous year may change.

Source: Inland Revenue.

**Figure 11.23** Annual student loan repayments at 30 June



**PROPORTION OF BORROWERS WHO HAVE REPAID IN FULL**

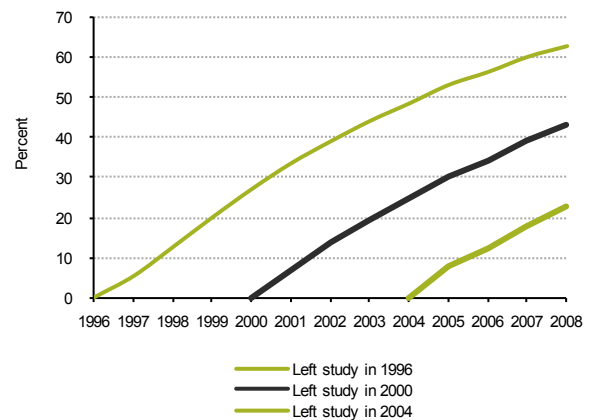
Sixty-three percent of people who took out a student loan in 1996 had repaid their loan in full by 31 March 2008. Of those who borrowed in 2000, 43 percent had repaid their loans by 31 March 2009.

Employment and income are the main determinants of the repayment rates of those who have left study. As incomes rise, borrowers' repayment obligations increase. For this reason, repayment rates tend to start slowly and increase as people gain experience in the workplace.

Note: The repayment years in Figure 11.24 end in March of the following calendar year. For example, the 2008 repayment year started on 1 April 2008 and ended on 31 March 2009.

Source: Statistics New Zealand, Integrated dataset on student loans and allowances.

**Figure 11.24** Proportion of borrowers who have fully repaid for the 1996, 2000 and 2004 leaving-year (March years)



**LOAN REPAYMENTS BY GENDER AND COMPLETION STATUS**

Those who complete their qualification are more likely to repay their loans over a shorter period of time than those who do not complete a qualification.

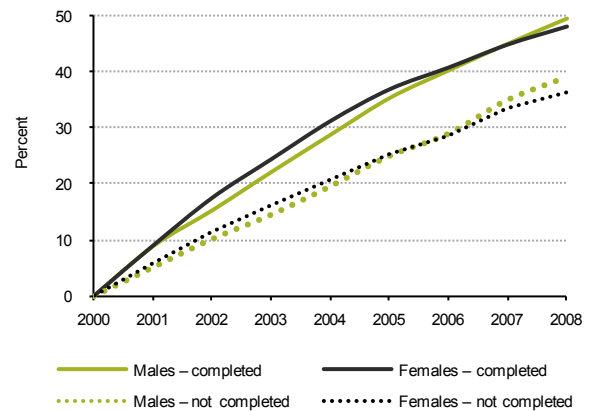
Although women initially repay their loans more quickly than men, gender has little impact on long-term repayment rates over time.

**Notes:**

1. Figure 11.25 shows people who last studied in 2000, had borrowed from the scheme, and had a student loan balance of \$20 or more at 31 March in the following year. Excluded are those who had repaid their student loan before 31 March in the year after leaving study.
2. Full repayment is deemed to occur when the student loan balance has fallen below \$20 and includes both tax non-resident and tax resident borrowers.
3. A student is deemed to have completed if he/she successfully completed a qualification in his/her last year of study.

**Source:** Statistics New Zealand, Integrated dataset on student loans and allowances.

**Figure 11.25** Borrowers who repaid their loans by gender and qualification completion status (March years)



**Figure 11.26** Student Loan Scheme’s nominal value, carrying value and fair value at 30 June

**VALUE OF THE LOAN SCHEME**

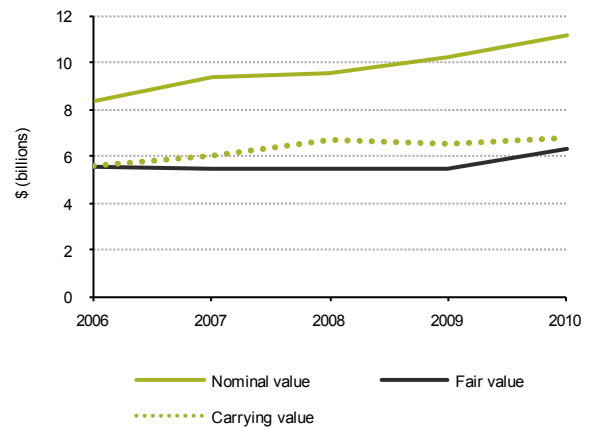
From 2009 to 2010, the carrying value decreased from 64 percent to 61 percent of the nominal value. Over the same period, the fair value increased from 53 percent to 57 percent of the nominal value. For more details about the scheme’s valuation please refer to the Student Loan Scheme Annual Report 2010, chapter 4.

**Student Loan Scheme’s nominal, carrying and fair values at 30 June**

	Nominal value	% change	Fair value	% change	Carrying value	% change
	\$ (millions)	from p.y.	\$ (millions)	from p.y.	\$ (millions)	from p.y.
2006	8,370	+11.6	5,540	-7.6	5,570	-13.8
2007	9,410	+12.5	5,440	-1.7	6,010	+7.9
2008	9,570	+1.7	5,520	-1.7	6,740	+12.1
2009	10,300	+7.2	5,460	-1.0	6,550	-3.1
2010	11,100	+8.6	6,370	+17	6,790	+3.6

**Note:** The carrying value is the value of the scheme recorded in the Crown’s financial statement.

**Source:** Student Loan Scheme financial statements for the year ended 30 June 2010.





# 12 RESEARCH IN THE TERTIARY EDUCATION SECTOR

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## Overview

The research performance of the tertiary sector improved in several areas in 2010. The volume of enrolments in doctoral degrees increased significantly, continuing a trend which began in 2006. This trend has been driven mainly by a large increase in international enrolments, which occurred in response to a change in government policy in 2006 to fund international doctoral students on the same basis as domestic students. International students comprised around 35 percent of doctoral enrolments in 2010, compared to 14 percent in 2005. An encouraging trend has seen continued increases in enrolments of Māori and Pasifika in doctorates.

As a result of the increased doctoral enrolments, the supervisory load placed on academics has continued to rise, with the number of doctoral enrolments per academic staff at several universities doubling since 2005.

The surge in enrolments at doctoral level has begun to be reflected in doctoral degree completions. There was significant growth in the number of doctoral degrees completed by international students.

The universities showed improvement in research output. Total research output increased at four of the five universities that reported research output in 2010.

As a percentage of world indexed publications, the share of publications and citations produced by researchers at New Zealand tertiary education institutions has been increasing over time.

## Doctoral enrolments in 2011

Early indications are that enrolments in doctorates have continued to grow in 2011. The number of doctoral enrolments reported up to the end of April 2011 was 6.5 percent higher than in the same period for 2010. However, the growth in enrolments of domestic students (1.8 percent) was much lower than the growth in international student enrolments (16 percent).

Analytical tables: Data on the research performance of the tertiary education sector is available at: [www.educationcounts.govt.nz/statistics/tertiary\\_education/research](http://www.educationcounts.govt.nz/statistics/tertiary_education/research).

### DOCTORAL ENROLMENTS BY GENDER<sup>1</sup>

The number of doctoral enrolments continued to rise significantly in 2010. This continues the strong increases in doctoral enrolments which started in 2006, when government began funding new international doctoral students at the same rate as domestic students. Total doctoral enrolments are now 64 percent above 2005 levels.

#### Doctoral enrolments in 2010

		% change 2005-10	% change 2009-10
Total	7,940	64	7.4
Females	4,040	62	6.5
Males	3,900	67	8.2

Figure 12.1 Doctoral enrolments by gender



### DOCTORAL ENROLMENTS BY RESIDENCY STATUS

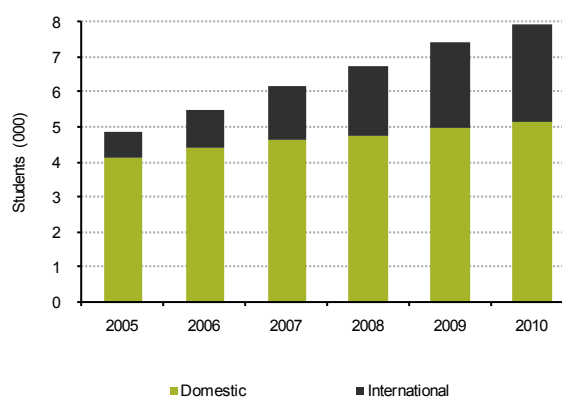
Although there was growth in the number of doctoral enrolments in 2010 by both domestic and international students, the rate of growth in international enrolments was much higher than for domestic students. In 2010, international enrolments made up 35 percent of all enrolments, compared to just 14 percent in 2005.

The disparate growth is a legacy of a change in the funding regime for new international students introduced in 2006, which treats them as domestic students.

#### Doctoral enrolments in 2010

		% change 2005-10	% change 2009-10
Total	7,940	64	7.4
Domestic	5,140	24	3.1
International	2,800	304	16

Figure 12.2 Doctoral enrolments by residency status



### DOCTORAL ENROLMENTS BY SELECTED GROUPS

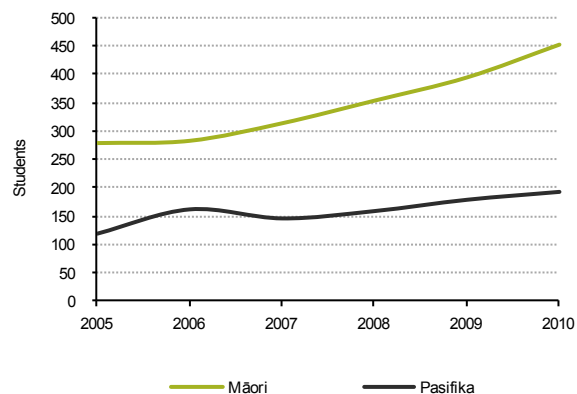
The number of Māori and Pasifika students enrolled in doctorates continued to increase in 2010. For both ethnic groups, enrolments are now at historically high levels. The centre of research excellence Ngā Pae o te Māramatanga has contributed to the growth in the number of Māori researchers through mentoring and other support programmes such as grants and scholarships, including the conducting of research relevant to Māori communities.

#### Doctoral enrolments in 2010

		% change 2005-10	% change 2009-10
Māori	451	63	15
Pasifika	192	63	7.9

Note: Students who indicate more than one ethnic group are counted in each group.

Figure 12.3 Doctoral enrolments by selected groups



<sup>1</sup> Higher doctorates are excluded from the student counts in this chapter.

### DOCTORAL STUDENTS PER ACADEMIC STAFF MEMBER

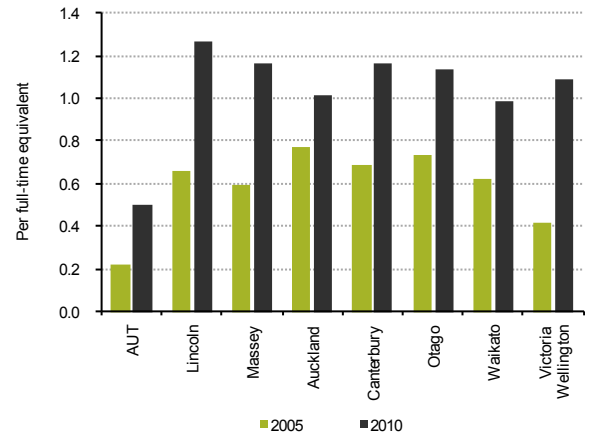
The ratio of doctoral students per academic staff member rose at almost all universities from 2009 to 2010, with the exception of Lincoln University. Lincoln University has the highest number of doctoral students per academic staff member. The number of doctoral students per academic staff member is now substantially above the level of five years ago at all universities.

#### Doctoral students to academic staff ratios

	2005	2010
All universities	0.60	1.02
Auckland University of Technology (AUT)	0.22	0.50
Lincoln University	0.66	1.27
Massey University	0.59	1.16
University of Auckland	0.77	1.01
University of Canterbury	0.69	1.16
University of Otago	0.73	1.13
University of Waikato	0.63	0.99
Victoria University of Wellington	0.41	1.09

Notes: 1. Data for colleges of education has been merged with the universities. 2. These ratios have been calculated using the student headcount and the full-time equivalent staff measure.

Figure 12.4 Ratio of doctoral enrolments to academic staff



### DOCTORAL COMPLETIONS BY GENDER

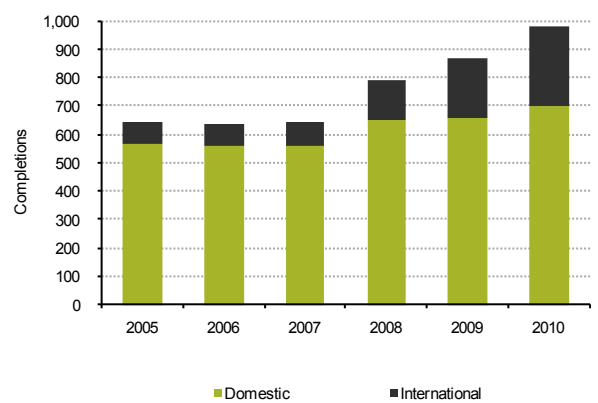
The number of students completing a doctoral degree increased in 2010. The rate of growth in doctoral completions in 2010 was higher for women than men. By 2010, 53 percent of doctoral completions were by women, compared to 49 percent in 2005.

The surge in completions from 2008 reflects the strong growth in enrolments from 2006 onwards.

#### Doctoral completions in 2010

		% change 2005-10	% change 2009-10
Total	982	53	14
Females	524	66	16
Males	458	40	11

Figure 12.5 Doctoral completions by gender



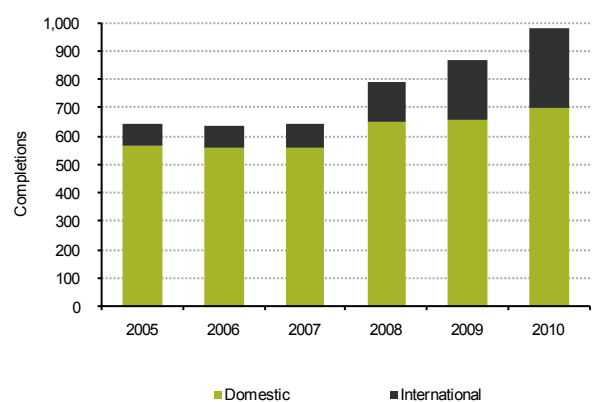
### DOCTORAL COMPLETIONS BY RESIDENCY STATUS

The strong growth in international students completing a doctoral degree continued in 2010, reflecting the high growth in international enrolments since 2005. In 2010, doctoral completions by international students were 29 percent of all completions, compared to just 11 percent in 2005.

#### Doctoral completions in 2010

		% change 2005-10	% change 2009-10
Total	982	53	14
Domestic	699	23	6.1
International	283	288	37

Figure 12.6 Doctoral completions by residency status



### DOCTORAL COMPLETIONS BY SELECTED GROUPS

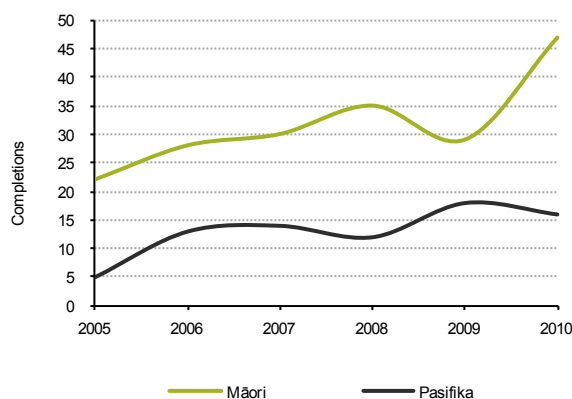
The number of doctoral completions by Māori students increased significantly in 2010, while the number of completions by Pasifika students fell. However, the long-term trend shows an increase in Māori and Pasifika graduates, with the likelihood of more increases to follow as the rise in doctoral enrolments by these groups flows through into completions. The centre of research excellence Ngā Pae o te Māramatanga has contributed to the increases in doctoral completions by Māori through its active support of Māori researchers.

#### Doctoral completions in 2010

		% change 2005-10	% change 2009-10
Māori	47	114	62
Pasifika	16	220	-11

Note: Students who indicate more than one ethnic group are counted in each group.

Figure 12.7 Doctoral completions by selected groups



### DOCTORAL COMPLETIONS BY FIELD OF STUDY

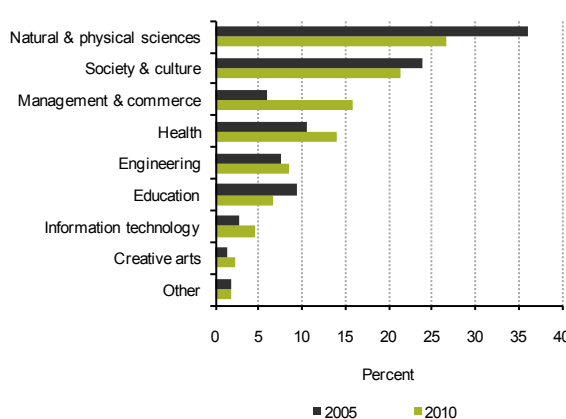
The largest proportion of students completing doctorates in 2010 studied in the areas of the natural and physical sciences and society and culture. Since 2005, there has been a significant increase in the proportion of doctoral graduates studying in the areas of management and commerce and health, while the proportion of graduates in the natural and physical sciences fell.

#### Proportions of doctoral completions by subject area

	2005	2010
Natural & physical sciences	36%	27%
Society & culture	24%	21%
Management & commerce	5.9%	16%
Health	11%	14%
Engineering & related technologies	7.6%	8.6%
Education	9.5%	6.6%
Information technology	2.6%	4.6%
Creative arts	1.3%	2.2%
Other	1.8%	1.7%

Note: The total percentage may add to more than 100 percent as doctoral graduates may appear in more than one subject area.

Figure 12.8 Doctoral completions by field of study



### DOCTORAL COMPLETIONS PER ACADEMIC STAFF MEMBER

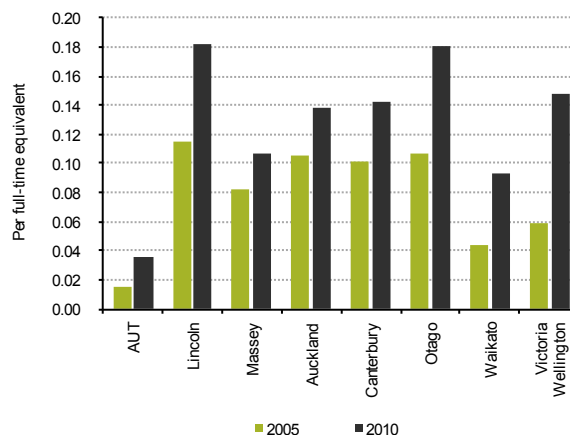
Although the ratio of doctoral completions to academic staff increased at all universities between 2005 and 2010, Lincoln University, the University of Otago and Victoria University of Wellington exhibited particularly strong growth.

#### Doctoral completions to academic staff ratios

	2005	2010
All universities	0.08	0.13
Auckland University of Technology	0.01	0.04
Lincoln University	0.12	0.18
Massey University	0.08	0.11
University of Auckland	0.11	0.14
University of Canterbury	0.10	0.14
University of Otago	0.11	0.18
University of Waikato	0.04	0.09
Victoria University of Wellington	0.06	0.15

Note: Data for colleges of education has been merged with the universities.

Figure 12.9 Doctoral completions per academic staff member



## UNIVERSITY RESEARCH OUTPUT

Of the five universities that report total research outputs, four exhibited an increase in output between 2008 and 2010.

### Number of research outputs

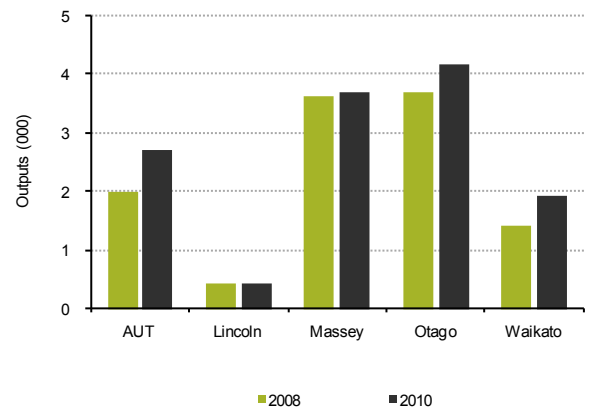
	2008	2010	% change 2008-10
Auckland University of Technology	1,990	2,690	+35
Lincoln University	442	427	-3.4
Massey University	3,610	3,680	+2.0
University of Otago	3,690	4,170	+13
University of Waikato	1,420	1,910	+34

#### Notes:

- Care should be used when comparing the research output of the universities, because of the differences in the way they count research outputs.
- Not all universities publish counts of research outputs.

Source: Annual reports of the universities.

Figure 12.10 University research outputs



## UNIVERSITY RESEARCH PRODUCTIVITY

Between 2008 and 2010, the number of research outputs per academic staff member increased at four of the five universities that report total research outputs. Lincoln University was the only one to show a decrease.

### Ratio of reported research outputs per academic staff

	2008	2010	% change 2008-10
Auckland University of Technology	2.0	2.8	+41
Lincoln University	2.0	1.8	-12
Massey University	3.2	3.4	+4.1
University of Otago	3.1	3.6	+14
University of Waikato	2.2	2.9	+32

#### Notes:

- Care should be used when comparing the research output of the universities, because of the differences in the way they count research outputs.
- Not all universities publish counts of research outputs.

Source: Annual reports of the universities and Ministry of Education.

Figure 12.11 Reported research outputs per academic

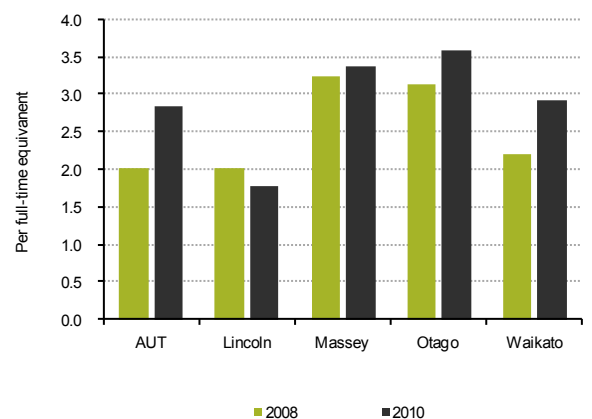


Figure 12.12 Share of world indexed publications and citations by New Zealand's tertiary education institutions

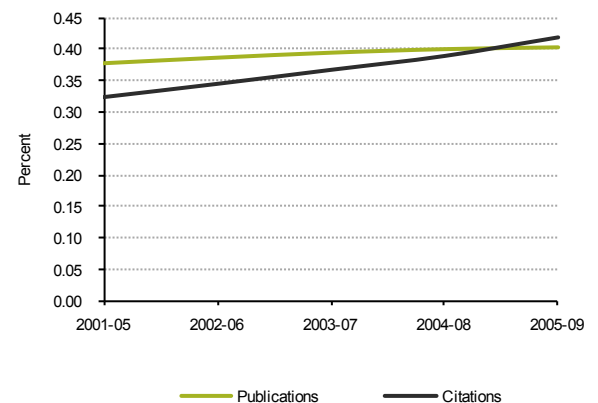
## SHARE OF WORLD INDEXED PUBLICATIONS AND CITATIONS

New Zealand's tertiary education institutions are producing a greater share of the world's indexed publications and citations over time. The proportion of world indexed publications produced by New Zealand's tertiary education institutions increased from 0.38 percent in the period from 2001 to 2005 to 0.40 percent in the period from 2005 to 2009. The proportion of world citations produced by New Zealand's tertiary education institutions increased from 0.32 percent in the period from 2001 to 2005 to 0.42 percent in the period from 2005 to 2009.

### Share of world indexed publications and citations by New Zealand tertiary education institutions

	2001-05	2005-09
Publications	0.38%	0.40%
Citations	0.32%	0.42%

Source: Thomson Reuters.



**ACADEMIC IMPACT OF RESEARCH**

The proportion of subject areas where the relative academic impact of research by New Zealand’s tertiary education institutions is above the world average is increasing. Over the period from 2005 to 2009, 55 percent of subject areas had a relative academic impact (number of citations divided by the number of publications) equal to or above the world average, which has been set to 1. This compares to 42 percent in the period from 2001 to 2005.

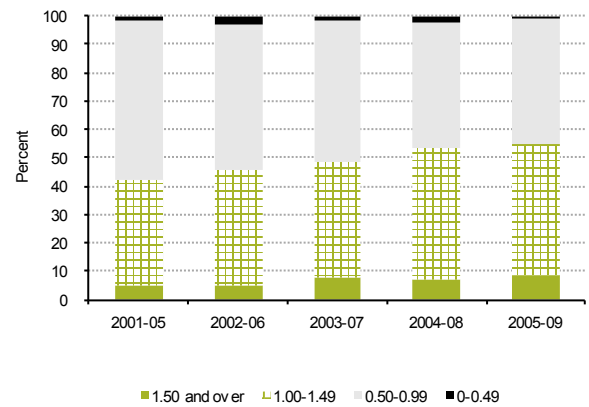
**Distribution of relative academic impact of research across subject areas by New Zealand’s tertiary education institutions**

Relative academic impact	2001-05	2005-09
1.50 and over	5.4%	8.8%
1.00 to 1.49	37%	46%
0.50 to 0.99	56%	45%
0 to 0.49	1.4%	0.6%

**Note:** Academic impact is the number of citations divided by the number of publications. A value of 1 indicates that the academic impact of the research by New Zealand’s tertiary education institutions is equal to the world average.

**Source:** Thomson Reuters.

**Figure 12.13** Distribution of relative academic impact across subject areas by New Zealand’s tertiary education institutions



# 13 FUNDING RESEARCH IN TERTIARY EDUCATION

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## Overview

Government funding of research via Vote Education increased in 2010, by 2.0 percent.

External research contract income earned by the universities has been increasing over time, reaching \$441 million in 2009. The largest source of research contract income for the universities was the government, with around 71 percent of income coming from this source. Businesses contributed 9.3 percent of the universities' research income.

Estimated university expenditure on research and development increased by 23 percent from 2007 to 2009. The largest proportion of university research expenditure was estimated to be on basic research. The largest category of university research expenditure was in the health subject area.

## 2011 work on evaluating research quality

### Performance-Based Research Fund

Throughout 2011, the Tertiary Education Commission has been preparing for the 2012 Performance-Based Research Fund quality evaluation. This includes the confirmation of members for 12 panels and two expert advisory groups. The panels have been developing their guidelines that will be used to evaluate and score the evidence portfolios.

The Tertiary Education Commission has made some design improvements to the Performance-Based Research Fund such as revised business rules for the research degree completions component of the fund.

The Ministry of Education has started planning for a review of the Performance-Based Research Fund following the 2012 Quality Evaluation.

### Centres of research excellence

Early in 2011, the Tertiary Education Commission completed a mid-term review of the centres of research excellence. The review was assisted by two independent reviewers and involved a self-assessment process carried out by each centre. The review confirmed that centres:

- ▲ are carrying out research that is of benefit to New Zealand
- ▲ all follow coherent research agendas, and
- ▲ deliver research that is at the top of its class in New Zealand and, in many instances, internationally.

In their reports, the centres highlighted the value their research adds, either through social or environmental application or through economic impact.

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Analytical tables: Data on financing research in tertiary education is available at: [www.educationcounts.govt.nz/statistics/tertiary\\_education/research](http://www.educationcounts.govt.nz/statistics/tertiary_education/research).

### RESEARCH FUNDING VIA VOTE EDUCATION

The total research funding via Vote Education increased in 2010. Research funding was 67 percent above 2005 levels. The largest growth in funding was via the Performance-Based Research Fund (PBRF), which has now reached \$247 million in size.

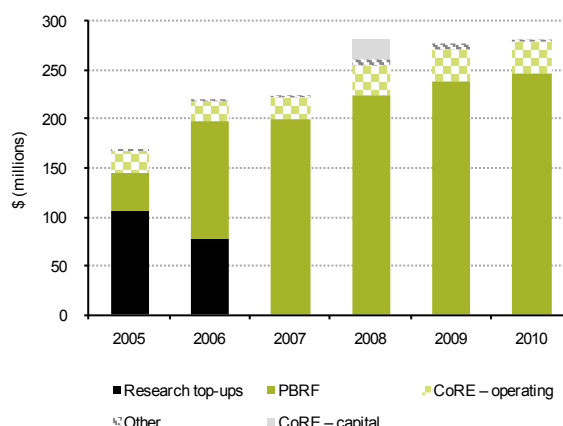
#### Research funding of tertiary education organisations, via Vote Education, in 2010

	\$ (millions)	% change 2005-10	% change 2009-10
Performance-Based Research Fund	247	530	3.3
Centres of research excellence (CoREs) – operating	34	58	-0.7
Other	2.5	56	-46
<b>Total</b>	<b>283</b>	<b>67</b>	<b>2.0</b>

Note: The Performance-Based Research Fund amount for 2010 is indicative only.

Source: Tertiary Education Commission.

Figure 13.1 Vote Education research funding in tertiary education organisations



### DISTRIBUTION OF RESEARCH INCOME

In 2010, the largest single source of research funding to tertiary education organisations via Vote Education was the through the Performance-Based Research Fund.

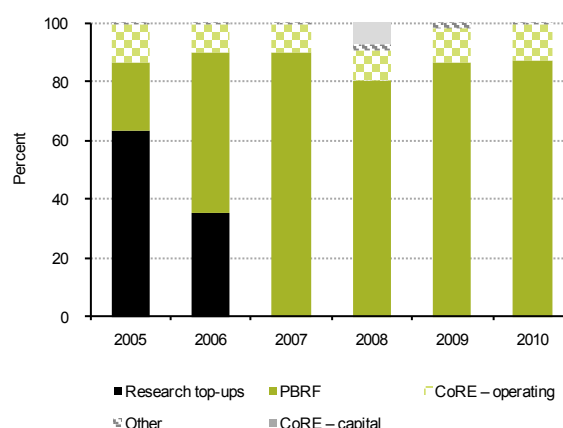
#### Percentages of research funding of tertiary education organisations, via Vote Education, by type

	2005	2009	2010
Research top-ups	63%	0%	0%
Performance-Based Research Fund	23%	86%	87%
Centres of research excellence – operating	13%	12%	12%
Other	0.9%	1.7%	0.9%

Note: The Performance-Based Research Fund amount for 2010 is indicative only.

Source: Tertiary Education Commission.

Figure 13.2 Distribution of Vote Education research funding in tertiary education organisations



### RESEARCH CONTRACT INCOME IN UNIVERSITIES

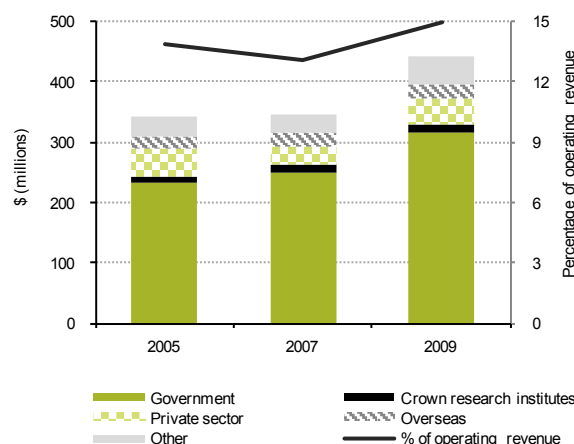
Research contract income in universities grew by 28 percent between 2007 and 2009. The fastest growth was in research contracts from the private sector, which grew by 37 percent. As a percentage of their total operating revenue, the value of research contracts was 15 percent in 2009, up from 13 percent in 2007.

#### University research contract income by source in 2009

	\$ (millions)	% change 2005-09	% change 2007-09
Government	317	35	27
Crown research institutes	13	63	8.3
Private sector	41	-15	37
Overseas	24	20	9.1
Other	47	47	47
<b>Total</b>	<b>441</b>	<b>30</b>	<b>28</b>

Notes: 1. Government includes government agencies and local government. 2. Private sector includes state owned enterprises. 3. 'Other' includes funding from other tertiary education institutions, gifts and endowments. 4. The Research and Development Survey is held biennially.

Figure 13.3 University research contract income by source



Source: Statistics New Zealand, Research and Development Survey.



**DISTRIBUTION OF RESEARCH CONTRACT INCOME IN UNIVERSITIES**

In 2009, the government was the largest source of research contract funding for the universities. Research contract funding from private business in New Zealand was the next largest single source of research contract funding.

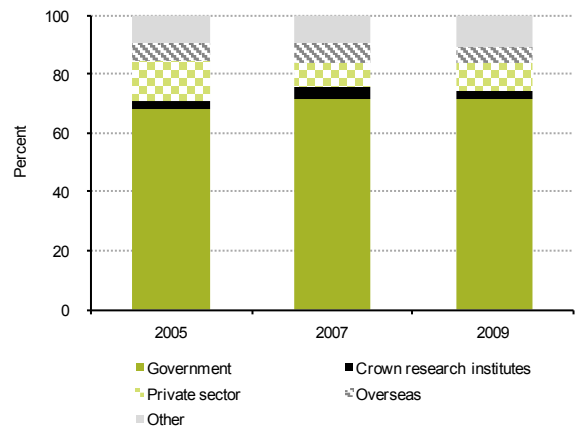
**Percentage of university research contract income by source**

	2005	2007	2009
Government	68%	72%	71%
Crown research institutes	2.2%	3.5%	2.9%
Private sector	14%	8.7%	9.3%
Overseas	5.9%	6.4%	5.4%
Other	9.4%	9.3%	11%

Notes: 1. Government includes government agencies and local government. 2. Private sector includes state owned enterprises. 3. 'Other' includes funding from other tertiary education institutions, gifts and endowments. 4. The Research and Development Survey is held biennially.

Source: Statistics New Zealand, Research and Development Survey.

Figure 13.4 Distribution of university research contract income by source



**UNIVERSITY PERFORMANCE-BASED RESEARCH FUND EXTERNAL RESEARCH INCOME**

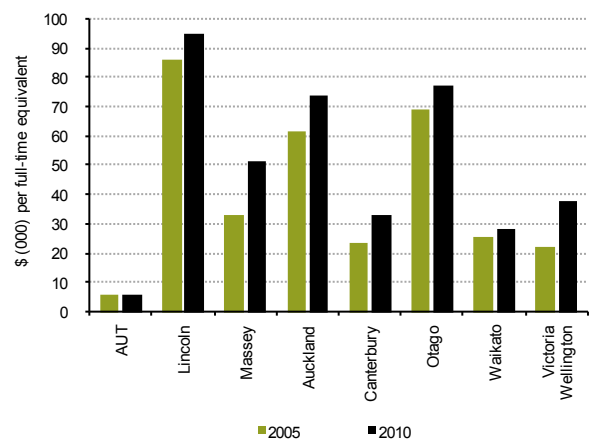
In 2010, for the first time, the amount of inflation-adjusted external research income per academic fell in the universities (down 2.9 percent on 2009).

**External research income adjusted for inflation per academic staff**

	\$ (000) per academic	% change 2005-10	% change 2009-10
Auckland University of Technology (AUT)	5.9	2.2%	-29%
Lincoln University	94.5	9.7%	1.2%
Massey University	51.2	55%	5.6%
University of Auckland	73.5	20%	1.6%
University of Canterbury	33.3	40%	-32%
University of Otago	77.2	11%	2.5%
University of Waikato	28.4	12%	-14%
Victoria University of Wellington	37.4	68%	-0.4%

Notes: 1. This measure is based on the number of academic full-time equivalent staff and uses external research income as reported in the Performance-Based Research Fund. This differs from the external research income figures reported above. 2. The Consumers Price Index has been used to deflate the external research income into 2010 dollars.

Figure 13.5 University inflation-adjusted external research income per academic



Source: Tertiary Education Commission and annual reports of the universities.

**VOTE RESEARCH, SCIENCE AND TECHNOLOGY FUNDING**

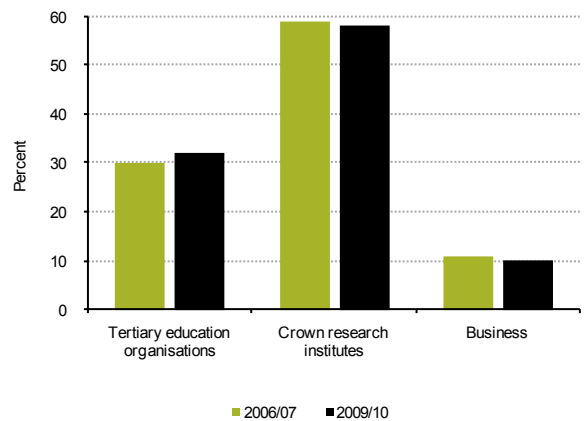
In 2009/10, there was a slight rise in the proportion of Vote Research, Science and Technology funding allocated to tertiary education organisations. This increase came at the expense of funding allocated to Crown research institutes.

**Share of Vote Research, Science and Technology funding allocated**

	2006/07	2008/09	2009/10
Tertiary education organisations	30%	31%	32%
Crown research institutes	59%	59%	58%
Business	11%	10%	10%

Source: Ministry of Science and Innovation.

Figure 13.6 Share of Vote Research, Science and Technology funding allocated by provider type



**UNIVERSITY RESEARCH EXPENDITURE**

The value of the expenditure on research and development by universities increased significantly between 2007 and 2009. As a percentage of gross domestic product, this represented 0.43 in 2009, compared to 0.38 in 2005.

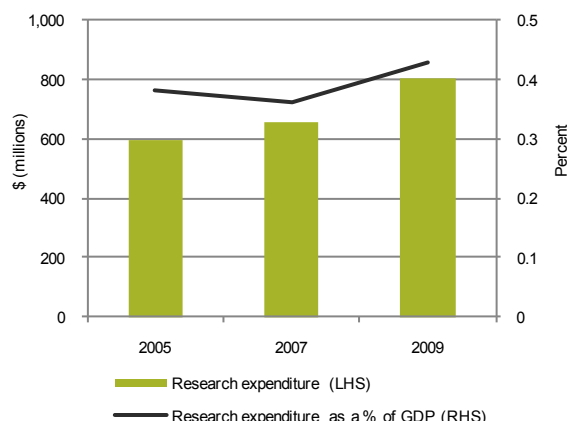
**University research and development expenditure in 2009**

	\$ (millions)	% change 2005-09	% change 2007-09
Total	802	35	23
<hr/>			
As a % of gross domestic product	0.43		

Note: The Research and Development Survey is held biennially.

Source: Statistics New Zealand, Research and Development Survey.

**Figure 13.7** University research and development expenditure



**UNIVERSITY RESEARCH EXPENDITURE BY TYPE**

In 2009, the largest type of expenditure on research and development in universities was on basic research. However, the proportion of expenditure on basic research decreased from 2007, while the expenditure on applied research increased.

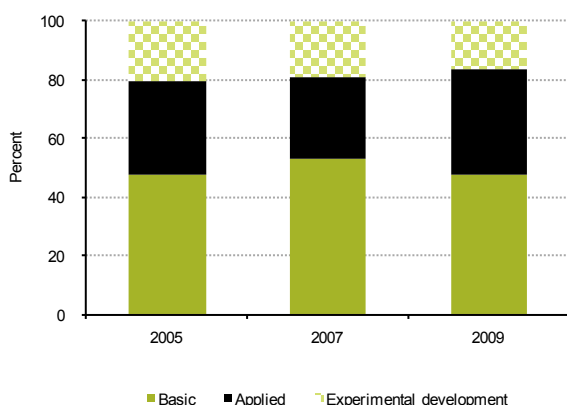
**Distribution of university research and development expenditure by type**

	2005	2007	2009
Basic	48%	53%	48%
Applied	32%	28%	36%
Experimental development	20%	19%	16%

Note: The Research and Development Survey is held biennially.

Source: Statistics New Zealand, Research and Development Survey.

**Figure 13.8** University research and development expenditure by type



**UNIVERSITY RESEARCH EXPENDITURE BY PURPOSE**

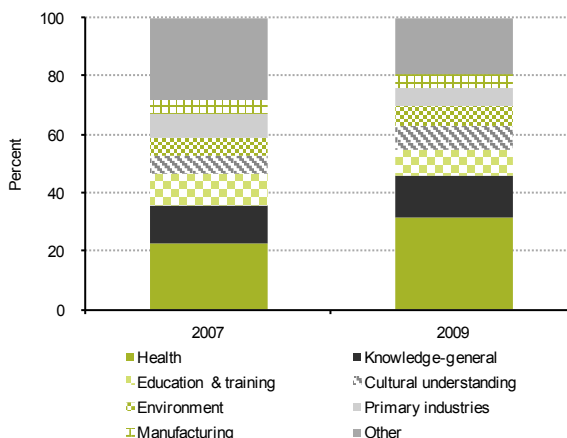
In 2009, the largest area of university research and development expenditure was health, followed by education and training.

**Distribution of university research and development expenditure**

	2007	2009
Health	23%	32%
Knowledge-general	13%	15%
Education and training	11%	9.0%
Cultural understanding	6.6%	8.1%
Environment	6.1%	6.5%
Primary industries	8.0%	6.4%
Manufacturing	4.6%	5.0%
Other	28%	19%

Source: Statistics New Zealand, Research and Development Survey.

**Figure 13.9** University research and development expenditure in 2009 by purpose



# 14 THE FINANCIAL PERFORMANCE OF TERTIARY EDUCATION INSTITUTIONS

## Overview

The financial performance of the 31 tertiary education institutions improved significantly in 2010. All three sub-sectors performed better on all of the financial viability and sustainability measures monitored by the Tertiary Education Commission. For instance:

- ▲ 28 of the 31 institutions had an operating surplus (before abnormals) above 3 percent of operating revenue – which is one of the Tertiary Education Commission's benchmarks for prudent financial performance, compared to 14 of 33 in 2005.
- ▲ the aggregate operating surplus (before abnormals) of the 31 institutions was 5.2 percent of revenue – against 2.3 percent in 2005, and
- ▲ only one institution had an operating deficit (before abnormals), compared to nine in 2005.

Cash cover – a measure of immediate viability – was also much stronger in 2010 than in 2005.

The institutions have continued to invest in maintaining and improving their capability. Capital expenditure rose by 2.9 percent in 2010 – and was 33 percent above the level of 2005.

While tertiary education institutions had strong financial performance, industry training organisations experienced difficult financial conditions in 2010. Collectively, the industry training organisations had an operating deficit of \$10 million – 3.9 percent of operating revenue. More than half (53 percent) had a deficit, while only 28 percent had a surplus of more than 3 percent of revenue. The corresponding figures for 2005 were 16 percent with a deficit and 73 percent with a surplus of more than 3 percent of revenue.

Two factors contributed to the weak financial performance of the industry training sector. The first was the continued weaker economic conditions, which led to reduced employment in some industries, resulting in a decrease in on-job training. The second factor was the Tertiary Education

Commission's review of compliance with industry training rules which led to funding for inactive trainees being reclaimed.

## 2011 year

The most important factor affecting the financial performance of tertiary education institutions in 2011 was the Christchurch earthquakes. There are three institutions based in Canterbury, and at least five other institutions have a significant Christchurch presence. The earthquakes have affected the sector in two ways. First, some of the institutions experienced damage to their buildings and infrastructure and many needed interim arrangements while buildings were made safe. In the longer term, some institutions face high repair costs, not all of which will be covered by insurance. Second, some of the institutions lost students. Domestic enrolments in the region were down around 15 percent (on an equivalent full-time student basis) in August 2011. International enrolments were down even more. In response, the Minister for Tertiary Education agreed to maintain, in 2011 and 2012, the levels of student achievement component funding agreed to in the institutions' 2010/11 investment plans – giving a level of funding certainty. However, a number of institutions will face lower revenue in 2011 and beyond as enrolments are expected to recover only over a period of years.

One consequence of the Canterbury earthquakes will be experienced by all institutions. Insurance premiums throughout New Zealand rose in 2011 and will rise further as the insurance industry deals with the effects of the earthquakes on the reinsurance market. This will affect all institutions' costs into the medium term.

During 2011, there were two mergers of tertiary education institutions. The Eastern Institute of Technology merged with Tairāwhiti Polytechnic to create an institution that will serve the east coast of the North Island, while Lincoln University absorbed Telford Rural Polytechnic, creating an institution that will cover all levels of post-school education in agriculture and other primary sector areas.

There were also several mergers of industry training organisations in 2011, while a number of other industry training organisations opened merger discussions.

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Analytical tables: Data on the performance of tertiary education institutions is available at: [www.educationcounts.govt.nz/statistics/tertiary\\_education/financial\\_performance](http://www.educationcounts.govt.nz/statistics/tertiary_education/financial_performance).

**SUMMARY FINANCIAL POSITION OF TERTIARY EDUCATION INSTITUTIONS**

The overall financial performance of tertiary education institutions has improved since 2005. In particular, the size of the operating surplus before abnormal items has improved and it is now above the minimum prudent level recommended by the Tertiary Education Commission.

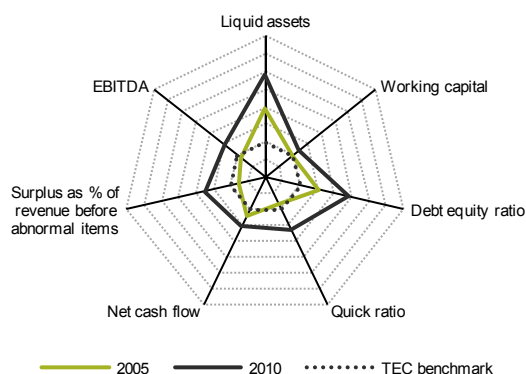
**Summary financial position of tertiary education institutions**

	2005	2009	2010
Liquid assets	192	290	293
Working capital	99	121	122
Debt equity ratio	152	215	243
Quick ratio	83	154	163
Net cash flow	123	155	155
Surplus as % of operating revenue before abnormal items	75	146	174
Earnings before interest, tax, depreciation, amortisation and one-off abnormals (EBITDA)	86	143	147

Notes: 1. The performance data has been scaled to form an index. 2. The Tertiary Education Commission benchmark for prudent operation has been scaled to 100.

Source: Ministry of Education and Tertiary Education Commission.

**Figure 14.1** Summary financial position of tertiary education institutions



**SUMMARY FINANCIAL POSITION OF UNIVERSITIES**

The summary financial position of universities has improved across most of the measures. Although net cash flow was a little lower in 2010 than reported in 2005.

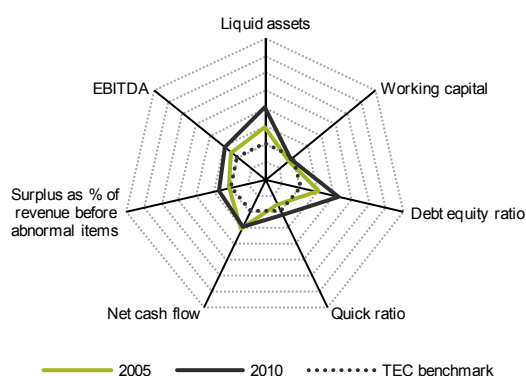
**Summary financial position of universities**

	2005	2009	2010
Liquid assets	149	221	205
Working capital	81	98	94
Debt equity ratio	152	194	212
Quick ratio	80	115	113
Net cash flow	155	157	151
Surplus as % of operating revenue before abnormal items	105	110	134
EBITDA	122	142	145

Notes: 1. The performance data has been scaled to form an index. 2. The Tertiary Education Commission benchmark for prudent operation has been scaled to 100.

Source: Ministry of Education and Tertiary Education Commission.

**Figure 14.2** Summary financial position of universities



**SUMMARY FINANCIAL POSITION OF POLYTECHNICS**

The summary financial position of polytechnics has improved markedly since 2005. In particular, the operating surplus before abnormal items has increased and the debt-to-debt plus equity ratio has also improved.

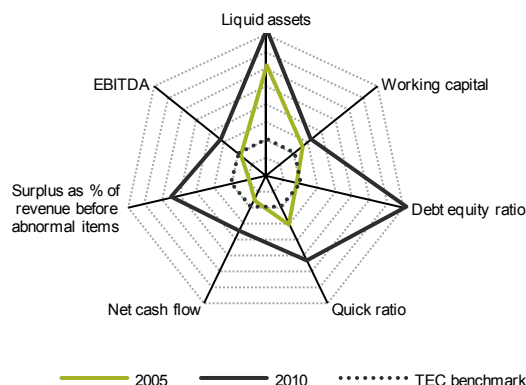
**Summary financial position of polytechnics**

	2005	2009	2010
Liquid assets	308	372	411
Working capital	129	149	161
Debt equity ratio	88	291	407
Quick ratio	151	221	266
Net cash flow	79	156	174
Surplus as % of operating revenue before abnormal items	52	230	277
EBITDA	93	152	161

Notes: 1. The performance data has been scaled to form an index. 2. The Tertiary Education Commission benchmark for prudent operation has been scaled to 100.

Source: Ministry of Education and Tertiary Education Commission.

**Figure 14.3** Summary financial position of polytechnics



## REVENUE AND EXPENDITURE IN TERTIARY EDUCATION INSTITUTIONS

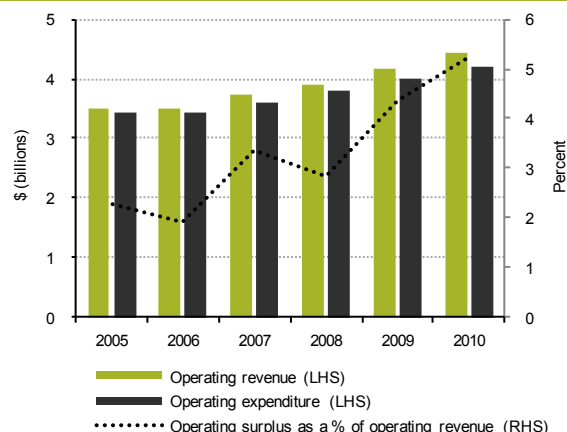
Revenue and expenditure both increased in tertiary education institutions in 2010. Revenue increased slightly more than operating expenditure, so the operating surplus rose as a percentage of operating revenue.

### Operating revenue and expenditure of tertiary education institutions in 2010

	\$ (billions)	% change 2005-10	% change 2009-10
Operating revenue	4.4	26	5.7
Operating expenditure	4.2	22	4.8
	2005	2009	2010
Operating surplus as a % of operating revenue before abnormal items	2.3	4.4	5.2

Source: Ministry of Education and Tertiary Education Commission.

Figure 14.4 Revenue, expenditure and operating surplus (before abnormal items) of tertiary education institutions



## OPERATING SURPLUS OF TERTIARY EDUCATION INSTITUTIONS

In 2010, all tertiary education institution sub-sectors reported an overall operating surplus before abnormal items. The largest surplus, as a percentage of operating revenue, was reported by polytechnics, followed by wānanga and universities.

### Operating surplus (before abnormal items) in tertiary education institutions as a percentage of operating revenue

	2005	2009	2010
Total	2.3%	4.4%	5.2%
Universities	3.1%	3.3%	4.0%
Polytechnic	1.6%	6.9%	8.3%
Wānanga	-5.7%	7.3%	7.3%

Source: Ministry of Education and Tertiary Education Commission.

Figure 14.5 Operating surplus (before abnormal items) of tertiary education institutions

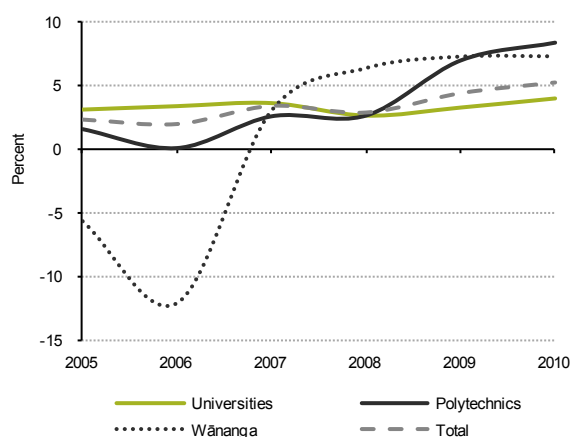
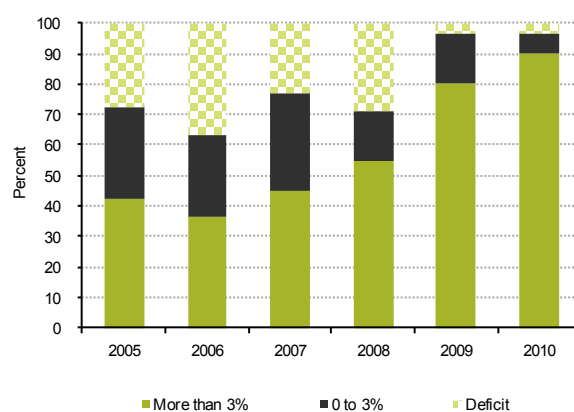


Figure 14.6 Distribution of tertiary education institutions' operating surplus (before abnormal items) as a percentage of income



## FINANCIAL HEALTH OF TERTIARY EDUCATION INSTITUTIONS

In 2010, 28 of the 31 institutions had an operating surplus (before abnormal items) that exceeded the Tertiary Education Commission's benchmark of 3 percent of revenue. This compares to 25 institutions in 2009 and just 12 in 2006. In 2010, as in 2009, there was just one institution with an operating deficit.

### Distribution of tertiary education institutions' operating surplus (before abnormal items) as a percentage of total revenue

	2005	2009	2010
More than 3%	42%	81%	90%
0 to 3%	30%	16%	6.5%
Less than 0% (deficit)	27%	3.2%	3.2%

Notes: 1. Figures may not add to 100 percent due to rounding. 2. This measure treats the colleges of education as separate from the universities.

Source: Ministry of Education and Tertiary Education Commission.

**FINANCIAL HEALTH BY SUB-SECTOR**

In 2010, just one tertiary education institution, Lincoln University, reported an operating deficit. For the second year in a row, no polytechnic or wānanga reported an operating deficit. All three wānanga and 19 out of the 20 polytechnics reported surpluses (before abnormal items) in 2010 above the Tertiary Education Commission’s benchmark of 3 percent.

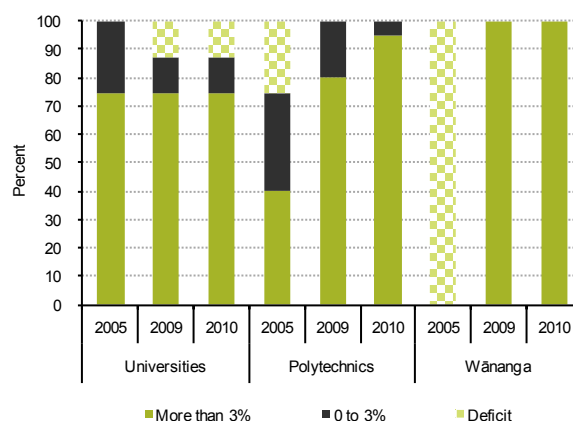
**Distribution of tertiary education institutions’ operating surplus (before abnormal items) as a percentage of total revenue**

	Universities (8)			Polytechnics (20)			Wānanga (3)		
	2005	2009	2010	2005	2009	2010	2005	2009	2010
More than 3%	75%	75%	75%	40%	80%	95%	0%	100%	100%
0 to 3%	25%	13%	13%	35%	20%	5%	0%	0%	0%
Less than 0% (deficit)	0%	13%	13%	25%	0%	0%	100%	0%	0%

Notes: 1. Figures may not add to 100 percent due to rounding. 2. This measure treats the colleges of education as separate from the universities.

Source: Ministry of Education and Tertiary Education Commission.

**Figure 14.7** Distribution of tertiary education institutions’ operating surplus (before abnormal items) as a percentage of income by sub-sector



**SOURCE OF TERTIARY EDUCATION INSTITUTION REVENUE**

The largest revenue source of tertiary education institutions is government funding via Vote Education. At \$2.2 billion, this represented 50 percent of all revenue in 2010, down slightly from 51 percent in 2009, but up from the low of 47 percent in 2005. Funding sourced from domestic student tuition fees was stable at 18 percent of total revenue, while international tuition fee revenue increased as a percentage of total revenue for the first time since 2004.

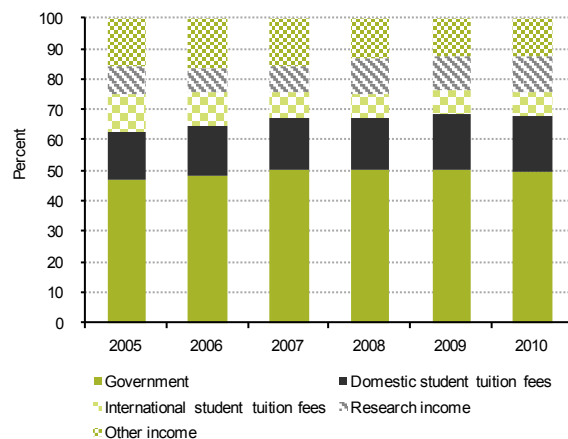
**Distribution of tertiary education institutions’ revenue by source**

	2005	2009	2010
Government	47%	51%	50%
Domestic student tuition fees	16%	18%	18%
International student tuition fees	12%	7.9%	8.2%
Research income	9.5%	12%	11%
Other income	16%	12%	13%

Notes: 1. Figures may not add to 100 percent due to rounding. 2. Government funding in this analysis refers to Vote Education funding for tuition and research.

Source: Ministry of Education and Tertiary Education Commission.

**Figure 14.8** Distribution of tertiary education institutions’ income by source



**REVENUE PER STUDENT IN TERTIARY EDUCATION INSTITUTIONS**

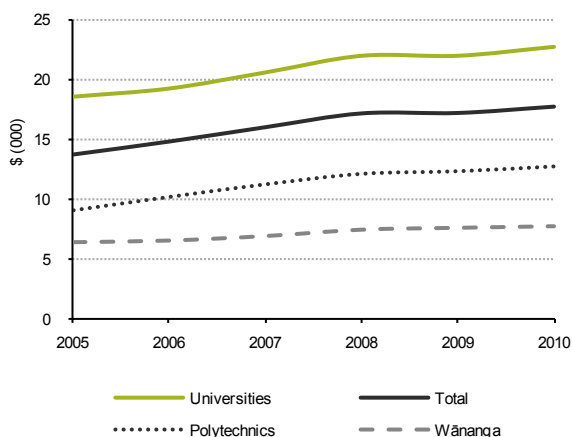
The operating revenue per student increased in all sub-sectors in 2010. Growth in the previous year had been constrained by institutions taking on greater numbers of unfunded student places.

**Operating revenue per equivalent full-time student in tertiary education institutions 2010**

	\$ (000)	% change	
		2005-10	2009-10
Total	17.7	30	3.2
Universities	22.7	23	3.5
Polytechnics	12.8	40	3.2
Wānanga	7.5	22	1.8

Source: Ministry of Education and Tertiary Education Commission.

**Figure 14.9** Revenue per equivalent full-time student by sub-sector



**EXPENDITURE BY COMPONENT IN TERTIARY EDUCATION INSTITUTIONS**

Tertiary education institutions spent around \$4.2 billion in 2010. At 58 percent, personnel costs represent the largest component of expenditure of tertiary education institutions, reflecting the fact that tertiary education is a service industry. The share has remained relatively unchanged since 2006.

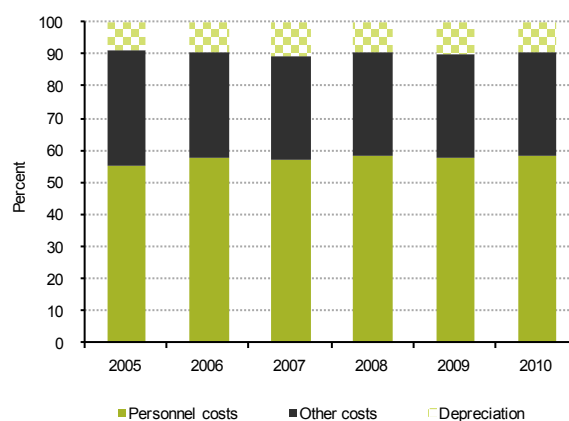
**Distribution of expenditure by tertiary education institutions by component**

	2005	2009	2010
Personnel costs	55%	58%	58%
Other costs	36%	32%	32%
Depreciation	8.8%	9.8%	9.5%

Note: Figures may not add to 100 percent due to rounding.

Source: Ministry of Education and Tertiary Education Commission.

Figure 14.10 Tertiary education institutions' expenditure by component



**CASH COVER IN TERTIARY EDUCATION INSTITUTIONS**

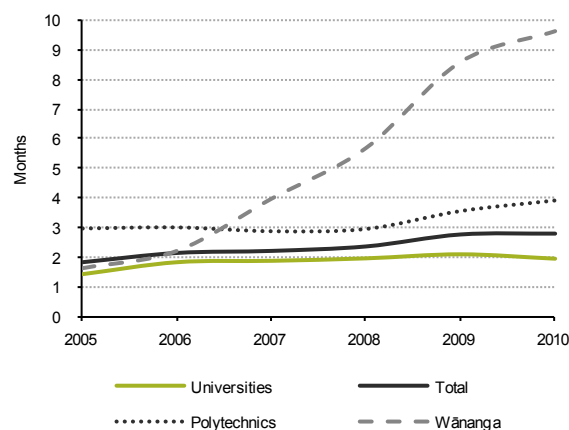
One important indicator of the financial viability of an institution is cash cover, which is measured by the months of operating cash disbursements held by the organisation. A liquidity level of one month's average operating cash disbursements is seen as the minimum target for prudent operation. Wānanga in particular have improved their cash cover since 2005, largely due to settlement of treaty claims and improvements in Te Wānanga o Aotearoa's operating performance.

**Cash cover by sub-sector**

	2005	2009	2010
Cash cover in months			
Total	1.8	2.8	2.8
Universities	1.4	2.1	2.0
Polytechnics	3.0	3.6	3.9
Wānanga	1.6	8.6	9.6

Source: Ministry of Education and Tertiary Education Commission.

Figure 14.11 Cash cover by average monthly operating cash disbursements



**WORKING CAPITAL RATIO AND CASH COVER IN TERTIARY EDUCATION INSTITUTIONS**

The working capital ratio gives a snapshot of an institution's current assets – maturing within one year – against its short-term obligations maturing within one year. A ratio of less than 100 percent means an institution is relying on cash flow to settle its short-term debts.

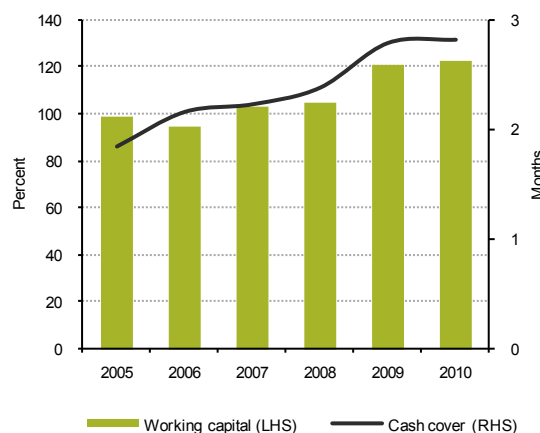
In 2010, the working capital ratio was 122 percent, slightly up on the 121 percent reported in 2009 and significantly higher than the ratio in 2008 of 104 percent.

**Working capital ratio and cash cover in tertiary education institutions**

	2005	2009	2010
Working capital (%)	99	121	122
Cash cover in months	1.8	2.8	2.8

Source: Ministry of Education and Tertiary Education Commission.

Figure 14.12 Working capital and cash cover of tertiary education institutions



**VALUE OF FIXED ASSETS IN TERTIARY EDUCATION INSTITUTIONS**

In 2010, the value of fixed assets per equivalent full-time student increased in wānanga and universities but decreased in polytechnics.

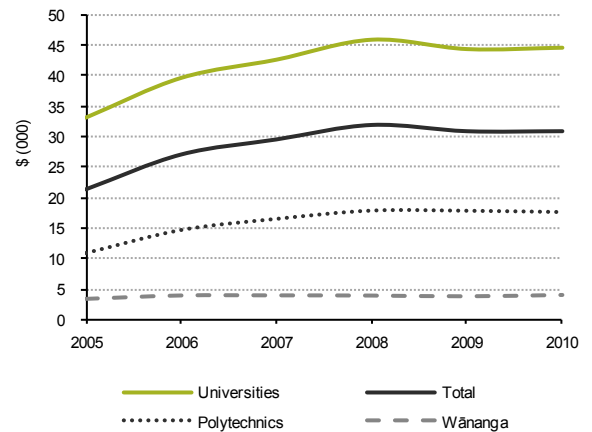
The universities have the highest level of assets per student, in part reflecting the research infrastructure they manage. The assets of the three wānanga remained lower than for other types of institutions.

**Fixed assets per equivalent full-time student by sub-sector in 2010**

	\$ (000s)	% change 2005-10	% change 2009-10
Total	31.0	45	0.0
Universities	44.5	35	+0.5
Polytechnics	17.7	61	-1.2
Wānanga	4.0	23	+6.8

Source: Ministry of Education and Tertiary Education Commission.

**Figure 14.13** Fixed assets per equivalent full-time student by sub-sector



**CAPITAL EXPENDITURE BY TERTIARY EDUCATION INSTITUTIONS**

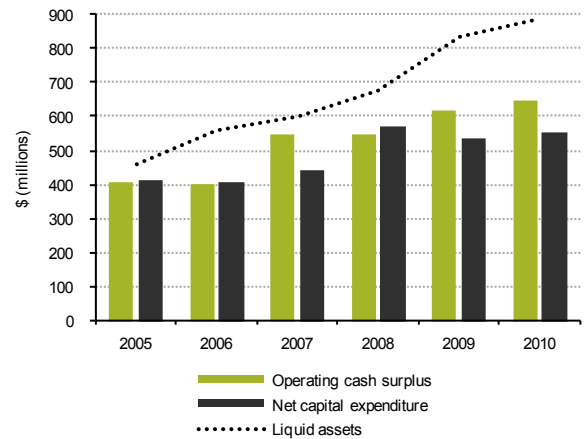
In 2010, net capital expenditure was once again lower than the operating cash surplus. This means that within 2010, institutions had an increase in their financial reserves rather than spending all operational cash flow on improving their fixed assets within the 2010 year.

**Operating cash surplus, net capital expenditure and liquid assets of tertiary education institutions in 2010**

	\$ (millions)	% change 2005-10	% change 2009-10
Operating cash surplus	644	59	4.7
Net capital expenditure	554	33	2.9
Liquid assets	886	92	6.2

Source: Ministry of Education and Tertiary Education Commission.

**Figure 14.14** Operating cash surplus, net capital expenditure and liquid assets of tertiary education institutions



**DEBT-TO-DEBT PLUS EQUITY RATIO FOR TERTIARY EDUCATION INSTITUTIONS**

The debt-to-debt plus equity ratio measures the leverage of an institution. The lower the ratio the less exposure to risk the institution has. The Tertiary Education Commission benchmark for prudent operations is 7.5 percent or less.

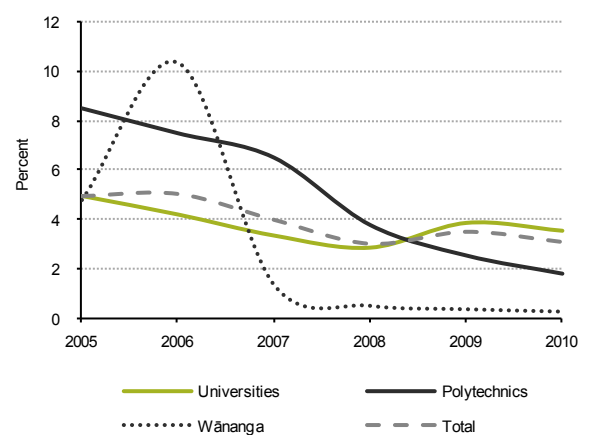
In 2010, all sub-sectors improved their debt-to-debt plus equity position. Wānanga and polytechnics have improved their position significantly since 2006 and 2005, respectively.

**Debt-to-debt plus equity ratio by sub-sector**

	2005	2009	2010
Total	4.9%	3.5%	3.1%
Universities	4.9%	3.9%	3.5%
Polytechnics	8.5%	2.6%	1.8%
Wānanga	4.8%	0.4%	0.3%

Source: Ministry of Education and Tertiary Education Commission.

**Figure 14.15** Debt-to-debt plus equity ratio by sub-sector





### QUICK RATIO OF TERTIARY EDUCATION INSTITUTIONS

The quick ratio measures the ability of an institution to settle its current liabilities using its near cash or quick assets. A ratio of 1.5 is considered prudent by the Tertiary Education Commission.

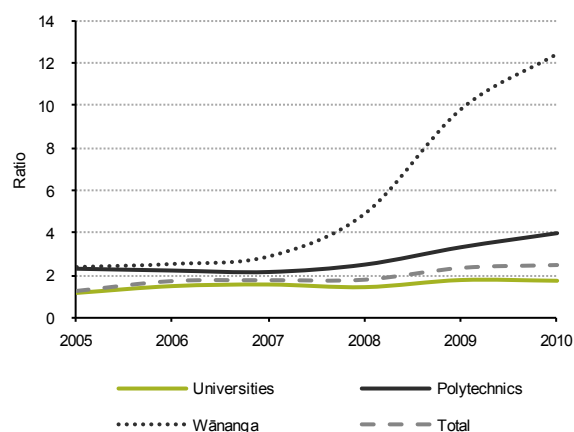
In 2010, polytechnics and wānanga reported an improved quick ratio, while the universities' ratio was unchanged.

#### Quick ratio by sub-sector

	2005	2009	2010
Total	1.3	2.3	2.4
Universities	1.2	1.7	1.7
Polytechnics	2.3	3.3	4.0
Wānanga	2.4	9.9	12.5

Source: Ministry of Education and Tertiary Education Commission.

Figure 14.16 Quick ratio by sub-sector



### EBITDA OF TERTIARY EDUCATION INSTITUTIONS

The EBITDA measures the operating surplus/deficit of an institution before interest, tax, depreciation and amortisation and one-off abnormals. This gives a sense of their core earnings. The Tertiary Education Commission's benchmark for prudent performance is a surplus of 9 percent of total operating revenue.

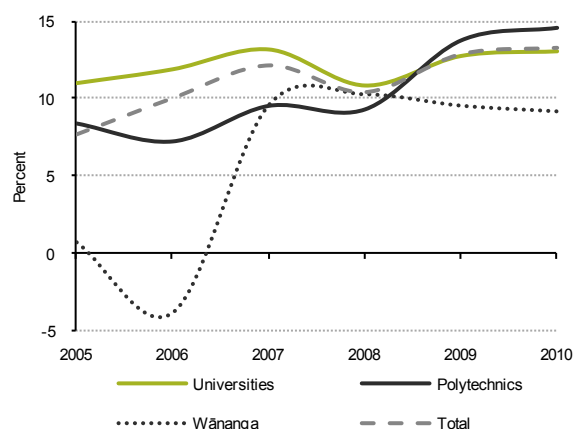
In 2010, all sub-sectors reported an EBITDA above the Tertiary Education Commission benchmark, with polytechnics exhibiting the strongest performance.

#### EBITDA by sub-sector

	2005	2009	2010
Total	7.7%	13%	13%
Universities	11%	13%	13%
Polytechnics	8.4%	14%	15%
Wānanga	0.8%	10%	9.2%

Source: Ministry of Education and Tertiary Education Commission.

Figure 14.17 EBITDA by sub-sector



### REVENUE AND EXPENDITURE OF INDUSTRY TRAINING ORGANISATIONS

The financial performance of industry training organisations continued to decline in 2010. Operating revenue fell slightly in 2010, while operating expenditure rose. As a result, industry training organisations reported a deficit of 3.9 percent in 2010, compared to a surplus of 0.4 percent in 2009 and a surplus of 7.1 percent in 2005.

#### Operating revenue and expenditure of industry training organisations in 2010

	\$ (millions)	% change 2005-10	% change 2009-10
Operating revenue	255	+54	-1.9
Operating expenditure	265	+73	+2.5

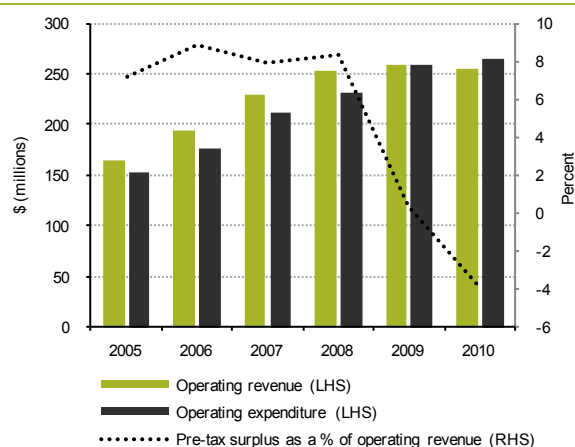
  

	2005	2009	2010
Operating surplus as a % of operating revenue	+7.1	+0.4	-3.9

Note: As data for three industry training organisations for 2010 was not yet available, their financial performance in 2010 is assumed to be the same as they reported in 2009.

Source: Tertiary Education Commission.

Figure 14.18 Income, expenditure and operating surplus of industry training organisations



**FINANCIAL HEALTH OF INDUSTRY TRAINING ORGANISATIONS**

In 2010, more than half of industry training organisations reported an operating deficit before tax. This compared to 47 percent in 2009 and 16 percent in 2005.

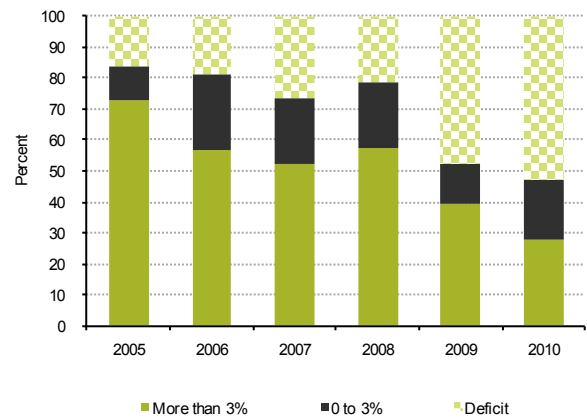
**Distribution of industry training organisations’ operating surplus before tax as a percentage of total revenue**

	2005	2009	2010
More than 3%	73%	39%	28%
0 to 3%	11%	13%	19%
Less than 0% (deficit)	16%	47%	53%

**Notes:** 1. Figures may not add to 100 percent due to rounding. 2. As data for three industry training organisations for 2010 was not yet available, their financial performance in 2010 is assumed to be the same as reported in 2009.

**Source:** Tertiary Education Commission.

**Figure 14.19** Distribution of industry training organisations’ operating surplus as a percentage of income



# 15 THE TERTIARY EDUCATION WORKFORCE

## Overview

The tertiary education workforce has the important role of developing the skills and knowledge of New Zealand's future skilled workers as well as helping the existing workforce to keep their skills up to date. In recent years, the amount of study undertaken by students at public tertiary education institutions has been increasing. In 2010, the equivalent full-time student unit count was 2.5 percent higher than in 2009. At universities and polytechnics, this led to increases in the number of equivalent full-time student units per academic staff member. At wānanga, the increase in the full-time equivalent academic staff was considerably stronger than the increase in the equivalent full-time students from 2009 to 2010 and this led to a decrease in the student to academic staff ratio.

### Academic and non-academic full-time equivalent staff

The number of academic staff at public tertiary education institutions continued to decrease from 2009 to 2010, reflecting restructuring in some institutions. The non-academic staff also continued to increase, a pattern that started in 2007. The latest decrease in the academic full-time equivalent staff<sup>1</sup> was only small, as the decrease at the universities was largely offset by increases at the polytechnics and wānanga. The latest increase in the non-academic full-time equivalent staff from 2009 to 2010 was strongest in the universities.

### Academic staff (headcount)

At universities, the downward trend in the number of lecturers continued in 2010 as did the upward trend in the number of professors, research only staff and other academic staff. At polytechnics, the pattern among the various types of academic staff has been stable in recent years. From 2009 to 2010, an increase in the number of lecturers at polytechnics was partially offset by a decrease in the number of department heads. At wānanga, the academic workforce has increased in number from a low point in 2007. From 2009 to 2010, there were strong increases in the number of senior lecturers and other academic staff at wānanga.

<sup>1</sup> Full-time equivalent staff refers to full-time and part-time staff where part-time staff are included as a percentage of full-time employment.

### Personnel costs

Expenditure on the workforce has represented 58 percent of all expenditure in tertiary education institutions in recent years. In 2010, personnel expenditure amounted to \$2.44 billion, up 5.4 percent on 2009.

## The tertiary education workforce in 2011

Early indications from the Ministry of Education's April enrolments collections suggest that the size of the tertiary education workforce is likely to remain stable in 2011. While the April enrolments snapshot suggests that the number of domestic students will decline in 2011, the decrease in terms of equivalent full-time student units is expected to be smaller. In contrast, the April 2011 return suggests that the growth in international enrolments will continue.

The increases in the student to academic staff ratio in recent years, and the early indications that the demand for student places is likely to remain stable, suggest that the pressure to retain academic staff will continue. Even though the academic staff headcount in public tertiary education institutions has increased over the last 10 years, it has not grown as strongly in terms of full-time equivalent staff. For example, at the universities, the headcount of the part-time teaching and research staff almost doubled to 4,800 from 2000 to 2010, but these part-timers represented only 20 percent of the total full-time equivalent teaching and research staff at universities. On the other hand, the academic staff designated as full-time at universities increased by only 8.5 percent from 2000 to 2010.

Late in 2010, a report on academic workforce planning, commissioned by Universities New Zealand, recommended an investigation of the demographics and dynamics of casual staff and staff in the 'other academic' category, with a view to establishing this group's potential as a source of academic recruits.<sup>2</sup> A report from the Ministry of Education describing the structure of the workforce in public tertiary education institutions by designation, gender and full-time or part-time status will become available shortly. In this report, the trends in the number of staff, and their full-time equivalents, have been separately analysed for each sub-sector.

Analytical tables: Data on the tertiary education workforce is available at: [www.educationcounts.govt.nz/statistics/tertiary\\_education/resources](http://www.educationcounts.govt.nz/statistics/tertiary_education/resources).

<sup>2</sup> Berl Economics (2010) *Report to the Universities New Zealand Human Resources Committee Steering Group: academic workforce planning – towards 2020*, Wellington: Business and Economic Research Limited.

**TERTIARY EDUCATION WORKFORCE**

The workforce in tertiary education institutions increased by 1.3 percent from 2009 to 2010, in line with an increase in the total student study load. The number of equivalent full-time staff decreased by 21 percent at private training establishments from 2009 to 2010, while the total student study load at private providers decreased less strongly, down by 1.6 percent from 2009 to 2010.

**Staff employed in 2010 (expressed as full-time equivalent staff)**

Tertiary education institutions	28,800	(up 1.3% on 2009)
Private training establishments <sup>1</sup>	4,960	(down 21% on 2009)
Universities	19,100	(up 1.0% on 2009)
Polytechnics	8,220	(up 1.4% on 2009)
Wānanga	1,430	(up 3.9% on 2009)

**Note:** In 2010, tertiary education institutions comprised 8 universities, 20 institutes of technology and polytechnics, and 3 wānanga.

**Source:** Ministry of Education and annual reports of tertiary education institutions.

**ACADEMIC AND NON-ACADEMIC STAFFING**

The number of academic full-time equivalent staff employed in tertiary education institutions continued to decrease from 2009 to 2010. In contrast, the non-academic full-time equivalent staff continued to increase, a trend that started in 2007. The latest decrease in the academic full-time equivalent staff was due to a 1.3 percent decrease at universities, partly offset by increases at the polytechnics and wānanga.

**Staff employed in 2010 (expressed as full-time equivalent staff)**

	Academic		Non-academic	
	2010	% change from 2009	2010	% change from 2009
Tertiary education institutions	12,600	-0.1	16,100	+2.4
Private training establishments	2,430	-31	2,530	-6.6
Universities	7,760	-1.3	11,300	+2.7
Polytechnics	4,240	+1.1	3,980	+1.7
Wānanga	616	+7.7	816	+1.2

**Source:** Ministry of Education and annual reports of tertiary education institutions.

**STUDENT TO STAFF RATIOS**

The ratio of students to academic staff increased overall at tertiary education institutions from 19.2 in 2009 to 19.7 in 2010. The ratio increased at universities from 17.1 to 17.7, and at polytechnics from 19.7 to 20.1, while it decreased at wānanga from 44.8 to 42.7.

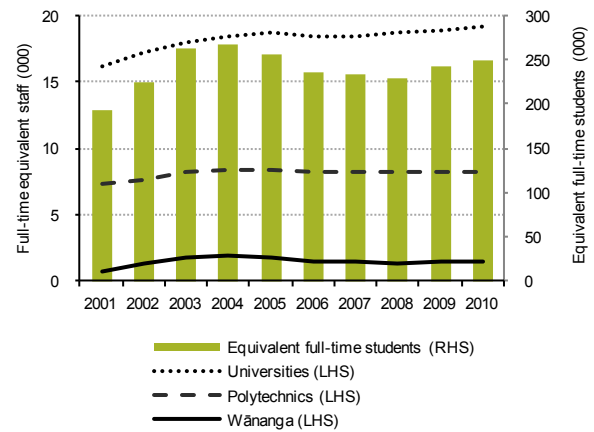
**Students to academic staff ratio in 2010**

Tertiary education institutions	19.7	(19.4 in 2005)
Universities	17.7	(16.6 in 2005)
Polytechnics	20.1	(20.9 in 2005)
Wānanga	42.7	(37.2 in 2005)

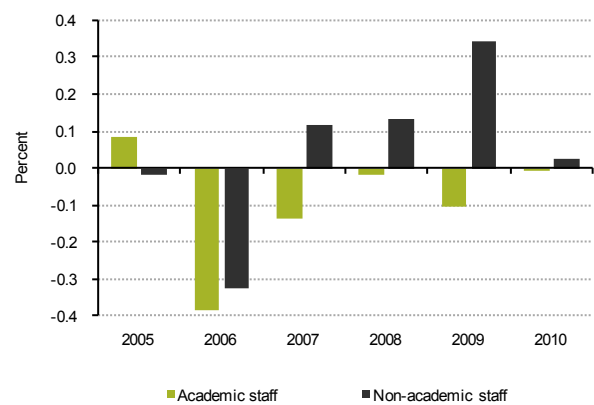
**Notes:** 1. These ratios have been calculated using the equivalent full-time student measure and the full-time equivalent academic staff count. In interpreting these ratios caution needs to be exercised as the allocation of staff to categories may not be consistently reported in the annual reports from year to year. 2. The ratio at the wānanga is significantly higher than at other types of tertiary education institutions because of the delivery of distance programmes.

**Source:** Annual reports of tertiary education institutions.

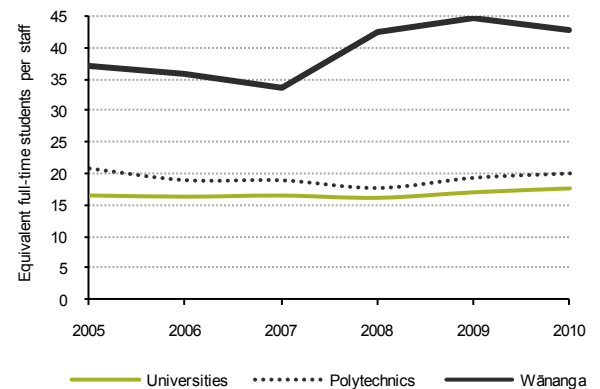
**Figure 15.1** Staff employed and equivalent full-time student units in tertiary education institutions



**Figure 15.2** Annual change in the number of staff employed in tertiary education institutions



**Figure 15.3** Average number of students per academic staff member



<sup>1</sup> Data for private training establishments is a snapshot of staff employed in the first week of August. This information is from the statistical collections provided to the Ministry of Education by tertiary education providers. Providers are included if they are registered with the New Zealand Qualifications Authority.

**UNIVERSITY ACADEMIC AND RESEARCH STAFF**

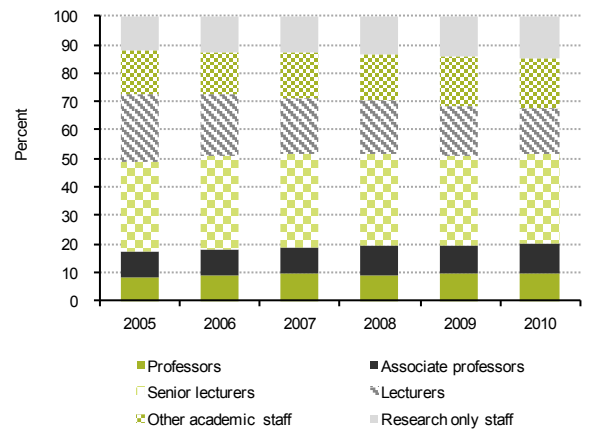
The proportion of academic staff who are lecturers continued to decrease in 2010, a trend that began in 2003. There also was a small decline in the proportion of senior lecturers from 2009 to 2010, while the proportions of professors, associate professors, research only staff and other academic staff continued to increase.

**Proportion of university academic staff by designation in 2010 (based on full-time equivalent staff)**

Professors	10%	(8% in 2005)
Associate professors	10%	(9% in 2005)
Senior lecturers	31%	(32% in 2005)
Lecturers	16%	(23% in 2005)
Other academic staff	18%	(15% in 2005)
Research only staff	14%	(12% in 2005)

Note: There were also 556 full-time equivalent research support staff employed in universities.

**Figure 15.4** Distribution of university academic staff by designation



**GENDER DIFFERENCES**

From 2009 to 2010, the proportion of female equivalent full-time academic staff employed by tertiary education institutions remained unchanged overall.

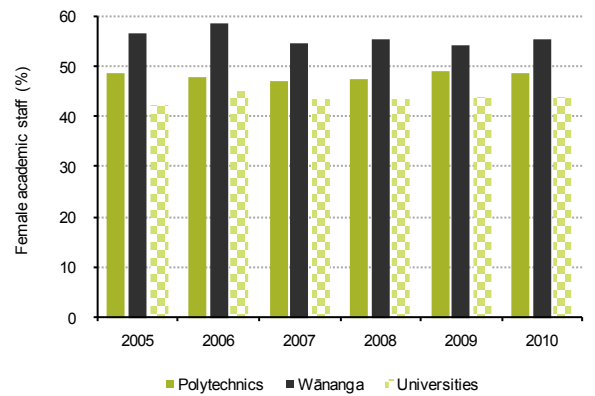
At universities and polytechnics, the proportions of female equivalent full-time academic staff remained stable from 2009 to 2010, while at wānanga the proportion increased from 54 percent to 55 percent.

**Proportion of female academic staff by provider type in 2010 (based on full-time equivalent staff)**

Tertiary education institutions	46%	(45% in 2005)
Universities	44%	(42% in 2005)
Polytechnics	49%	(49% in 2005)
Wānanga	55%	(57% in 2005)

Based on the headcounts, the gender balance of the public tertiary education workforce also remained unchanged overall in 2010 at the higher percentage of 58 percent in favour of female staff.

**Figure 15.5** Proportion of female academic staff by provider type



**GENDER DIFFERENCES IN UNIVERSITIES**

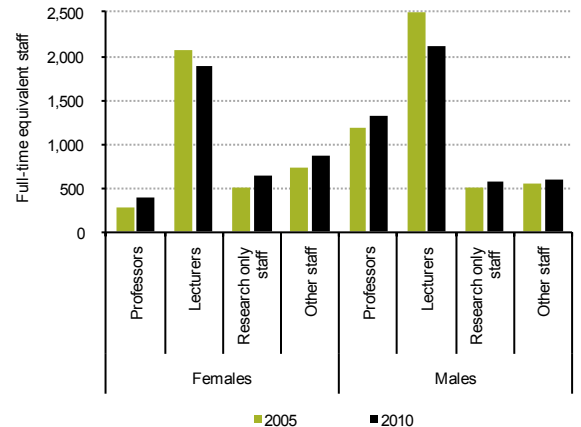
The proportion of female professors, including associate professors, continued to increase. In 2010, about one in four professors were women compared to one in seven in 2000.

**Proportions of female university academic staff in 2010 (based on full-time equivalent staff)**

Professors/associate professors	23%	(19% in 2005)
Senior lecturers/lecturers	47%	(45% in 2005)
Research only staff	53%	(50% in 2005)
Other academic staff	59%	(57% in 2005)

Note: Figure 15.6 includes associate professors and senior lecturers.

**Figure 15.6** University academic staff by gender



**PERSONNEL COSTS**

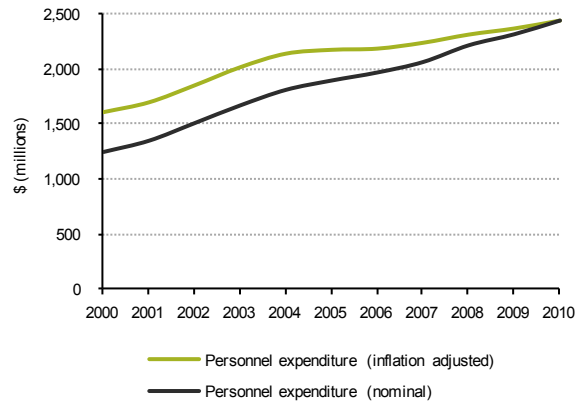
The personnel costs for all public tertiary education institutions amounted to \$2.44 billion in 2010. Personnel expenditure was 5.4 percent higher in 2010 than in 2009, when it totalled \$2.31 billion.

Personnel expenditure has represented 58 percent of all expenditure in tertiary education institutions in recent years.

**Note:** The deflator used in Figure 15.7 is the Consumers Price Index (all groups) and the base period is the 2010 year.

**Source:** Annual reports of tertiary education institutions.

**Figure 15.7** Personnel expenditure in tertiary education institutions



**PERSONNEL COSTS PER STAFF MEMBER**

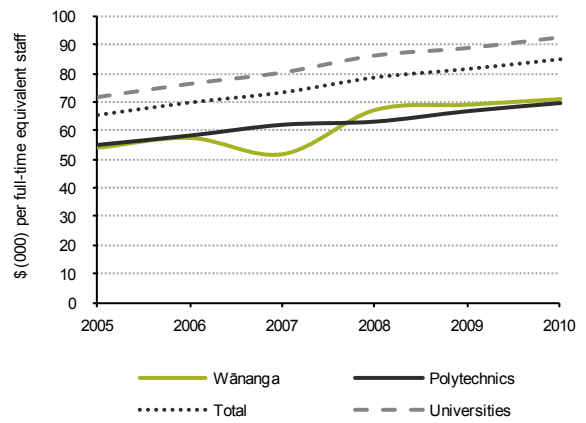
The personnel cost per staff member increased by 4.2 percent from 2009 to 2010 in both the universities and polytechnics. The number of full-time equivalent staff increased at a lower rate, up by 1.4 percent in polytechnics and up by 1.0 percent at universities. At wānanga, the personnel costs per staff member increased from 2009 to 2010 by 2.8 percent, while there was a 3.9 percent increase in the full-time equivalent staff.

**Personnel costs per full-time equivalent staff member**

	\$ (000) nominal				Inflation-adjusted			
	2005	2009	2010	% change 2005-10	% change 2009-10	% change 2005-10	% change 2009-10	
Universities	71.6	88.7	92.4	+29.0	+4.2	+12.3	+1.8	
Polytechnics	55.0	66.8	69.6	+26.5	+4.2	+10.1	+1.9	
Wānanga	54.2	68.9	70.9	+30.8	+2.8	+13.8	+0.5	
Total	65.7	81.5	84.8	+29.0	+4.1	+12.3	+1.8	

**Notes:** 1. Due to different cost structures in each sub-sector, caution should be exercised when comparing provider types. 2. The deflator used is the Consumers Price Index (all groups) and the base period is the year 2010.

**Figure 15.8** Personnel expenditure per staff member



# 16 FUNDING OF TERTIARY EDUCATION

## Overview

Total government spending on tertiary education in the year ended June 2011 increased by 0.4 percent on the previous year to reach \$5.4 billion.<sup>1</sup> In inflation-adjusted terms, this represented a decrease of 2.4 percent. When new lending on student loans is excluded, total government expenditure on tertiary education decreased by 0.4 percent and when adjusted for inflation the decrease was 2.9 percent.

In 2010/11, government funding of tertiary education accounted for 2.7 percent of gross domestic product. When new lending on student loans is excluded, it represented 1.9 percent of gross domestic product.

Tertiary education expenditure increased on tuition subsidies, research, provider capability, student allowances and student loans. Expenditure on the Industry Training Fund, Training Opportunities and Youth Training fell.

The number of equivalent full-time student places funded by the Tertiary Education Commission through the student achievement component increased in 2010. Government spending on tuition subsidies also increased as a result of increases in the number of student places and base funding rates.

There was still considerable over-delivery in 2010 in universities and private training establishments, reflecting the impact of the weak labour market in boosting participation in student achievement component-funded courses.

The average domestic tuition fee per equivalent full-time student increased by 5.6 percent at public tertiary education institutions. Part of this increase was due to a continued move away from enrolments in low-cost courses. Overall, the affordability of tertiary education declined in 2010, as the growth in average incomes continued to be modest due to the weaker economic conditions.

The contribution by government towards industry training fell, while the contribution by industry rose in 2010. This resulted in the government's share falling. This fall was a result of a review into industry training and the impact of the weak labour market.

<sup>1</sup> Spending on student loans is the new lending in the year.

## Funding initiatives announced in 2011

The government announced a number of funding initiatives during 2011. These included an additional:

- ▲ \$35 million in operating expenditure and \$14 million in capital expenditure over four years, to fund approximately 750 more equivalent full-time student places at private training establishments
- ▲ \$11 million over four years to equalise the postgraduate funding rates across sub-sectors
- ▲ \$94 million over four years for targeted tuition subsidy increases for degree and postgraduate study
- ▲ \$12 million over four years for an additional 40 medical student places
- ▲ \$197 million over four years to expand Youth Guarantee through combining the existing Youth Guarantee places with Youth Training places, and
- ▲ \$42 million in operating expenditure and \$6 million in capital expenditure for up to 1,500 additional places to meet additional demand for labour in the reconstruction programme following the Canterbury earthquake.

The government also announced a number of savings initiatives during 2011. These included savings of:

- ▲ \$58 million over four years from reduced funding for the Industry Training Fund because the current level of funding is not required to meet future demand
- ▲ \$33 million over four years from the removal of regulatory compliance training from the Industry Training Fund
- ▲ \$28 million in operating expenditure and \$16 million in capital expenditure over four years from improving the value for money of the government's investment in the training of pilots
- ▲ \$38 million in operating and \$8 million in capital expenditure over four years from restricting student loan eligibility for borrowers aged 55 years and over to tuition fees only
- ▲ \$24 million in operating expenditure and \$27 million in capital expenditure over four years from removing course-related cost entitlements for part-time full year students, and
- ▲ \$162 in operating expenditure and \$63 million in capital expenditure over four years from holding the student loan repayment threshold at \$19,084 till 2015.

**GOVERNMENT EXPENDITURE**

Total government expenditure on tertiary education was \$5.4 billion in 2010/11. This represented an increase of 0.4 percent from the previous year in nominal terms and a decrease of 4.6 percent in real terms. When new lending on student loans is excluded, expenditure on tertiary education decreased by 0.4 percent in nominal terms and 5.4 percent in real terms.

**Government expenditure on tertiary education for the year ended June 2011**

	\$ (billions)	% change 2006-11		% change 2010-11	
		Nominal	Real	Nominal	Real
Including student loans	5.4	+37	+19	+0.4	-2.4
Excluding student loans	3.8	+32	+16	-0.4	-2.9

**Notes:** 1. Student loan expenditure is the new lending in each year. 2. The Consumers Price Index has been used to calculate real expenditure.

**Source:** Ministry of Education, Tertiary Education Commission, Ministry of Social Development, Ministry of Science and Innovation, Health Research Council and Royal Society.

**EXPENDITURE AS A PERCENTAGE OF GROSS DOMESTIC PRODUCT**

As a percentage of gross domestic product, total government expenditure on tertiary education in 2010/11 fell slightly from the previous year. However, expenditure remains above the level of 2005/06, due in part to lower growth in gross domestic product during the economic downturn.

**Government expenditure on tertiary education as a percentage of gross domestic product**

	2005/06	2009/10	2010/11
Including student loans	2.4%	2.8%	2.7%
Excluding student loans	1.8%	2.0%	1.9%

**Note:** Student loan expenditure is the new lending in each year.

**Source:** Ministry of Education, Tertiary Education Commission, Ministry of Social Development, Ministry of Science and Innovation, Health Research Council and Royal Society.

**EXPENDITURE BY COMPONENT**

Spending on tuition subsidies and provider capability increased by 0.7 percent in 2010/11. This compared with increases of 1.3 percent on research, 8.7 percent on student allowances and 2.6 percent on student loans, while expenditure on industry and targeted training fell by 11 percent.

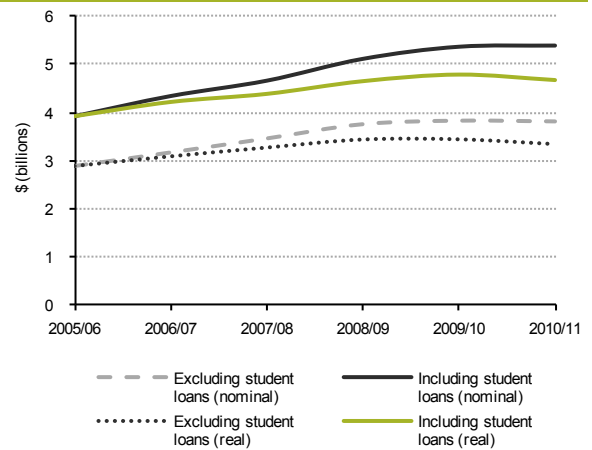
**Government expenditure on tertiary education by selected components for the year ended June 2011**

	\$ (millions)	% change 2006-11	% change 2010-11
Tuition subsidies/provider capability	2,060	+27	+0.7
Research	469	+45	+1.3
Industry training and targeted training	324	+9.1	-11
Student allowances	620	+75	+8.7
Student loans	1,560	+50	+2.6

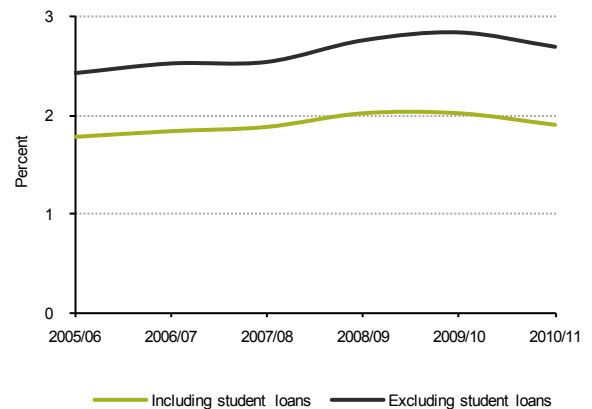
**Notes:** 1. Tuition subsidies include student achievement component funding and provider capability funding. 2. The main funding for tertiary education research comes through the Performance-Based Research Fund and the centres of research excellence. 3. Industry and targeted training includes the Industry Training Fund, Modern Apprenticeships, Training Opportunities and Youth Training. 4. Student loan expenditure is the new lending in each year.

**Source:** Ministry of Education, Tertiary Education Commission, Ministry of Social Development, Ministry of Science and Innovation, Health Research Council and Royal Society.

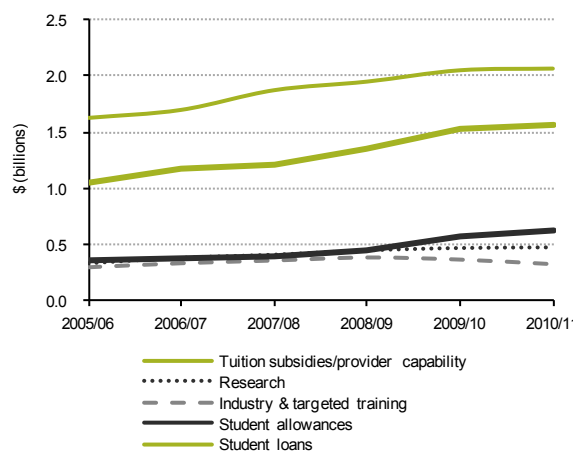
**Figure 16.1** Government spending (June years) on tertiary education



**Figure 16.2** Government spending on tertiary education as a percentage of gross domestic product



**Figure 16.3** Government spending (June year) on tertiary education by component





**EXPENDITURE ON INDUSTRY AND TARGETED TRAINING BY COMPONENT**

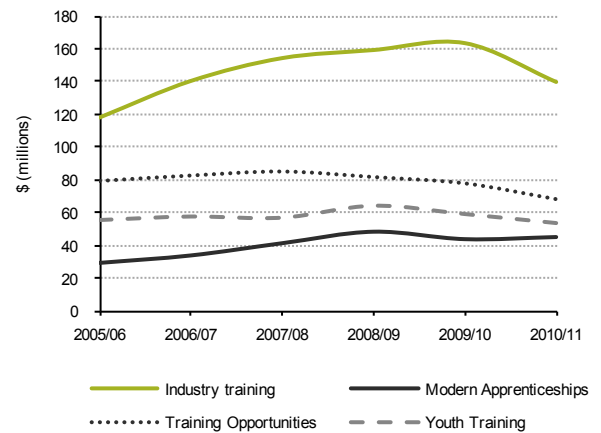
While expenditure on Modern Apprenticeships increased in 2011, expenditure on the Industry Training Fund, Training Opportunities and Youth Training all decreased. The drop in the Industry Training Fund partially reflects the impact of the weaker labour market and the results of a review into industry training.

**Government expenditure on industry and targeted training by selected components for the year ended June 2011**

	\$ (millions)	% change 2006-11	% change 2010-11
Industry Training Fund	140	+18	-14
Modern Apprenticeships	44.8	+51	+2.8
Training Opportunities	68.8	-14	-12
Youth Training	53.4	-3.5	-9.7

Source: Ministry of Education and Tertiary Education Commission.

**Figure 16.4** Government spending on industry and targeted training by component



**STUDENT ACHIEVEMENT COMPONENT-FUNDED PLACES**

In 2010, the number of government-funded student achievement component places reached an all-time high of almost 235,000. Polytechnics exhibited the largest increase in funded places (3.0 percent), while private training establishments saw a reduction in funded places in 2010.

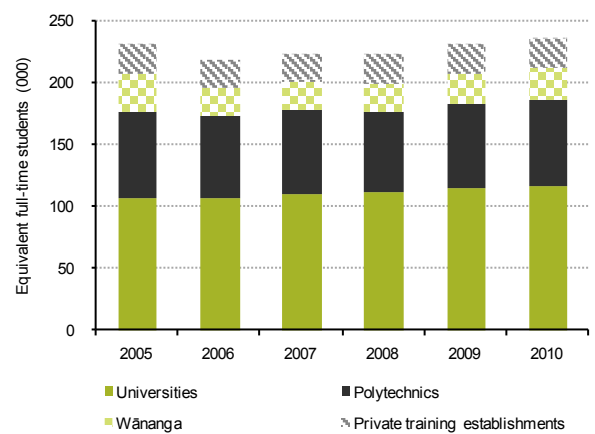
**Student achievement component-funded equivalent full-time students 2010**

	Equivalent full-time students	% change 2005-10	% change 2009-10
Total	234,900	+2.1	+1.6
Universities	117,000	+9.1	+1.6
Polytechnics	68,700	-0.8	+3.0
Wānanga	25,300	-17	+1.4
Private training establishments	23,900	+3.8	-1.8

Notes: From 2008, funded equivalent full-time student units are estimates.

Source: Tertiary Education Commission.

**Figure 16.5** Student achievement component equivalent full-time students by sub-sector



**STUDENT ACHIEVEMENT COMPONENT FUNDING**

The student achievement component is the largest part of the tertiary education funding framework. It covers the teaching and learning of domestic students. Total tuition subsidies increased in 2010, due to an increase in funded places and increases in funding rates. Private training establishments exhibited the smallest increase in tuition subsidies, which reflected the small decrease in funded places partially offsetting increases in funding rates.

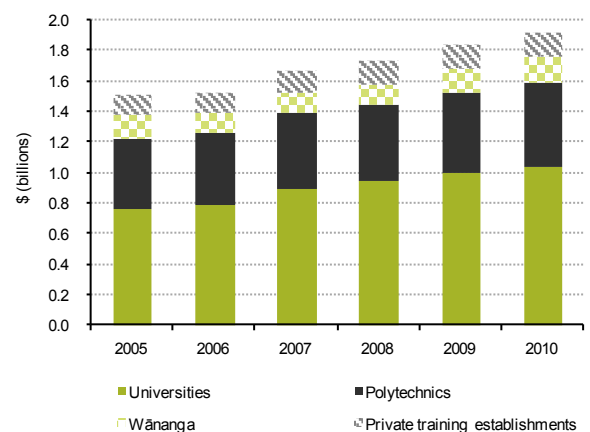
**Student achievement component funding by sub-sector 2010**

	Tuition subsidies \$ (millions)	% change 2005-10	% change 2009-10
Total	1,910	+27	+4.3
Universities	1,040	+37	+4.2
Polytechnics	550	+21	+5.3
Wānanga	159	-3.4	+4.7
Private training establishments	162	+23	+0.8

Note: Tuition subsidies include funding allocated via the student achievement component, the Public Provider Base Grant and tripartite-rates funding.

Source: Tertiary Education Commission.

**Figure 16.6** Student achievement component funding by sub-sector



### AVERAGE TUITION SUBSIDY

On a per funded equivalent full-time student basis, tuition funding increased by 2.6 percent in 2010. The larger growth in average funding for universities between 2005 and 2010 is a result of additional money from the tripartite-rates fund and adjustment to the funding rates by discipline in order to reflect the costs associated with different types of study.

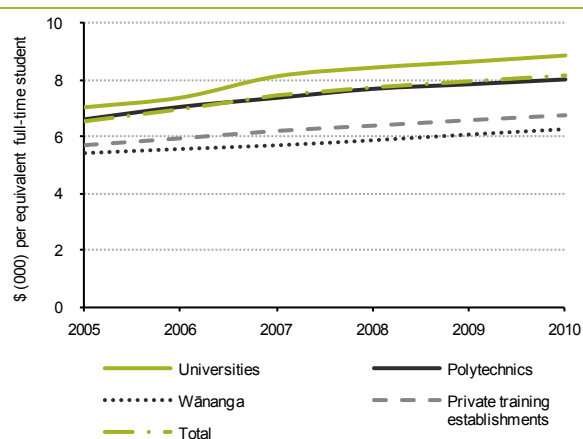
#### Student achievement component funding per funded equivalent full-time student in 2010

	Average subsidy \$	% change 2005-10	% change 2009-10
Total	8,130	24	2.6
Universities	8,870	26	2.5
Polytechnics	8,020	22	2.2
Wānanga	6,270	16	3.2
Private training establishments	6,760	18	2.6

**Note:** Tuition subsidies include funding allocated via the student achievement component, the Public Provider Base Grant and tripartite-rates funding.

**Source:** Ministry of Education and Tertiary Education Commission.

**Figure 16.7** Average tuition subsidy per student achievement component-funded equivalent full-time student



### ACTUAL AVERAGE TUITION SUBSIDY

When actual delivered student achievement component places are used to calculate the average tuition subsidy per student place, the sub-sectors all exhibited an increase in average funding in 2010.

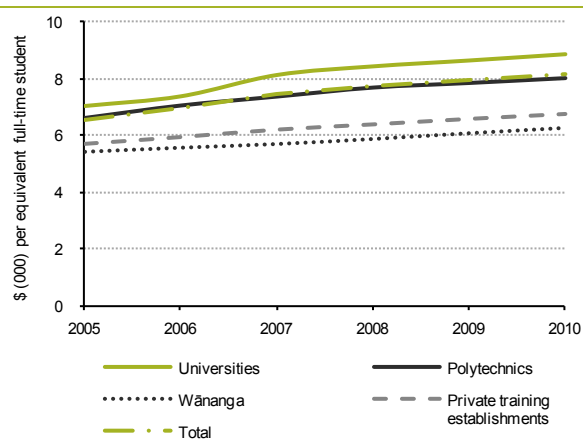
#### Student achievement component funding per actual delivered equivalent full-time student in 2010

	Average subsidy \$	% change 2005-10	% change 2009-10
Total	7,780	20	3.3
Universities	8,580	21	2.4
Polytechnics	8,050	23	4.0
Wānanga	6,150	14	1.8
Private training establishments	5,380	5.2	5.2

**Notes:** 1. This indicator is based on the number of equivalent full-time students actually delivered; that is, it accounts for tertiary education provision in excess of, or below, that funded. 2. Tuition subsidies include funding allocated via the student achievement component, the Public Provider Base Grant and tripartite-rates funding.

**Source:** Ministry of Education and Tertiary Education Commission.

**Figure 16.8** Student achievement component funding per actual delivered equivalent full-time student



### GOVERNMENT-FUNDED PLACES BY CATEGORY

The trend towards a smaller proportion of government-funded equivalent full-time students in low-cost funding categories continued in 2010.

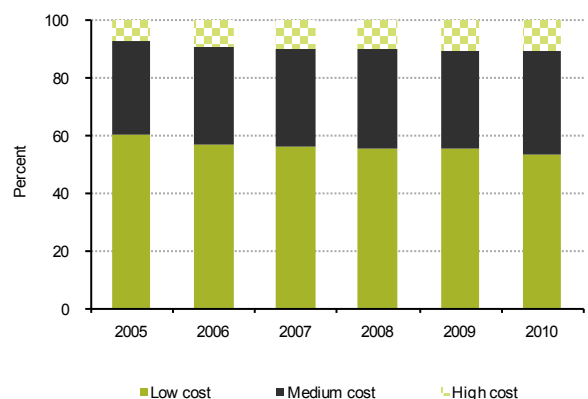
#### Distribution of government-funded equivalent full-time students in tertiary education institutions by cost category

	2005	2009	2010
Low cost (Categories A & J)	60%	55%	53%
Medium cost (B, I, L & P)	33%	34%	36%
High cost (C, G, H, M, N, O, Q, R, S, T & U)	7.4%	11%	11%

**Note:** From 2008, funded equivalent full-time student units are estimates.

**Source:** Tertiary Education Commission.

**Figure 16.9** Government-funded places in tertiary education institutions by category



**GOVERNMENT-FUNDED PLACES BY LEVEL**

The trend towards a smaller proportion of government-funded equivalent full-time students in non-degree courses continued in 2010.

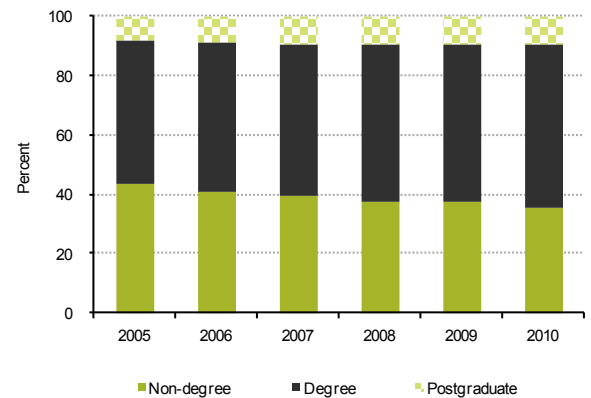
**Distribution of government-funded equivalent full-time students in tertiary education institutions by level**

	2005	2009	2010
Non-degree	44%	37%	36%
Degree	48%	53%	55%
Postgraduate	8.2%	10%	9.6%

**Notes:**  
 1. From 2008, funded equivalent full-time student units are estimates.  
 2. Figures may not add to 100 percent due to rounding.

**Source:** Tertiary Education Commission.

**Figure 16.10** Government-funded places in tertiary education institutions by level



**DELIVERY AND FUNDING OF TERTIARY EDUCATION**

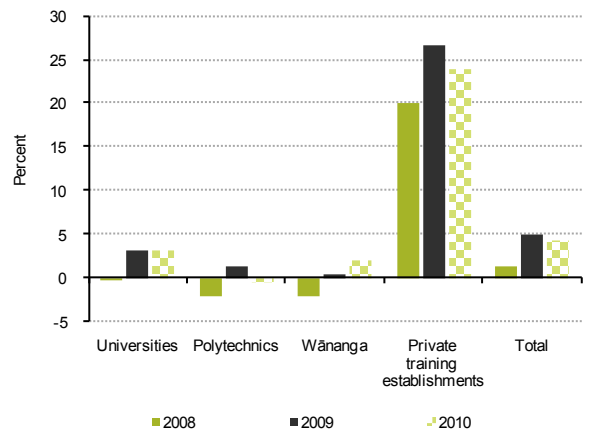
In 2010, 4.2 percent more education services were delivered overall than were funded by the government. This compared to 4.9 percent in 2009 and 1.3 percent in 2008. The scale of over-delivery since 2008 reflects the impact of the recession in boosting participation in tertiary education. Not all sub-sectors exhibited over-delivery in 2010 – polytechnics had a slight under-delivery.

**Difference between the value of tertiary education delivered and its funding through the student achievement component**

	2008	2009	2010
	Percentages		
Total	+1.3	+4.9	+4.2
Universities	-0.1	+3.1	+3.2
Polytechnics	-2.0	+1.3	-0.4
Wānanga	-2.1	+0.5	+1.9
Private training establishments	+20	+27	+24

**Source:** Tertiary Education Commission.

**Figure 16.11** Difference between the value of tertiary education delivered and its funding through the student achievement component



**AVERAGE DOMESTIC FEES**

The overall average tuition fee at tertiary education institutions increased in 2010. Although the largest increase occurred in wānanga, their fees are relatively low. A shift in the proportion of enrolments to higher-cost courses was a factor in the increase in wānanga and polytechnic fees. Universities continue to charge the highest tuition fees on average.

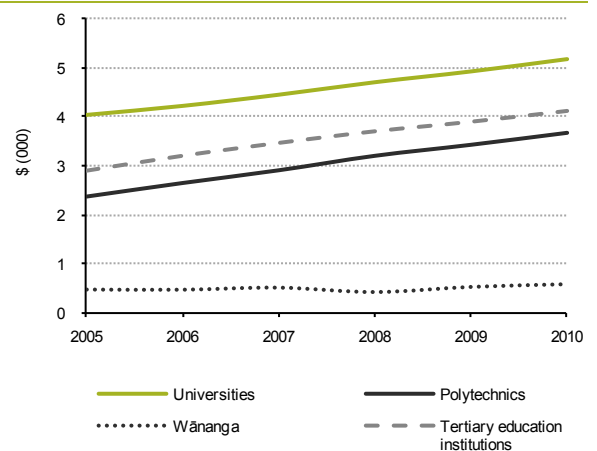
**Average domestic fees per equivalent full-time domestic student in 2010**

	Average fee \$	% change 2005-10	% change 2009-10
Tertiary education institutions	4,140	42	5.6
Universities	5,190	29	5.1
Polytechnics	3,660	55	7.2
Wānanga	582	25	11

**Note:** Fees are inclusive of goods and services tax.

**Source:** Ministry of Education and Tertiary Education Commission.

**Figure 16.12** Average domestic fees in tertiary education institutions



**AFFORDABILITY OF TERTIARY EDUCATION**

The affordability of tertiary education declined in 2010. This was due to average tuition fees rising faster than the average weekly income of employed people. However, the affordability of tertiary education is still significantly better than in 2000, when the ratio of the average domestic fee to average weekly income was higher at 5.7.

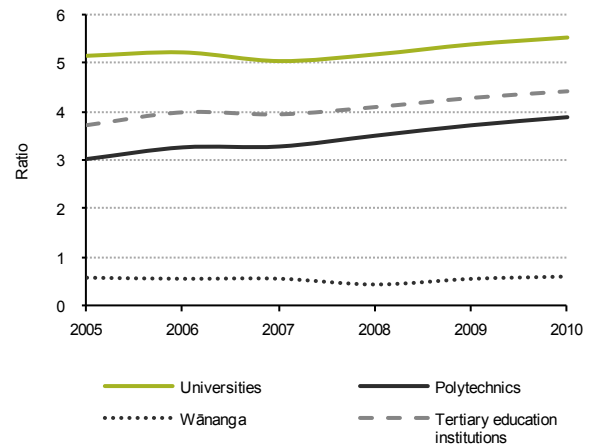
**Average domestic fees as a ratio of average weekly income for employed persons**

	2005	2009	2010
Tertiary education institutions	3.7	4.3	4.4
Universities	5.1	5.4	5.5
Polytechnics	3.0	3.7	3.9
Wānanga	0.6	0.6	0.6

**Notes:** 1. The tuition fees are inclusive of goods and services tax. 2. These ratios have been calculated using the average tuition fee per equivalent full-time student and the average weekly income of employed persons from the New Zealand Income Survey.

**Source:** Ministry of Education and Tertiary Education Commission.

**Figure 16.13** Ratio of the average domestic fee to average weekly income for employed persons



**TERTIARY EDUCATION COST INFLATION**

Statistics New Zealand data shows that the price of tertiary education for consumers increased in 2010 at a faster rate than overall inflation for the second year in a row. For the two years before this, tertiary education increased at a slower rate than consumer prices overall.

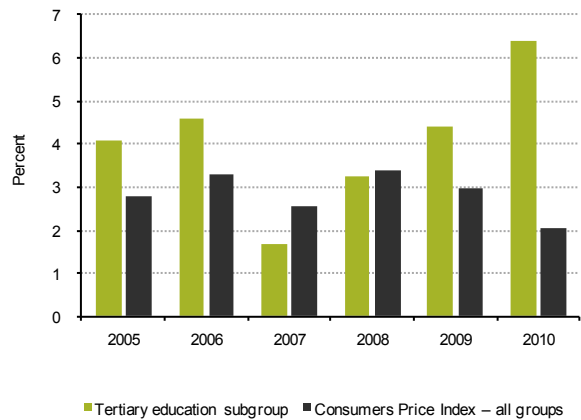
**Annual percentage increase in costs to consumers of tertiary education**

	2005	2009	2010
Tertiary education subgroup	4.1	4.4	6.4
Consumers Price Index – all groups	2.8	3.0	2.0

**Note:** Data is for the March quarter.

**Source:** Statistics New Zealand.

**Figure 16.14** Tertiary education cost inflation



**FUNDING SOURCES FOR INDUSTRY TRAINING**

The contribution of the government and industry towards industry training fell slightly in 2010. A decrease in government funding was almost offset by an increase in the reported cash contribution of industry. This resulted in government’s share of industry training funding dropping from 70 percent in 2009 to 66 percent in 2010.

**Contributions of government and industry to industry training 2010**

	\$ (millions)	% change 2005-10	% change 2009-10
Total	257	+51	-0.6
Government	168	+39	-6.8
Industry	88	+80	+14

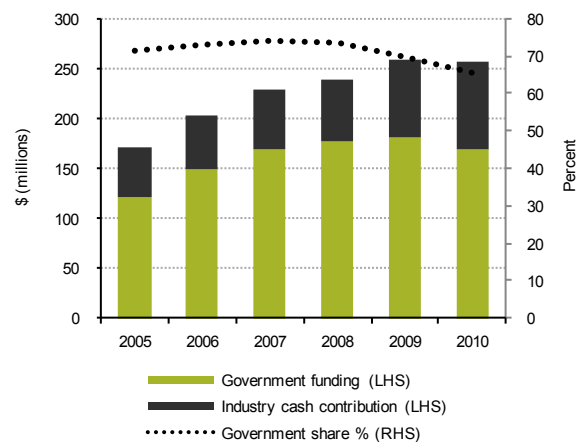
  

	2005	2009	2010
Government’s share of contribution (%)	71	70	66

**Note:** Research indicates that the annually reported cash contribution by industry almost certainly understates its actual cash contribution. In addition, industries’ non-cash investment is likely to exceed this cash contribution.

**Source:** Ministry of Education and Tertiary Education Commission.

**Figure 16.15** Government and industry contributions to industry training



# 17 TERTIARY EDUCATION SECTOR PERFORMANCE

## Overview

This chapter on the performance of tertiary education providers at sub-sector level has been contributed by the Tertiary Education Commission. The information presented here needs to be used in conjunction with the information on the Commission's website. Use the link [www.tec.govt.nz/tertiary-sector/performance-information/educational-performance](http://www.tec.govt.nz/tertiary-sector/performance-information/educational-performance).<sup>1</sup>

The successful course completion rates were higher in 2010 than in 2009 for each tertiary education sub-sector. The average course completion rates were highest among universities in 2010, at 84 percent. Among polytechnics, the overall course completion rate increased from 69 percent in 2009 to 74 percent in 2010. The comparable figures were 72 percent and 75 percent for wānanga and 71 percent and 77 percent for private training establishments.

There were substantial increases in the rate of student retention from 2009 to 2010 among polytechnics, wānanga and private training establishments, which shows potential for higher qualification completion rates in the future. At universities, the retention rate remained stable from 2009 to 2010, at 80 percent. These higher course completion and retention rates suggest that progress is being made towards the goal of having more young New Zealanders achieve qualifications.

Weighted qualification completions increased from 2009 to 2010 among polytechnics and wānanga, while they remained stable among universities. This measure is the percentage of students who complete a qualification, irrespective of the starting year of the study, weighted to account for the varying study loads. The measure of qualification completions increased for polytechnics and wānanga even though the number of qualifications completed in 2010 did not rise as strongly as the number of equivalent full-time students. At private training establishments, the qualification completion score increased more strongly in 2010 and, in part, this was due to a decline in the number of equivalent full-time students.

Progression to higher levels of study is another measure of sector performance. This indicator improved in 2010, with the rate of progression from level 1 to 3 certificates improving slightly at polytechnics, wānanga and private training establishments. At universities, the rate of progression to higher-level study improved for students who had completed a level 4 certificate or a level 5 to 7 diploma. The average rate of progression for students who had completed a bachelors degree or postgraduate study also improved for each sub-sector.

Among industry training organisations, the average credit achievement rate in 2010 was 64 percent, while the average programme completion rate was 55 percent. These figures need to be used with caution as they were affected by a review of industry training policy which led to decreases in 2010 in the number of trainees and standard training measures.

### MONITORING THE INVESTMENT IN TERTIARY EDUCATION

The Tertiary Education Commission invests approximately \$3 billion per year in teaching and learning, research and tertiary education provider capability. In view of this significant government contribution, an important role of the Tertiary Education Commission is the monitoring of the performance of tertiary education providers.

## Sector performance in 2011

Early indications are that, in 2011, tertiary education enrolments will decrease. The decreases are in non-degree qualifications and reflect a reduction in government funding of short courses and regulatory compliance courses. These decreases were signalled in the 2011 investment plans of the polytechnic sector. Another factor contributing to the decrease in enrolments in 2011 is that the movement of the population bulge is now beyond the age for tertiary education participation.

The decrease in enrolments in 2011 may lead to improvements in the qualification completion measure, especially in view of the high rate of student retention. The continued high unemployment rates for young people are likely to keep retention rates high and, in turn, qualification completions are likely to rise. Also, a portion of funding became linked to performance in 2011 to provide tertiary education organisations with incentives for improving

<sup>1</sup> Data in this chapter refers only to government-funded domestic students.

teaching and pastoral care. This has led to courses for some students being restricted, with the aim to have students only attempt those courses in which they are likely to succeed.

## Four key measures of performance

The Tertiary Education Commission measures the performance of tertiary education organisations against the priorities set out in the tertiary education strategy and through the use of four key educational performance indicators:

- ▲ successful course completion
- ▲ qualification completion
- ▲ student progression to higher-level study, and
- ▲ student retention.

Together, the above measures provide an annual snapshot of the educational performance of each provider. The information presented in this chapter has been aggregated by sub-sector. As such, the performance of individual organisations may differ substantially from the averages presented here for each provider type. Information about the performance of individual tertiary education organisations can be found on the Tertiary Education Commission's website.

While key indicators were used by the Tertiary Education Commission to measure performance in the past, they were defined differently. The current indicators, introduced in 2009, are not able to be compared with those from previous years.

### FOUR KEY MEASURES OF PERFORMANCE FOR PROVIDER-BASED LEARNING

**Successful course completion** provides a measure of the proportion of students who successfully complete the courses in which they are enrolled. This performance indicator takes into account the size of the course in terms of the number of equivalent full-time student units it comprises.

**Qualification completion** provides a measure of the proportion of students who complete a qualification. This performance indicator weights the different qualifications to take account of the varying study loads. This indicator provides a measure of qualification completion in any one year, irrespective of the starting year of the qualification. This approach differs from those used elsewhere in this report such as a cohort-based qualification completion rate that may be measured five or eight years after starting study.

**Student progression to higher-level study** measures the proportion of students who progress to study at a higher level (at the same or a different tertiary education provider) after completing a qualification at levels 1 to 4.

**Student retention** measures the extent to which tertiary education organisations retain students in study, or students successfully complete their qualification. The indicator measures the proportion of students enrolled in one year that re-enrol in any course at the same tertiary education organisation in the following year, or successfully complete their qualification.

### MEASURES OF PERFORMANCE FOR WORK-PLACE-BASED LEARNING

At industry training organisations, two indicators are used to measure educational performance, credit achievement and programme completion. These indicators are broadly equivalent to the successful course completion and qualification completion rates and are calculated using similar methodology.

## SECTOR PERFORMANCE DATA

Information presented in this chapter covers participation and achievement of students in the two largest tertiary education funding streams managed by the Tertiary Education Commission – the student achievement component and the Industry Training Fund. The student achievement component and the Industry Training Fund account for approximately two-thirds of the funding provided to the tertiary sector.

The student achievement component is the largest part of the tertiary funding system for teaching and learning. It is the single largest source of government funding for universities, wānanga, and institutes of technology and polytechnics. It is also allocated to many private training establishments and other tertiary education providers. The student achievement component is a subsidy. Most learners also pay tuition fees. Allocations are based on total student enrolments in the investment plans agreed between the Tertiary Education Commission and providers. Funding rates vary by type of course as well as for different parts of the sector.

The Industry Training Fund is allocated to industry training organisations, which then purchase training for industry trainees. The fund contributes to the development of national qualifications. The delivery of workplace-based learning is linked to these qualifications. Industry training is funded at a lower rate than the student achievement component, reflecting the fact that learning primarily takes place on-job using the resources of the workplace, with only a limited off-job element.

The study volumes of the various qualifications are monitored in terms of equivalent full-time student units. A similar concept, the standard training measure, is used to measure study volumes in industry training organisations.

## GOVERNMENT-FUNDED TERTIARY EDUCATION<sup>1,2</sup>

### PROVIDER AND WORKPLACE-BASED ENROLMENTS

The gap between the student headcount and the number of equivalent full-time student units at public tertiary education institutions was smaller in 2010 than in 2009, indicating an increase in the average study load of students. In contrast, the gap between industry trainees and standard training measures increased from 2009 to 2010, a result of changes made during the review of industry training operational policy.

#### Enrolments by sub-sector in 2010

	Students/ trainees	% change from 2009	EFTS/STM	% change from 2009
Universities	160,000	0.4%	121,000	+1.8%
Polytechnics	175,000	-5.0%	69,400	+2.8%
Wānanga	42,200	-0.7%	25,800	+2.8%
Private training establishments	56,900	-0.5%	30,600	-1.8%
Industry training organisations	195,000	-3.3%	58,400	-15%

**Note:** EFTS = equivalent full-time student unit and STM = standard training measure. The 2010 STMs were estimated based on the December 2010 quarterly data.

### LEVEL 4 AND HIGHER QUALIFICATIONS

At polytechnics, wānanga and private training establishments, the proportion of equivalent full-time students in level 4 or higher qualifications increased from 2009 to 2010.

In 2010, 86 percent of provider-based students aged 24 years and under were studying at level 4 and higher.

#### Students in level 4 and higher qualifications at providers as a percentage of the equivalent full-time student units for selected groups

	2007	2008	2009	2010
All students	78%	79%	80%	81%
24 years and under	86%	87%	86%	86%
Māori	63%	64%	65%	67%
Pasifika	73%	72%	73%	73%

**Source:** Tertiary Education Commission.

### MĀORI AND PASIFIKA PARTICIPATION

From 2009 to 2010, the number of Māori and Pasifika equivalent full-time students increased slightly as a percentage of total enrolments.

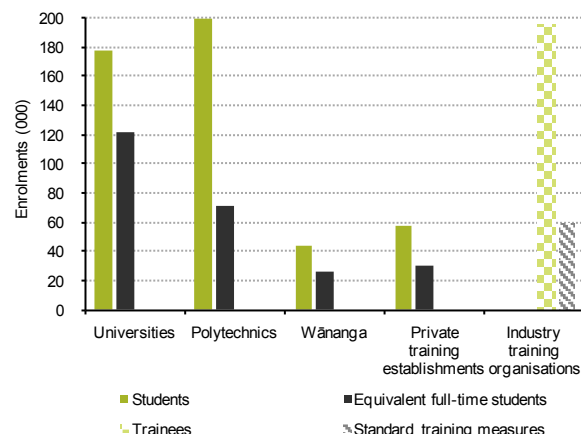
At wānanga, 59 percent of the equivalent full-time students were Māori in 2010 and 8.9 percent were Pasifika. At private training establishments, the comparable numbers were 27 percent for Māori and 16 percent for Pasifika. In terms of learners covered by industry training organisations, 17 percent were Māori in 2010 and 7.1 percent were Pasifika.

#### Provider-based Māori and Pasifika enrolments as a percentage of all equivalent full-time student units

	2007	2008	2009	2010
Māori	19%	19%	19%	20%
Pasifika	7.3%	7.5%	7.9%	8.2%

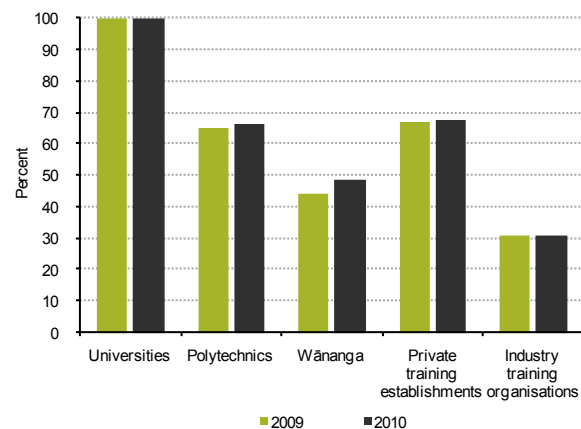
**Source:** Tertiary Education Commission.

**Figure 17.1** Funded provider and workplace-based enrolments by sub-sector

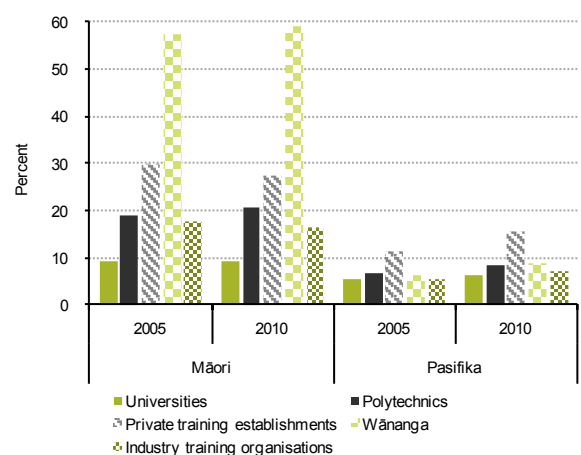


**Source:** Tertiary Education Commission.

**Figure 17.2** Percentage of funded enrolments in level 4 and higher qualifications by sub-sector



**Figure 17.3** Percentage of funded Māori and Pasifika enrolments by sub-sector



<sup>1</sup> Data refers to domestic equivalent full-time student units funded through the student achievement component or learners/standard training measures funded through the Industry Training Fund. Data covers all students in formal qualifications irrespective of the length of the course studied.

<sup>2</sup> Other tertiary education providers (OTEPs) have been included with private training establishments.



## SUB-SECTOR EDUCATIONAL PERFORMANCE INFORMATION

## COURSE COMPLETION

Student achievement improved from 2009 to 2010 in terms of higher course completion rates for each sub-sector. Comparing 2010 with 2009, 77 percent of students at private training establishments completed their courses (up 6 percentage points), polytechnics 74 percent (up 5 percentage points) and wānanga 75 percent (up 3 percentage points). The course pass rate was highest at universities in 2010 at 84 percent (up 1 percentage point from 2009).

## Successful course completion rates for priority groups

	Māori		Pasifika		Under 25 years		All students	
	2009	2010	2009	2010	2009	2010	2009	2010
Universities	76%	78%	66%	69%	84%	85%	83%	84%
Polytechnics	59%	66%	60%	65%	68%	73%	69%	74%
Wānanga	68%	72%	72%	76%	62%	67%	72%	75%
Private training establishments	61%	68%	65%	73%	72%	78%	71%	77%

**Note:** These rates are weighted to take account of the different course study loads and they differ from the rates used in other parts of this publication.

## INDUSTRY TRAINEES' CREDIT ACHIEVEMENT

Workplace-based learners achieved 4.5 million credits towards national qualifications in 2010. The total number of credits achieved was 12 percent higher in 2010 than in 2009. However, caution needs to be used in interpreting the changes in the credit achievement rates from 2009 to 2010 due to the introduction of performance-based funding in 2009 and the recent review of industry training operational policy.

## Number of trainees and credits completed

	2008	2009	2010
Number of industry trainees	195,000	202,000	195,000
Total credits completed (in millions)	3.77	4.03	4.51

**Source:** Tertiary Education Commission.

## QUALIFICATION COMPLETION

From 2009 to 2010, the percentage of students who completed a qualification, irrespective of the starting year of the study, increased overall at polytechnics, wānanga and private training establishments. At universities the percentage remained stable. Among the sub-sectors, the latest improvement in weighted qualification completions was strongest at private training establishments, especially for Māori and Pasifika students.

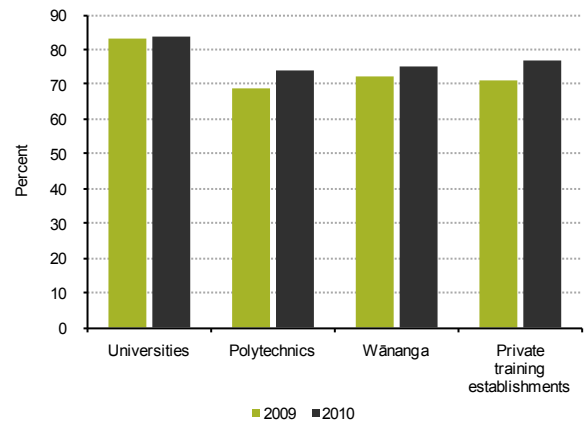
## Qualification completions for priority groups

	Māori		Pasifika		Under 25 years		All students	
	2009	2010	2009	2010	2009	2010	2009	2010
Universities	59%	55%	50%	48%	63%	62%	67%	67%
Polytechnics	43%	45%	46%	45%	48%	51%	50%	54%
Wānanga	56%	56%	64%	68%	52%	55%	61%	63%
Private training establishments	52%	61%	59%	69%	66%	74%	65%	73%

**Note:** This measure of qualification completion differs from the cohort-based rate that may be measured five or eight years after starting study.

**Source:** Tertiary Education Commission.

Figure 17.4 Successful course completion rates by sub-sector



**Source:** Tertiary Education Commission.

Figure 17.5 Credit achievement rates for priority groups of industry trainees

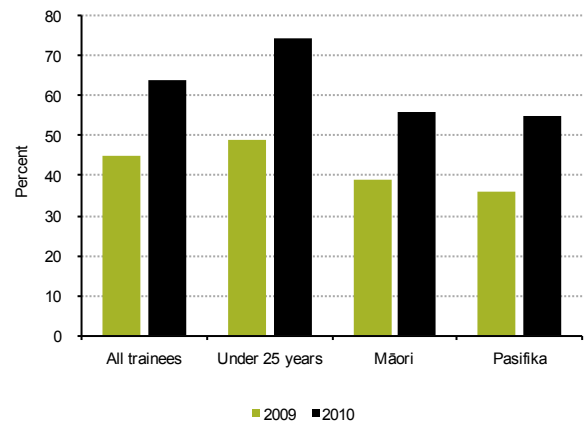
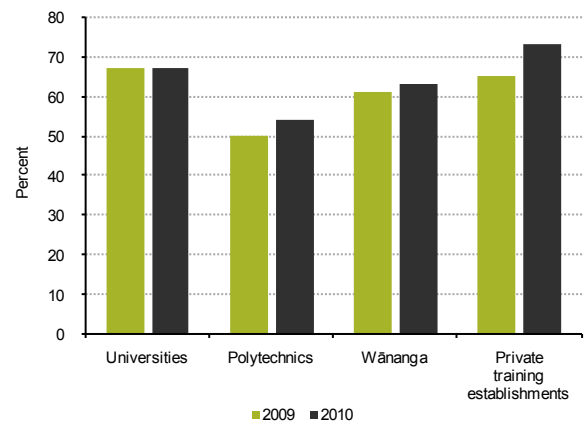


Figure 17.6 Qualification completions by sub-sector



**INDUSTRY TRAINEE PROGRAMME COMPLETION**

The overall rate at which industry trainees completed their programmes (irrespective of the starting year of study) increased by 15 percentage points from 2009 to 2010 to 55 percent. However, caution needs to be used in interpreting the changes in the programme completions from 2009 to 2010 due to the introduction of performance-based funding in 2009 and the recent review of industry training operational policy.

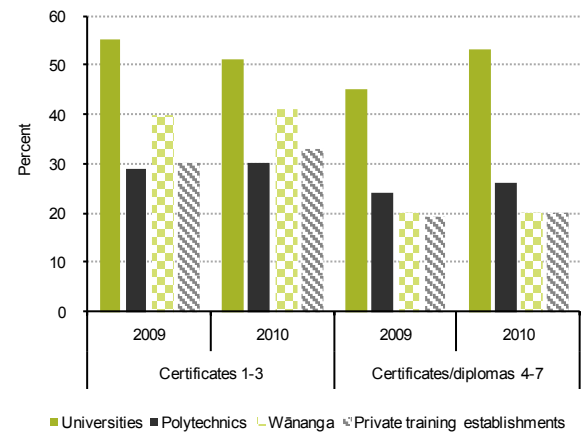
**Figure 17.7** Programme completion rates for priority groups of industry trainees



**STUDENT PROGRESSION TO HIGHER-LEVEL STUDY**

From 2009 to 2010, the progression to higher-level study of students who completed level 1 to 3 certificates and level 4 to 7 certificates and diplomas generally increased among the sub-sectors. This suggests alignment with the tertiary education strategy priority of having more young people study at higher levels. Also, at universities and polytechnics, a higher proportion of students went on to higher-level study in 2010 after having completed a bachelors degree.

**Figure 17.8** Progression to higher-level study for students who completed a certificate or diploma



**Progression rates for students who completed a qualification by level**

	Certificates 1-3		Certs/dips 4-7		Bachelors		Postgraduate	
	2009	2010	2009	2010	2009	2010	2009	2010
Universities	55%	51%	45%	53%	15%	18%	15%	16%
Polytechnics	29%	30%	24%	26%	14%	16%	6.3%	5.8%
Wānanga	40%	41%	20%	20%	13%	9.7%	15%	31%
Private training establishments	30%	33%	19%	20%	5.8%	4.4%	1.9%	4.9%

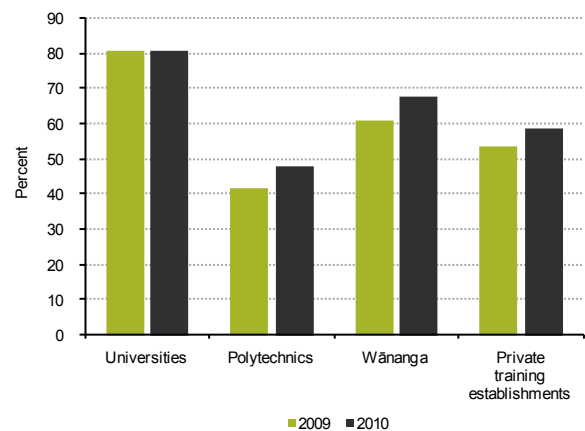
Note: 'Bachelors' includes graduate certificates and diplomas.

Source: Tertiary Education Commission.

**STUDENT RETENTION RATE BY SUB-SECTOR**

At polytechnics, wānanga and private training establishments, a substantially higher proportion of students were retained in study in 2010 than in 2009. Universities have the highest student retention rates and from 2009 to 2010 these rates remained stable. The increases in the retention rates are, in part, due to the weaker employment conditions with more students deciding to obtain qualifications in order to enhance their employment prospects. The higher rates also suggest that more students are now engaged and supported in their study.

**Figure 17.9** Student retention rate by sub-sector



**Student retention rates for priority groups in 2010 by sub-sector**

	Māori	Pasifika	Under 25 years	All students
Universities	73%	74%	85%	81%
Polytechnics	45%	48%	55%	48%
Wānanga	64%	65%	58%	67%
Private training establishments	51%	62%	65%	59%

Source: Tertiary Education Commission.

TERTIARY EDUCATION PERFORMANCE AND GOVERNMENT PRIORITIES

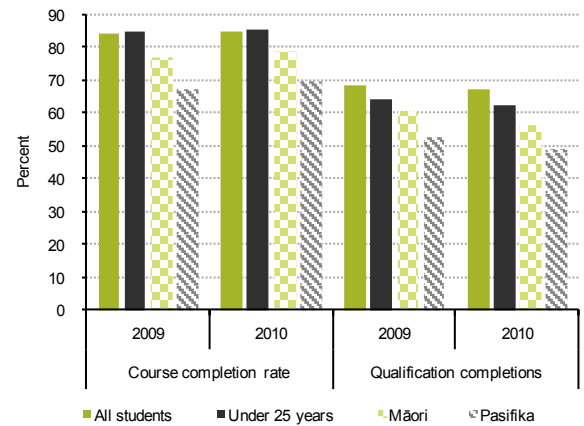
UNIVERSITIES

Government’s priority for the university sector in 2010 was to increase educational success for Māori, Pasifika and under-25-year-olds.

The overall course completion rate for all priority groups increased from 2009 to 2010 with stronger increases for Māori and Pasifika. However, the qualification completions decreased for all priority groups in 2010 and the fall was stronger for Māori and Pasifika. This was due to the move away from lower- to higher-level qualifications, which take longer to complete, and the considerably stronger increases in Māori and Pasifika equivalent full-time students.

The proportion of Māori and Pasifika leaving school able to progress to university study has increased. From 2005 to 2010, the proportions doubled for Māori to 24 percent and for Pasifika to 30 percent. In 2010, 46 percent of 18 and 19 year-old Māori school students with university entrance started study at a university, up 1 percentage point on 2009. The comparable figures in 2010 were 55 percent for Pasifika and 58 percent for all students.

Figure 17.10 Qualification and course completion rates at bachelors level and higher at universities



Source: Tertiary Education Commission.

POLYTECHNICS

The key focus for the polytechnic sector in 2010 was to increase provision of qualifications at level 4 and above. The percentage of students studying at this level has continued to increase. Polytechnics were also aiming to improve the course and qualification pass rates. From 2009 to 2010, the course completion rates have increased substantially, especially for under-25-year-olds. The qualification completion rate rose less strongly due, in part, to the number of equivalent full-time students increasing in 2010 and to increased enrolments at higher qualification levels, which take longer to complete.

Selected groups studying level 4 and higher qualifications as a percentage of all equivalent full-time student units at polytechnics

	2007	2008	2009	2010
All students	63%	66%	67%	69%
Under 25 years	31%	34%	35%	36%
Māori	9.1%	9.5%	10%	10%
Pasifika	4.3%	4.4%	4.9%	5.3%

Source: Tertiary Education Commission.

Figure 17.11 Qualification and course completion rates at level 4 and higher at polytechnics

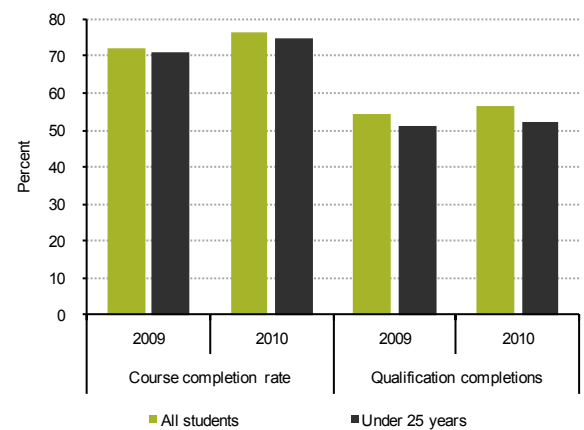


Figure 17.12 Completion and student retention rates at level 4 and higher at wānanga

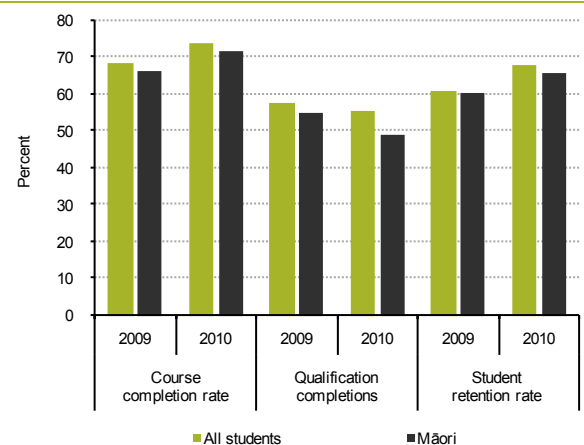
WĀNANGA

Government’s focus for wānanga is to provide a wide range of qualifications, with clear study paths to higher levels of learning through a Māori paradigm. In 2010, the rate of retention and course completion rate of Māori and all students increased at wānanga. The qualification completions by Māori decreased in 2010 due to a substantial increase in enrolments at bachelors level and higher, which take longer to complete.

Selected groups studying level 4 and higher qualifications as a percentage of all equivalent full-time student units at wānanga

	2007	2008	2009	2010
All students	44%	42%	44%	48%
Māori	29%	27%	29%	33%
Under 25 years	5.5%	5.3%	5.8%	7.7%

Source: Tertiary Education Commission.



### PRIVATE TRAINING ESTABLISHMENTS

The key focus for private training establishments in 2010 was on Māori, Pasifika and younger students. There were just under 700 NZQA-registered private providers in 2010 and 187 of these received government funding.

The course and qualification completion rates (irrespective of starting year of the qualification) increased substantially from 2009 to 2010. In part, this was attributable to the 2010 equivalent full-time students decreasing at private training establishments.

#### Selected groups studying at level 4 and higher as a percentage of all equivalent full-time student units at private training establishments

	2007	2008	2009	2010
All students	56%	58%	62%	62%
Under 25 years	27%	28%	30%	31%
Māori	11%	11%	12%	12%
Pasifika	5.9%	6.5%	7.6%	7.7%

Source: Tertiary Education Commission.

### INDUSTRY TRAINING ORGANISATIONS

Industry trainees achieved 4.5 million credits in 2010 and this was 12 percent higher than the number completed in 2009. The rate at which industry training programmes were completed in 2010 (irrespective of the starting year of the qualification) was 15 percentage points higher than in 2009. While these achievements are in keeping with the tertiary education strategy priority of enabling working New Zealanders to complete nationally recognised qualifications, caution needs to be used in interpreting the changes from 2009 to 2010. In 2009, performance-based funding was introduced and in 2010/11 a review of industry training operational policy was held. The review led to a reduction in 2010 in the number of trainees and standard training measures.

#### Selected groups of trainees as a percentage of all industry trainees in 2010

Female trainees	31%	(28% in 2005)
Māori trainees	17%	(18% in 2005)
Pasifika trainees	6.9%	(5.7% in 2005)

Note: The rates in Figure 17.14 differ from the cohort-based qualification completion rates that may be measured five or eight years after starting study.

Source: Tertiary Education Commission.

Figure 17.13 Qualification and course completion rates at private training establishments

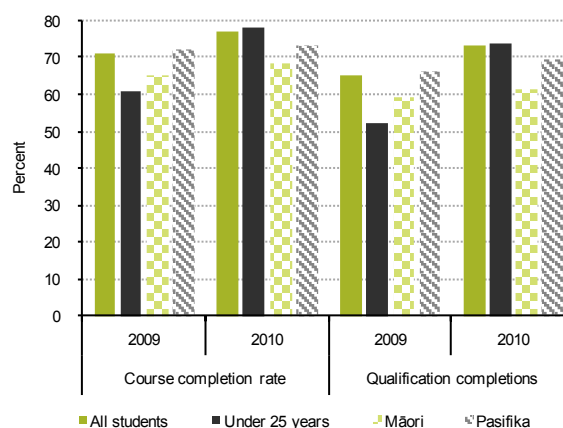
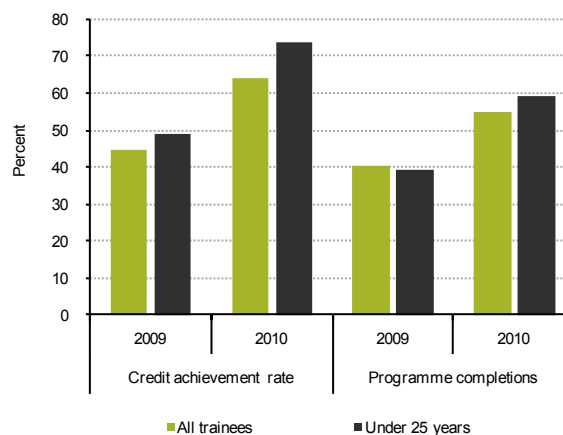


Figure 17.14 Industry training credit achievement and programme completion rates



# 18 POSTSCRIPT: 2011 YEAR

## Overview

Budget 2011 continued the government's focus on getting better value from spending in tertiary education, by shifting funding from areas of low demand to priority areas, and responding to the demand for tertiary education. The budget also included changes aimed at getting better value for taxpayers from the Student Loan Scheme.

The Youth Guarantee programme was broadened in 2011. Fees-free tertiary places for 16 and 17 year-olds were increased from 2,000 in 2010 to 2,500 in 2011. Eight trades academies, which provide senior secondary students access to trade training while still at school, opened in 2011 and more academies are planned for 2012. As a further part of Youth Guarantee, the government is developing a range of vocational pathways linked to the National Certificate of Educational Achievement.

Information from the 2011 enrolment collections, covering the period from January to August, shows that the number of students in formal tertiary study programmes decreased overall by 7.8 percent, compared with the same period in 2010. Converting the enrolments to equivalent full-time student units revealed a smaller overall decrease of 3.3 percent. The decrease was due to fewer domestic enrolments while international student numbers increased. Overall, enrolments in certificates and diplomas decreased from 2010 to 2011, while the number of masters and doctoral students increased. The number of students in bachelors degrees fell by less than one percent, while the total amount of study at this level actually increased.

In 2011, the government passed legislation to establish Education New Zealand, the new Crown agency set up to support and grow New Zealand's export education sector. The number of international students is expected to increase in 2011, following increases in 2009 and 2010. The legislation also strengthened the powers of the New Zealand Qualifications Authority to regulate the sector.

## Improving the value of tertiary education expenditure

In 2011/12, the government's total expenditure on tertiary education (including student support) is forecast to be \$4,270 million (2.0 percent of gross domestic product). This compares to an expenditure of \$4,210 million for the 2010/11 year.

Budget 2011 continued to align tertiary education expenditure more closely with government priorities by moving funding to areas such as degree and postgraduate study and away from areas of falling demand. Budget 2011 also included changes to the Student Loan Scheme to encourage personal responsibility for student loans and getting better value for taxpayers.

Key initiatives announced as part of Budget 2011 include:

- ▲ up to 750 additional funded places in new and high-performing private training establishments
- ▲ funding of \$17.5 million over four years for English as a second language courses for refugees and migrants
- ▲ incorporating Youth Training into the Youth Guarantee programme, bringing the total up to 7,500 places in 2012
- ▲ a 2.0 percent increase in the funding rate for all degree and postgraduate courses
- ▲ postgraduate funding rates for polytechnics, wānanga and private training establishments now attracting the same funding rate in dollar terms as the universities
- ▲ increased funding of \$40 million over four years to raise the profile of New Zealand education overseas
- ▲ 40 additional medical places from 2012, and
- ▲ changes to ensure that student loan lending is good value by reducing lending to those who do not meet their obligations and increasing personal responsibility for student loans by encouraging repayments.

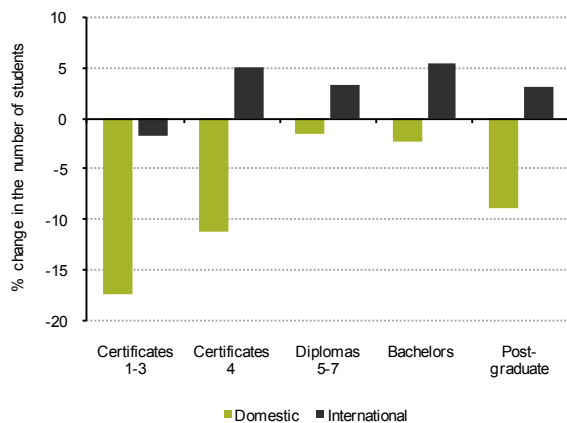
Information about the performance of tertiary providers and industry training organisations is now published online each year to improve transparency and the accountability for public expenditure on tertiary education. Additionally, some of providers' funding will be linked from 2012 onwards to performance measures.

## August 2011 enrolments<sup>1</sup>

Over the period from January to August 2011, the number of students enrolled in formal study<sup>2</sup> at tertiary education providers decreased by 7.8 percent, compared with the same period in 2010. This latest decrease in enrolments comprised a decrease in domestic enrolments of 8.9 percent and an increase in international enrolments of 3.2 percent. Information on the number of trainees engaged in work-based training is not available for 2011 due to changes in the method of collecting this data.

The 2011 decrease in the number of provider-based students was greatest at the polytechnics and wānanga. At polytechnics, the decrease was 16 percent, at wānanga 10 percent and at universities the decrease was less substantial at 2.8 percent. There were also 0.8 percent fewer students enrolled at private training establishments over the period from January to April 2011 compared with the same period in 2010.

**Figure 18.1** Percentage change in the number of domestic and international students by qualification level (August 2011 compared with August 2010)



When the 2011 enrolments are converted to equivalent full-time student units, and compared with the same period a year earlier, the decrease for domestic students was smaller at 4.3 percent. This means that the average study load of domestic students has risen for the fifth consecutive year. The study load of international students also rose from 2010 to 2011 as the increase in international full-time equivalent students at 4.9 percent was higher than the increase in the number of students.

Looking at the latest change in provider-based enrolments by qualification level shows that the number of domestic students decreased at every level except for masters degrees. The most substantial decreases occurred at non-degree level and for graduate certificates/diplomas. The number of domestic students in bachelors degrees decreased only slightly and the amount of study at this level actually increased.

Enrolments by international students increased at every qualification level except for level 4 certificates and masters degrees. There were 3.7 percent more international students studying bachelors degrees in 2011 than in 2010 and the increase at this level in equivalent full-time students was higher at 4.5 percent. From 2010 to 2011, the number of international students increased substantially at doctoral level (up 17 percent) and for level 5 to 7 diplomas (up 5.1 percent).

## Christchurch earthquake

The government has closely monitored the impact that the Christchurch earthquake has had on tertiary education providers and on students. After the February 2011 Canterbury earthquake, emergency arrangements were put in place to protect students. These included:

- ▲ support for students, and their families, who were injured or killed in the earthquake
- ▲ changes in tertiary funding and student support rules to allow domestic students to continue their studies at other institutions, and
- ▲ changes to immigration and international education policies to allow international students to change their study arrangements.

As expected, the number of people studying in Christchurch reduced in 2011. Domestic equivalent full-time student units in Christchurch were more than 15 percent lower in the January to August period in 2011 than in 2010. The number of international students studying in Christchurch has also reduced dramatically.

As Christchurch continues to recover from the earthquake, an increase in demand for trades training is expected. The government established a contingency in Budget 2011 of \$42 million (operating) and \$6 million (capital) to fund any increase in demand as and when it occurs.

<sup>1</sup> The August snapshot represents about three-quarters of the annual enrolments collection and needs to be interpreted as provisional information that is subject to change when the final data comes available in 2011.

<sup>2</sup> Study in formal qualifications of more than one week's duration.

## Two polytechnic mergers

In January 2011, Lincoln University and Telford Rural Polytechnic merged to increase their collaboration in education and research to support land-based industries.

Also, in January 2011, Tairāwhiti Polytechnic merged with the Eastern Institute of Technology to form a single institution to serve the area of Gisborne, Wairoa, Hastings and Napier as well as the surrounding towns and areas from Hicks Bay to Dannevirke. The merger will provide students living in Gisborne with new study options such as bachelors degrees in applied social sciences, the arts (Māori) and nursing. Other qualifications now available in Gisborne include diplomas in mental health and certificates in fashion apparel, health and fitness, and tourism and travel.

## Industry training

In 2011, the Tertiary Education Commission's new operational policies have had financial implications for industry training organisations. Organisations have been working to ensure that they can operate effectively within this new environment.

The new operational policies have resulted in further mergers, with the number of industry training organisations reducing from 38 in 2010 to 34 in 2011. In 2011, the following mergers took place:

- ▲ Learning State now covers public sector and local government employees through the merger with Local Government Industry Training Organisation
- ▲ ETITO Industry Training Organisation now covers electronic manufacturing, telecommunications, call centres, security, financial services and real estate services through the merger with REAL Industry Training Organisation
- ▲ Careerforce now covers health, disability, community support, social services and youth work through the merger with the Social Services Industry Training Organisation, and
- ▲ NZ Motor Industry Organisation (MITO) now covers motor trade, canvas fabrication, motor trimming and sail making, truck transport, bus and coach, taxi, courier, logistics, distribution, warehousing, ports and stevedores through the merger with Transport and Logistics Industry Training Organisation (Tranzqual).

In July 2011, the Minister for Tertiary Education released the terms of reference for a broader review of industry training which is led by the Ministry of Education. The objective of

the review is to consider the extent to which the industry training system delivers the skills to maximise the productive potential of New Zealand industries and the employment and earnings of people in the workforce. The review will provide advice on possible directions for change to improve the value of government's investment in industry training.

## Youth Guarantee

Youth Guarantee aims to raise the educational achievement of 16 and 17 year-olds, with the goal of all students achieving at least NCEA level 2 or an equivalent tertiary qualification.

A key part of the initiative is to provide fees-free tertiary study for 16 and 17 year-olds at levels 1 to 3. In 2010, government established 2,000 fees-free tertiary places and this increased to 2,500 places in 2011. There will be up to 7,500 Youth Guarantee places available from 2012 as all Youth Training places are being reallocated to the Youth Guarantee programme.

Eight trades academies were established in 2011, providing over 700 places for 16 and 17 year-olds. The academies allow students to earn both NCEA credits and a tertiary qualification, while gaining practical skills in the workplace. The initiative operates through partnerships between schools, tertiary institutions, industry training organisations and employers. A further 13 trades academies are expected to open in 2012, providing at least 2,000 places.

As part of Youth Guarantee, the government is working in partnership with clusters of industry training organisations to develop a range of vocational pathways. From 2012, schools, tertiary providers and trades academies will be able to use these pathways to assist students to achieve NCEA qualifications endorsed with manufacturing and technology; construction and infrastructure; primary industries; social and community services; and service industries.

## International tertiary education

Data from the Export Education Levy shows there has been a 4.9 percent increase in the number of international fee-paying students enrolled in public and private tertiary education during the 2010 calendar year, rising from 40,300 to 42,200 enrolments.

The number of international fee-paying students enrolled in tertiary education was 1.6 percent higher during the 1 January to 30 April 2011 period than for the same period in 2010.

In 2010, 31,400 international students were enrolled in the public tertiary education institutions and 10,800 with government-funded private training establishments.

From 2009 to 2010, there was continued significant growth in the numbers of fee-paying tertiary students from India (up 14 percent), Germany (up 20 percent) and Japan (up 5.2 percent). Tertiary student numbers from the much larger market of China were largely unchanged during the year, and enrolments from Thailand declined by 3.4 percent.

On 1 September 2011, the government established Education New Zealand – a new Crown agency to support and grow New Zealand’s export education sector. The agency combines the government-funded promotional, representational and other functions and activities which were previously spread across the Ministry of Education, Education New Zealand Trust and New Zealand Trade and Enterprise. Budget 2011 included an additional \$10 million a year to raise the profile of New Zealand education overseas, bringing the total Crown and Export Education Levy funding for international promotions to \$14.5 million.



## 19 FINDING OUT MORE ABOUT TERTIARY EDUCATION

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This chapter includes technical notes about the statistics in *Profile & Trends* and the associated analytical tables on Education Counts, a list of the definitions and acronyms commonly used in New Zealand's tertiary education sector, descriptions of some of the statistical methods applied and descriptions of the various data sources used.

The contact details of the key tertiary education agencies, sector representative groups, students' associations, tertiary education organisations, and industry training organisations are also included.

There are numerous sources of additional information on New Zealand's tertiary education sector. They include the:

- ▲ New Zealand education statistics and research website: [www.educationcounts.govt.nz](http://www.educationcounts.govt.nz)
- ▲ New Zealand education portal: [www.minedu.govt.nz/NZEducation.aspx](http://www.minedu.govt.nz/NZEducation.aspx), which has links to tertiary information for learners, parents and educators
- ▲ Ministry of Education's website, which contains supporting documents, publications and links to other education-related sites: [www.minedu.govt.nz/tertiary](http://www.minedu.govt.nz/tertiary)

- ▲ Team-Up programme on the Ministry of Education's website, which aims to provide more and better information to parents, caregivers and families so they can support and encourage their children's learning: [www.minedu.govt.nz/Parents.aspx](http://www.minedu.govt.nz/Parents.aspx)
- ▲ websites of the Tertiary Education Commission [www.tec.govt.nz](http://www.tec.govt.nz), New Zealand Qualifications Authority [www.nzqa.govt.nz](http://www.nzqa.govt.nz), Careers New Zealand [www.careers.govt.nz](http://www.careers.govt.nz) and other tertiary education agencies
- ▲ websites of many providers which are accessible through links from the above websites or from the Careers New Zealand site, and
- ▲ annual reports and other information published by tertiary education organisations.

The government has a number of distinct but interrelated roles in the tertiary education sector in New Zealand including the provision of resources for the delivery of education; operating as a regulator by administering education-related legislation; promulgating regulations and guidelines; monitoring compliance; and monitoring the effectiveness and efficiency of education delivery.

Government policy is developed within a framework that aims to create an environment for learning as the basis for New Zealand's future economic and social wellbeing.

## Key tertiary education agencies

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MINISTRY OF EDUCATION  
45-47 Pipitea Street  
Private Box 1666  
Wellington  
phone: 04-463 8000 fax: 04-463 8001  
email: [information.officer@minedu.govt.nz](mailto:information.officer@minedu.govt.nz)

The divisions that contribute to the Ministry of Education's activities in tertiary education are:

- ▲ Tertiary Education Policy
- ▲ Tertiary Sector Performance Analysis
- ▲ Education Sector Leadership Team
- ▲ Māori Education Strategy and Policy
- ▲ Education Information and Analysis
- ▲ International Education
- ▲ Sector and Business Services

TERTIARY EDUCATION COMMISSION  
Level 10  
44 The Terrace  
PO Box 27-048  
Wellington  
phone: 04-462 5200 fax: 04-462 5400  
email: [info@tec.govt.nz](mailto:info@tec.govt.nz)

NEW ZEALAND QUALIFICATIONS AUTHORITY  
Level 13  
125 The Terrace  
PO Box 160  
Wellington  
phone: 04-463 3000 fax: 04-802 3112  
email: [helpdesk@nzqa.govt.nz](mailto:helpdesk@nzqa.govt.nz)

CAREERS NEW ZEALAND  
Level 4, CMC Building  
89 Courtenay Place  
PO Box 9446  
Te Aro  
Wellington  
phone: 04-801 5177 fax: 04-801 5161  
call free: 0800 222 733  
email: [careers@careers.govt.nz](mailto:careers@careers.govt.nz)

CAREER INFORMATION RESOURCES UNIT  
Advice Line: 0800 222 733  
phone: 04-801 5177 fax: 04-801 5161  
email: [careers@careers.govt.nz](mailto:careers@careers.govt.nz)  
[www.careers.govt.nz](http://www.careers.govt.nz)

INLAND REVENUE  
National Office  
PO Box 2198  
Wellington  
phone (student loans helpline): 0800 377 778

STUDYLINK – MINISTRY OF SOCIAL DEVELOPMENT  
Freepost 113907  
Palmerston North 5301  
freephone: 0800 88 99 00 freefax: 0800 88 33 88  
email: [studylink@msd.govt.nz](mailto:studylink@msd.govt.nz)

### Tertiary education scholarship information

FUNDING INFORMATION SERVICE INC.  
[www.fis.org.nz](http://www.fis.org.nz)

UNIVERSITIES NEW ZEALAND  
[www.universitiesnz.ac.nz](http://www.universitiesnz.ac.nz)

## Universities

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Links to New Zealand's universities can be found at: [www.universitiesnz.ac.nz](http://www.universitiesnz.ac.nz)

**THE UNIVERSITY OF AUCKLAND**  
 Private Bag 92019  
 Auckland 1142  
 NEW ZEALAND  
 phone: +64-9-373 7999 (operator)  
 phone: +64-9-373 7599 (auto attendant)  
 email: [postmaster@auckland.ac.nz](mailto:postmaster@auckland.ac.nz)  
[www.auckland.ac.nz](http://www.auckland.ac.nz)

**VICTORIA UNIVERSITY OF WELLINGTON**  
 PO Box 600  
 Wellington 6140  
 phone: +64-4-472 1000 (operator)  
 phone: +64-4-463 5233 (auto attendant)  
 fax: +64-4-499 4601  
[www.vuw.ac.nz](http://www.vuw.ac.nz)

**AUCKLAND UNIVERSITY OF TECHNOLOGY**  
 Private Bag 92006, Auckland 1040  
 freephone: 0800 288 864  
 phone: +64-9-921 9999  
 fax: +64-9-921 9812  
[www.aut.ac.nz](http://www.aut.ac.nz)

**UNIVERSITY OF CANTERBURY**  
 Private Bag 4800  
 Christchurch 8140  
 phone: +64-3-366 7001 (operator)  
 phone: +64-3-364 2987 (auto attendant)  
[www.canterbury.ac.nz](http://www.canterbury.ac.nz)

### Campuses:

- City
- Millennium
- North Shore
- Manukau

**LINCOLN UNIVERSITY**  
 PO Box 84  
 Lincoln University Post Office  
 Ellesmere Junction Road/Springs Road  
 Canterbury 7647  
 phone: + 64-3-325 2811  
 fax: +64-3-325 3850  
[www.lincoln.ac.nz](http://www.lincoln.ac.nz)

**THE UNIVERSITY OF WAIKATO**  
 Te Whare Wānanga o Waikato  
 Private Bag 3105  
 Hamilton 3240  
 phone: + 64-7-856 2889 automated: +64-7-838 4466  
 fax: +64-7-838 4300  
 email: [info@waikato.ac.nz](mailto:info@waikato.ac.nz)  
[www.waikato.ac.nz](http://www.waikato.ac.nz)

**UNIVERSITY OF OTAGO**  
 PO Box 56  
 Dunedin 9054  
 phone: +64-3-479 1100 or 0800 808 098  
 fax: +64-3-479 8692  
 email: [university@otago.ac.nz](mailto:university@otago.ac.nz)  
[www.otago.ac.nz](http://www.otago.ac.nz)

**MASSEY UNIVERSITY**  
 Private Bag 11 222  
 Palmerston North  
 phone: +64-6-350 444 or 0800 627 739  
 fax: +64-6-350 5618  
 email: [contact@massey.ac.nz](mailto:contact@massey.ac.nz)  
[www.massey.ac.nz](http://www.massey.ac.nz)

## Institutes of technology and polytechnics

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| <ul style="list-style-type: none"> <li>▲ Aoraki Polytechnic<br/><a href="http://www.aoraki.ac.nz">www.aoraki.ac.nz</a></li> <li>▲ Bay of Plenty Polytechnic<br/><a href="http://www.boppoly.ac.nz">www.boppoly.ac.nz</a></li> <li>▲ Christchurch Polytechnic Institute of Technology<br/><a href="http://www.cpit.ac.nz">www.cpit.ac.nz</a></li> <li>▲ Eastern Institute of Technology Hawke's Bay<br/><a href="http://www.eit.ac.nz">www.eit.ac.nz</a></li> <li>▲ Manukau Institute of Technology<br/><a href="http://www.manukau.ac.nz">www.manukau.ac.nz</a></li> <li>▲ Nelson Marlborough Institute of Technology<br/><a href="http://www.nmit.ac.nz">www.nmit.ac.nz</a></li> <li>▲ Northland Polytechnic<br/><a href="http://www.northtec.ac.nz">www.northtec.ac.nz</a></li> <li>▲ Otago Polytechnic<br/><a href="http://www.tekotago.ac.nz">www.tekotago.ac.nz</a></li> <li>▲ Southern Institute of Technology<br/><a href="http://www.sit.ac.nz">www.sit.ac.nz</a></li> </ul> | <ul style="list-style-type: none"> <li>▲ Tai Poutini Polytechnic<br/><a href="http://www.taipoutini.ac.nz">www.taipoutini.ac.nz</a></li> <li>▲ The Open Polytechnic of New Zealand<br/><a href="http://www.openpolytechnic.ac.nz">www.openpolytechnic.ac.nz</a></li> <li>▲ Unitec New Zealand<br/><a href="http://www.unitec.ac.nz">www.unitec.ac.nz</a></li> <li>▲ Universal College of Learning<br/><a href="http://www.ucol.ac.nz">www.ucol.ac.nz</a></li> <li>▲ Waiariki Institute of Technology<br/><a href="http://www.waiariki.ac.nz">www.waiariki.ac.nz</a></li> <li>▲ Waikato Institute of Technology<br/><a href="http://www.wintec.ac.nz">www.wintec.ac.nz</a></li> <li>▲ Wellington Institute of Technology<br/><a href="http://www.weltec.ac.nz">www.weltec.ac.nz</a></li> <li>▲ Western Institute of Technology at Taranaki<br/><a href="http://www.witt.ac.nz">www.witt.ac.nz</a></li> <li>▲ Whitireia Community Polytechnic<br/><a href="http://www.whitireia.ac.nz">www.whitireia.ac.nz</a></li> </ul> |
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## Wānanga

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Links to these organisations can be found at:

[www.tauihu-wananga.maori.nz](http://www.tauihu-wananga.maori.nz)

- ▲ Te Wānanga o Aotearoa  
[www.twoa.ac.nz](http://www.twoa.ac.nz)
- ▲ Te Whare Wānanga o Awanuiārangi  
[www.wananga.ac.nz](http://www.wananga.ac.nz)
- ▲ Te Wānanga-o-Raukawa  
[www.twor.ac.nz](http://www.twor.ac.nz)

## Industry training organisations

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Links to these organisations can be found at: [www.itf.org.nz](http://www.itf.org.nz). Industry training organisations may be listed under more than one sector. Industry training organisations marked with an asterisk ceased operation, or merged with another industry training organisation, in 2010 or 2011.

### Primary sector

- ▲ Agriculture Industry Training Organisation
- ▲ Equine Industry Training Organisation
- ▲ Extractives Industry Training Organisation
- ▲ Forest Industries Training and Education Council
- ▲ Horticulture Industry Training Organisation
- ▲ Infratrain NZ
- ▲ New Zealand Industry Training Organisation
- ▲ Seafood Industry Training Organisation
- ▲ Communications and Media Industry Training Organisation
- ▲ Kompetenz– engineering, food and manufacturing
- ▲ Electricity Supply Industry Training Organisation
- ▲ ETITO Industry Training Organisation\*
- ▲ Flooring Industry Training Organisation
- ▲ Infratrain New Zealand
- ▲ Joinery Industry Training Organisation
- ▲ Motor Industry Training Organisation\*

### Manufacturing sector

- ▲ Apparel and Textile Industry Training Organisation
- ▲ Kompetenz – engineering, food and manufacturing
- ▲ Communications and Media Industry Training Organisation
- ▲ ETITO Industry Training Organisation\*
- ▲ Forest Industries Training and Education Council
- ▲ Joinery Industry Training Organisation
- ▲ Motor Industry Training Organisation\*
- ▲ New Zealand Industry Training Organisation
- ▲ NZ Marine Industry Training Organisation
- ▲ Plastics and Materials Processing Industry Training Organisation
- ▲ Seafood Industry Council
- ▲ Opportunity – The Training Organisation
- ▲ Plumbing, Gasfitting, Drainlaying & Roofing ITO
- ▲ Tranzqual (Transport and Logistics Industry Training Organisation)\*
- ▲ Water Industry Training (part of the Agriculture ITO covering water supply and wastewater)

### Services sector

- ▲ Aviation, Tourism and Travel Training Organisation
- ▲ Building Service Contractors Industry Training Organisation
- ▲ ETITO Industry Training Organisation\*
- ▲ Equine Industry Training Organisation
- ▲ Funeral Service Training Trust of New Zealand
- ▲ Hairdressing Industry Training Organisation
- ▲ Horticulture Industry Training Organisation
- ▲ Hospitality Standards Institute
- ▲ Journalists Training Organisation (part of Communications and Media ITO)
- ▲ REINZ Industry Training Organisation Ltd (REAL ITO)\*
- ▲ Retail Institute

### Infrastructure (construction, transport, communications) sector

- ▲ Aviation, Tourism and Travel Industry Organisation
- ▲ Building and Construction Industry Training Organisation
- ▲ Building Service Contractors Industry Training Organisation

- ▲ Retail Meat Industry Training Organisation Inc.
- ▲ Skills Active Industry Training Organisation
- ▲ New Zealand Sports Turf Industry Training Organisation

**Government and community services sector**

- ▲ Careerforce (Community Support Services Industry Training Organisation)\*
- ▲ Creative Trades Industry Training Organisation\*
- ▲ EMQUAL (Fire and Rescue Services)
- ▲ ETITO Industry Training Organisation\*
- ▲ Learning State (Public Sector Training Organisation)\*
- ▲ Local Government Industry Training Organisation\*
- ▲ Pharmacy Industry Training Organisation
- ▲ Social Services Industry Training Organisation\*

## Sector groups

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### AOTEAROA MĀORI PROVIDERS OF TRAINING EDUCATION AND EMPLOYMENT

80 Queens Drive  
Lyll Bay  
PO Box 2796  
Wellington  
phone: 04-387 5640 fax: 04-387 5645  
email: teatahou@xtra.co.nz

### ASSOCIATION FOR TERTIARY EDUCATION MANAGEMENT

ATEM New Zealand Branch  
PO Box 13-678  
Christchurch 8013  
phone: 03-379 9190 fax: 03-379 6607

### INDEPENDENT TERTIARY INSTITUTIONS

c/- Apartment 5  
125 Molesworth Street  
PO Box 12-249  
Wellington 6144  
phone: 027 449 9447  
email: neil@ncm.co.nz

### INDUSTRY TRAINING FEDERATION

Level 2  
276 Cuba Street  
PO Box 24-194  
Wellington 6142  
phone: 04-499 8155 fax: 04-499 8156  
www.itf.org.nz

### NEW ZEALAND ASSOCIATION OF PRIVATE EDUCATION PROVIDERS

Level 5, Compudigm House  
49 Boulcott St  
PO Box 6411  
Wellington 6141  
phone: 04-471 2460 fax: 0800 NZAPEP (692 737)  
email: exec@nzapep.co.nz

### NEW ZEALAND UNIVERSITIES ACADEMIC AUDIT UNIT

Level 9  
Education House  
142 Lambton Quay  
PO Box 5787  
Wellington 6145  
phone: 04-801 7924 fax: 04-801 8501  
email: admin@nzau.ac.nz

### UNIVERSITIES NEW ZEALAND (NEW ZEALAND VICE-CHANCELLORS' COMMITTEE)

Level 9, Allied Nationwide Finance Tower  
142 Lambton Quay  
PO Box 11-915, Manners Street  
Wellington 6142  
phone: 04-381 8500 fax: 04-381 8501  
email: jackie@nzvcc.ac.nz

### PACIFIC ISLANDS TERTIARY EDUCATION PROVIDERS OF NEW ZEALAND INC.

c/- PO Box 15-809  
New Lynn  
Auckland  
phone: 09-825 0136 fax: 09-825 0141  
www.besttraining.ac.nz

### TE TAUIHU O NGĀ WĀNANGA – THE NATIONAL ASSOCIATION OF WĀNANGA

PO Box 119  
Otaki  
phone: 04-233 9343 fax: 04-233 0994  
email: info@tauihu-wananga-maori.nz

## Students' associations

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### NEW ZEALAND UNION OF STUDENTS' ASSOCIATIONS

Level 3

354 Lambton Quay

PO Box 10-191

Wellington

phone: 04-498 2500 fax: 04-473 2391

email: [admin@students.org.nz](mailto:admin@students.org.nz)

### TE MANA AKONGA – NATIONAL MĀORI UNIVERSITY STUDENTS' ASSOCIATION

Level 3

354 Lambton Quay

PO Box 10-191

Wellington

phone: 04-498 2506 fax: 04-473 2391

email: [tma.kaituhono@xtra.co.nz](mailto:tma.kaituhono@xtra.co.nz)



## Definitions

### Academic year

The academic year is defined in the Education Act 1989 as a calendar year, 1 January to 31 December.

### Achievement standards

One of the assessment methods used for NCEA is the achievement standard, which assesses whether the student has acquired the expected skills and knowledge. Providers and industry training organisations must be accredited by the New Zealand Qualifications Authority, and have been granted a ‘consent to assess’ by NZQA, before they can register credits from assessment against achievement standards.

Providers and industry training organisations assessing against achievement standards must engage with the moderation system that applies to those achievement standards. Students who achieve the required standard are ranked as achieved, achieved with merit or achieved with excellence.

### Adult and community education

Adult and community education (ACE) enables adults to engage in a range of educational activities in a context that is post-school and relevant to the learner. Most ACE provision does not lead to a qualification. There are few barriers to participation. Provision is generally focused on personal development and skill enhancement, while there are also social, civic and community benefits. There is a range of providers that deliver ACE, including schools, tertiary education institutions, community groups, private training establishments and other tertiary education providers.

### Centres of research excellence

The centres of research excellence (CoREs) support leading-edge, international standard innovative research that fosters excellence and contributes both to New Zealand’s national goals and to knowledge transfer. The centres are primarily inter-institutional research networks, with the researchers working together on a commonly agreed work programme. Each centre is hosted by a tertiary education institution.

### Component

A programme of study may comprise a number of components and span a number of years. A component may be described as a paper, a module or a course. A component encompasses teaching, learning and assessment. In many cases it also includes research.

A collection of components forms a programme of study which, if completed successfully, results in the award of a recognised qualification.

### Course

Refer to component.

### Decile

Decile ratings indicate the extent to which a school draws its students from low socio-economic communities. Decile 1 schools are the 10 percent of all schools with the highest proportion of students from low socio-economic communities, whereas decile 10 schools are the 10 percent of all schools with the lowest proportion of these students.

### Distance education

Distance education occurs when students and the instructor are separated by geographic distance or time. The students’ learning is usually facilitated using correspondence study, audio conferencing, video conferencing, or e-learning.

### E-learning

E-learning refers to formal and non-formal education that uses electronic delivery methods such as internet-based learning delivery packages, CD-ROM, online video conferencing, websites or email to manage the relationship between teacher and learners.

### Equivalent full-time student unit

One equivalent full-time student unit is defined as the student workload that would normally be carried out in a single academic year (or a twelve month period) by a student enrolled full-time.

The equivalent full-time student unit value of a qualification is to represent the Tertiary Education Commission’s assessment of the normal minimum time for a successful full-time student to complete the qualification. The credit value assigned to the course by the quality assurance system is part of the EFTS measure.

Qualifications are to be disaggregated into component courses. The Tertiary Education Commission is to assign each approved course an EFTS factor that represents the proportion of the whole qualification that the course constitutes.

For courses included in the New Zealand Qualifications Framework, one equivalent full-time student unit is defined as 120 credits, representing one year of full-time study.

The equivalent full-time student count in this report is the sum of the EFTS units for a year.

#### **Fiscal year**

The government's accounting year is based on the fiscal year, which is a 12-month period starting on 1 July and finishing on 30 June.

#### **Full-time/part-time**

The terms 'full-time' and 'part-time' describe a student's study load. A student may elect to study a full-time qualification on a part-time basis, by enrolling in fewer components than the normal student full-time workload. The expression 'part-time' may be applied to a qualification as well as a student. For example, there are qualifications that are specifically designed for part-time study. The following definition of full-time is used for the purposes of eligibility for student loans and allowances:

Any programme of study of 32 weeks or more and at least 0.8 EFTS is designated full-time, full-year. A programme of study that has a lower EFTS value on a pro rata basis is called part-time. Any programme of study of at least 12 weeks but less than 32 weeks and at least 0.3 EFTS or the equivalent on a pro rata basis (e.g. 24 weeks and 0.6 EFTS) is designated full-time, part-year.

For full information on the student loans and allowances eligibility criteria refer to [www.workandincome.govt.nz/manuals-and-procedures/students/index.htm](http://www.workandincome.govt.nz/manuals-and-procedures/students/index.htm).

#### **Government training establishments**

A government training establishment (GTE) is a government department or a Crown entity, other than a tertiary education institution, approved by the Minister for Tertiary Education and registered by the New Zealand Qualifications Authority as a tertiary education provider. GTEs offer training, subject to the approval and accreditation requirements of the Education Act 1989.

#### **Industry training organisations**

Industry training organisations (ITOs) facilitate workplace learning for trainees in employment by setting national skill standards for their industry. In addition to providing leadership to industry on skill and training needs, ITOs develop appropriate training arrangements for their industry, monitor training quality and arrange for the assessment of

trainees. ITOs also provide information and advice to trainees and their employers.

#### **Institute of technology**

The term 'institute of technology' is a synonym for 'polytechnic'.

#### **ISCED level**

ISCED refers to the International Standard Classification of Education, developed by the United Nations Educational, Scientific and Cultural Organization (UNESCO). It is used by countries and international agencies as a means of compiling internationally comparable statistics on education and identifies the level of that educational provision. For tertiary education, the applicable classifications are:

- ▲ post-secondary/non-tertiary (ISCED 4) – programmes that are included in tertiary education in New Zealand, although from an international standpoint they straddle the boundary between upper secondary (ISCED 3) and tertiary education. Examples of such programmes include pre-degree foundation components and national certificates that lead to higher qualifications
- ▲ tertiary education (ISCED 5) – where programmes are largely theoretically based and are intended to provide qualifications for entry into ISCED 6 or a profession with high skills requirements. Level 5A represents more academically or theoretically based study, while level 5B represents more vocationally oriented study. Typical programmes at level 5A include bachelors degrees, honours degrees, masters degrees, and postgraduate diplomas or certificates. Level 5B programmes include undergraduate diplomas and certificates (see also Tertiary-type A and Tertiary-type B definitions), and
- ▲ tertiary education (ISCED 6) – programmes leading to an advanced research qualification. In the New Zealand tertiary education system, only doctorate qualifications fit into this category.

#### **National Certificate of Educational Achievement**

The National Certificate of Educational Achievement (NCEA) is New Zealand's official national qualification for senior secondary school students. NCEA replaced School Certificate in 2002, Sixth Form Certificate in 2003 and University Bursaries, Entrance and Scholarships in 2004. The Ministry of Education sets the required achievement standards for the three NCEA qualifications. The skills and knowledge a student is expected to achieve are described on the New Zealand Qualifications Framework. Standards can include achievement standards relating to the national

curriculum and unit standards from the New Zealand Qualifications Framework that relate to industry-related skills. Students can gain NCEA credits for all learning in regular school curriculum subjects and in industry-related areas. NCEA provides the bridge between school, the workplace and lifelong learning.

### **New Zealand Qualifications Framework**

The New Zealand Qualifications Framework lists all quality-assured qualifications of 40 credits or more. The aim of the framework is to:

- ▲ ensure that all qualifications have a purpose and relation to each other that students and the public can understand
- ▲ maintain and enhance learners' ability to transfer credit by the establishment of a common system of credit, and
- ▲ enhance and build on the international recognition of New Zealand qualifications.

The New Zealand Qualifications Framework includes the unit standards-based system of national qualifications. Unit standards are categorised by field of study, which is further broken down into subfields and domains. Standards and national qualifications are also categorised by level of student achievement. Certificates can be awarded up to level 7. Diploma qualifications can be awarded at levels 5, 6 or 7 on the framework, with level 7 being equivalent to the level achieved at the end of a first degree.

### **New Zealand Standard Classification of Education**

The New Zealand Standard Classification of Education (NZSCED) is a classification used to classify subjects or fields of tertiary education study. The classification system consists of three levels – broad (for example, health), narrow (for example, dental studies) and detailed fields (for example, dental hygiene and therapy).

### **Other tertiary education providers**

Other tertiary education providers (OTEPs) are organisations that deliver programmes of tertiary education, or in support of tertiary education, of some national significance, and are recognised by the Minister for Tertiary Education under section 321 of the Education Act 1989.

### **Part-time/full-time**

See definitions under full-time/part-time.

### **Pasifika peoples**

Pasifika peoples is a collective term used to refer to men, women and children of Samoan, Cook Island, Tongan, Niuean, Tokelauan, Fijian and other Pasifika heritages. Pasifika peoples comprise a diverse range of peoples from the South Pacific region or people within New Zealand who have strong family and cultural connections to Pacific Island countries, regardless of whether they were born in New Zealand or a Pacific Island nation.

### **Performance-Based Research Fund**

The Performance-Based Research Fund (PBRF) is a means of allocating research funding to tertiary education providers. It seeks to reward excellence in research in tertiary education organisations and improve the quality of research in the tertiary sector. The PBRF allocates funding on the basis of an evaluation of the quality of research, a provider's external research income and its postgraduate research degree completions.

### **Polytechnics**

A polytechnic is a public tertiary institution that is characterised by a wide diversity of vocational and professional programmes. Polytechnics are sometimes collectively referred to as institutes of technology and polytechnics (ITPs).

### **Private training establishments**

A private training establishment (PTE) is defined in the Education Act 1989 as 'an establishment, other than a public tertiary education institution, that provides post-school education or vocational training'. PTEs include not only privately owned providers, but also those operated by iwi, trusts and other organisations.

### **Programme of study**

A programme of study is a collection of components (papers, modules, courses, classes or work) in which a student enrolls that contribute to meeting the requirements for the award of a qualification(s).

### **Qualification**

A qualification is an official award given in recognition of the successful completion of a programme of study of 40 credits or more, which has been quality assured by a recognised quality assurance agency. All recognised qualifications are registered on the New Zealand Qualifications Framework.

### Student achievement component

Student achievement component funding provides the government's contribution to the costs of teaching and learning and other costs related directly to student numbers. The volume of provision and the types of components funded through the student achievement component are approved by the Tertiary Education Commission through each tertiary education organisation's investment plan.

The student achievement component rates are differentiated by discipline to reflect the costs associated with different types of study. For example, the funding rates for arts courses are lower than those for science courses. There are also differences in the rates of funding per equivalent full-time student across different tertiary education sub-sectors.

### Student allowances

Student allowances are grants designed to provide financial assistance to students who are less able to support themselves financially or do not have access to alternative sources of financial support while undertaking full-time study.

### Tertiary education

Tertiary education comprises all involvement in post-school learning activities. It includes:

- ▲ foundation education, such as adult literacy
- ▲ certificates and diplomas
- ▲ bachelors degrees
- ▲ postgraduate qualifications
- ▲ industry training, including Modern Apprenticeship training, and
- ▲ adult and community education.

### Tertiary education institutions

Tertiary education institutions (TEIs) are public providers of tertiary education. There are five kinds of tertiary education institutions as defined in section 159 of the Education Act 1989:

- ▲ universities
- ▲ polytechnics
- ▲ colleges of education
- ▲ wānanga, and
- ▲ 'specialist colleges'.

There were no specialist colleges or colleges of education in New Zealand in 2010.

### Tertiary education organisations

Tertiary education organisations (TEOs), as defined in section 159B of the Education Act 1989, are all the institutions and organisations that provide or facilitate tertiary education and training. These include:

- ▲ public tertiary education institutions
- ▲ private training establishments
- ▲ other tertiary education providers
- ▲ government training establishments, and
- ▲ industry training organisations.

### Tertiary education providers

Section 159 of the Education Act 1989 defines tertiary education providers as tertiary education institutions, private training establishments and government training establishments. The definition does not include industry training organisations.

### Tertiary high schools

The tertiary high school, by combining the strengths of both a school and a tertiary institution, aims to provide an integrated, and therefore smoother, transition for students. The tertiary high school, introduced in 2010 at the Manukau Institute of Technology, is the first of its kind in New Zealand. The students do most of their study in the tertiary environment, while retaining links with their home school for age-appropriate activities such as sports and cultural events.

### Tertiary-type A

The Organisation for Economic Co-operation and Development (OECD) classifies qualifications at ISCED Level 5 into Tertiary-type A education and Tertiary-type B. Tertiary-type A programmes (ISCED 5A) are largely theory-based and are designed to provide sufficient qualifications for entry to advanced research programmes and professions with high skill requirements. They have a minimum cumulative theoretical duration (at tertiary level) of three years or more full-time equivalent study, although they may last four or more years. In the case of New Zealand, Tertiary-type A qualifications include bachelors degrees, graduate certificates and diplomas, and all postgraduate-level qualifications, except doctorates. (See also the ISCED level definition.)

### Tertiary-type B

Tertiary-type B programmes (ISCED 5B) are typically shorter and focus on practical technical or occupational skills for direct entry into the labour force. They have a minimum

duration of two years' full-time equivalent study at tertiary level. (See also the ISCED level definition.)

### Trades academies

Trades academies allow students to gain credits for NCEA and a tertiary qualification, while gaining practical skills in the workplace. Trades academies work through partnerships between schools, tertiary institutions, industry training organisations and employers.

### Training Incentive Allowance

The Training Incentive Allowance (TIA) is designed to provide financial assistance to people receiving a Domestic Purposes Benefit, an Invalid's Benefit, a Widow's Benefit, or an Emergency Maintenance Allowance, to enable them to undertake employment-related training.

### Training Opportunities

Training Opportunities is a free programme for job seekers over the age of 18 years which is designed to provide trainees with practical pathways to employment or further education. The programme is targeted towards the long-term unemployed with low qualifications, people with disabilities, certain benefit recipients, refugees, ex-prisoners, or Work and Income priority clients.

### Tuition fees

Tuition fees are the fees charged to students by tertiary education providers as a contribution to the cost of delivery.

### Tuition subsidies

Tuition subsidies are the money that is appropriated by the government through Vote Education and used to provide subsidies through the student achievement component for valid student enrolments offered by recognised providers.

### Unit standard

One of the assessment methods used for NCEA is the unit standard which assesses whether the student has acquired the expected skills and knowledge. Providers and industry training organisations must be accredited by the New Zealand Qualifications Authority, and have been granted a 'consent to assess' by NZQA, before they can register credits from assessment against unit standards.

Providers and industry training organisations assessing against unit standards must engage with the moderation system that applies to those unit standards.

### University

A university is a public tertiary education institution that is primarily concerned with advanced learning and knowledge, research and teaching to a postgraduate level.

### University Entrance

To gain entry to a New Zealand university, you will need to have 42 credits at level 3 or above on the New Zealand Qualifications Framework.

Universities and other tertiary providers in New Zealand sometimes have other specific requirements for entry to particular programmes or courses. For a particular university programme, check the entry criteria for the specific standards at level 3.

### Wānanga

A wānanga is a public tertiary institution that provides programmes with an emphasis on the application of knowledge regarding āhuatanga Māori (Māori traditions) according to tikanga Māori (Māori custom).

### Youth Guarantee

Youth Guarantee provides fees-free tertiary study for 16 and 17 year-olds at qualification levels 1 to 3.

### Youth Training

Youth Training provides a bridge towards employment, further education or training for school leavers with low or no qualifications. It aims to significantly raise the educational and vocational achievement of eligible young people, while providing opportunities for them to explore work options.

From 2012 onwards, Youth Guarantee and Youth Training will be combined. A new Youth Guarantee Fund has been established. The new Youth Guarantee programme will extend the range of course and study options available to students.

## Acronyms

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ACE	Adult and community education	IIQABCG	Inter-Institutional Quality Assurance Bodies Consultative Group
AFML	Annual fee movement limit		
ALAF	Adult Literacy Achievement Framework	ISCED	International Standard Classification of Education
ALL	Adult Literacy and Life Skills Survey	ITF	Industry Training Federation
ALQM	Adult Literacy Quality Mark	ITI	Independent Tertiary Institutions
AMPTEE	Association of Māori Providers of Tertiary Education and Employment	ITO	Industry training organisation
APPEL	Association of Private Providers of English Language	LLN	Literacy, language and numeracy
ATEM	Association for Tertiary Education Management	MSD	Ministry of Social Development
CLANZ	Community Learning Aotearoa New Zealand	MSI	Ministry of Science and Innovation
COP	Code of Practice for the Pastoral care of International Students	NCEA	National Certificate of Educational Achievement
CoRE	Centre of research excellence	NSN	National Student Number
CPI	Consumers Price Index	NZAPEP	New Zealand Association of Private Education Providers
CRI	Crown research institute	NZIS	New Zealand Income Survey
CUAP	The Committee on University Academic Programmes	NZQA	New Zealand Qualifications Authority
EFTS	Equivalent full-time student unit	NZQF	New Zealand Qualifications Framework
ELSI	Economic Living Standard Index	NZSCED	New Zealand Standard Classification of Education
ERO	Education Review Office	NZUAAU	New Zealand Universities Academic Audit Unit
ESOL	English for speakers of other languages	OECD	Organisation for Economic Co-operation and Development
FCCM	Fee and Course Costs Maxima	OTEP	Other tertiary education provider
FTE	Full-time equivalent	PBRF	Performance-Based Research Fund
GTE	Government training establishment	PITPONZ	Pacific Islands Tertiary Education Providers of New Zealand
HLFS	Household Labour Force Survey	PTE	Private training establishment
HRC	Health Research Council	REAP	Rural Education Activities Programme
IALS	International Adult Literacy Survey	SAC	Student achievement component
ALL	Adult Literacy and Life Skills Survey	SLS	Student Loan Scheme
IDF	Innovation and Development Fund	SNZ	Statistics New Zealand

STAR	Secondary-Tertiary Alignment Resource	TOPNZ	The Open Polytechnic of New Zealand
STM	Standard training measure	TWoA	Te Wānanga o Aotearoa
TANZ	Tertiary Accord of New Zealand	UBSH	Unemployment Benefit Student Hardship
TCS	The Correspondence School	UNZ	Universities New Zealand
TEC	Tertiary Education Commission	WBSDF	Workbase Basic Skills Development Fund
TEI	Tertiary education institution	WINHEC	World Indigenous Nations Higher Education Consortium
TEO	Tertiary education organisation	WIPCE	World Indigenous Peoples Conference on Education
TEP	Tertiary education provider		
TES	Tertiary education strategy		
TIA	Training Incentive Allowance		

## Technical notes

The information in this *Profile & Trends* and in the analytical tables needs to be used in conjunction with these technical notes and any footnotes and table notes.

Most of the education statistics provided in *Profile & Trends 2010* are derived from the enrolment and completion collections (Single Data Returns) supplied by tertiary education providers to the Ministry of Education.

The reference period used in the latest edition of *Profile & Trends* is the year ended 31 December 2010, unless otherwise indicated.

Information and statistics have also been provided by the Tertiary Education Commission, the New Zealand Qualifications Authority, the Ministry of Social Development, Inland Revenue, Careers New Zealand, Statistics New Zealand and other government agencies, as well as the Industry Training Federation and quality assurance agencies.

### Analytical tables

Most of the information that underlies the analysis in *Profile & Trends* is also released on the Ministry of Education's website in a set of analytical tables: [www.educationcounts.govt.nz/statistics/tertiary\\_education](http://www.educationcounts.govt.nz/statistics/tertiary_education).

The analytical tables need to be used in conjunction with the footnotes provided in the tables and with these technical notes.

### Attrition rate

Attrition as measured by the Ministry of Education relates to the proportion of students that started a qualification, did not complete it and are no longer enrolled (at the same or higher level of study) in the following or subsequent years.

Calculating the rate of attrition of students after one year is common. The first-year attrition rate is the proportion of students that started a qualification, did not complete it and are not enrolled (at the same or higher level of study) in the following year.

Attrition is the complement of retention, that is,  $\text{attrition} = 1 - \text{retention}$ .

### Blank cells in tables

These relate to data that is missing, not available or not applicable.

### Counting methods

Generally, students are counted in each category they belong to, but only once in the total student count. For example, students who identify with more than one ethnic group have been counted in each group. This means that the sum of the students in each ethnic group may exceed the total student count.

Tables typically do not include rows specifically for students with unknown values, for example, no ethnic group reported by the student. However, those students are included in the total.

Note: Institutions are counted in the group they belonged to in that particular year regardless of subsequent regroupings that have occurred. For example, all colleges of education are counted as colleges of education up to the years they merged with their respective universities. Auckland Institute of Technology is counted as a polytechnic up to 2000, when it became a university. This means that there will be some shifts in the data attributable to changes in the classification of organisations.

### Credits

The New Zealand Qualifications Framework describes the typical learning effort required to achieve a qualification in terms of credits. A full year of study is 120 credits, which equates to 1,200 notional learning hours (including teaching, classroom activities and independent study). The minimum number of credits required for a certificate is 40 credits.

### Disability

Figures for students with disabilities are based on students' self-reporting of having a disability at the time of their enrolment. The recommended question for providers to include on their enrolment form is "Do you live with the effects of significant injury, long-term illness, or disability?" However, the actual question used may vary among providers. Providers are also required to provide information on how many students access disability support services.



### Equivalent full-time student

The equivalent full-time student (EFTS) unit is a measure of the 'size' of each student's enrolment. One equivalent full-time student unit represents the study load taken by a student enrolled full-time for one year. Each component is given an EFTS factor that represents its proportion of a full-time, full-year programme of study.

For qualifications included in the New Zealand Qualifications Framework, one equivalent full-time student unit is defined as 120 credits. Part-time study years are expressed as proportions of an equivalent full-time student, for example, 0.75 EFTS. The equivalent full-time student count is the sum of the EFTS units for a year.

### Highest school qualification

This information is collected by the enrolling tertiary organisation from the student at the time of enrolment. It may or may not be verified by the organisation.

### Participation rate

The tertiary education participation rate is the total domestic student enrolment count expressed as a percentage of the population aged 15 years and over. In the case of ethnicity and gender, the rates have been adjusted using the 2010 national age distribution estimates to produce additional age-standardised participation rates. These provide fairer comparisons by estimating what the rate would be if the distribution of student ages matched the 2010 national age distribution.

### Prior activity

Prior activity refers to the student's main activity at 1 October in the year prior to the student's first year of formal enrolment with their current provider.

### Progression rate

The Ministry of Education measures two types of progression by students in tertiary education. One type of progression measures the percentage of tertiary students who go on to a higher level of study, irrespective of whether they have completed a qualification or not. For example:

- ▲ 33 percent of students who started a level 1 to 3 certificate in 2003 went on to study at a higher level by 2008, or
- ▲ 16 percent of students who started a bachelors degree in 2003 went on to study at a higher level by 2008.

The other type of progression measures the proportion of students who complete a qualification and go on to further study (at the same or higher level). For example:

- ▲ 34 percent of graduates went on to higher-level study within five years of completing a bachelors degree, or
- ▲ 10 percent of graduates went on to doctoral study within five years of completing their masters degree.

### Qualifications

'Bachelors or higher qualifications' refers to bachelors degrees, graduate diplomas and certificates, bachelors degrees with honours, postgraduate diplomas and certificates, masters degrees and doctoral degrees. 'Other tertiary qualifications' refers to university certificates/diplomas, teaching certificates/diplomas, nursing certificates/diplomas, New Zealand certificates/diplomas, technician's certificates, local polytechnic certificates/diplomas, and trade certificates or advanced trade certificates. 'School qualifications' refers to year 11, 12 and 13 qualifications and overseas school qualifications.

### Qualification completion rate

The qualification completion rate as measured by the Ministry of Education is the proportion of students who successfully complete a tertiary qualification (at the qualification level at which they started study or at a higher qualification level). Students are considered to have completed a qualification when they have fulfilled all the academic requirements for that qualification. This means the qualification does not necessarily have to have been conferred. The rate of qualification completion is commonly calculated three, five or eight years after starting study.

### Reliability of estimates

This report includes information from the Household Labour Force and the New Zealand Income Surveys, both conducted by Statistics New Zealand. Errors from these surveys are divided into two classes. Non-sampling error includes errors arising from biases in the patterns of response and non-response, inaccuracies in reporting by respondents, and errors in the recording and coding of data. Sampling error is a measure of the variability that occurs by chance because a sample, rather than an entire population, was surveyed.

Caution should therefore be exercised in interpreting the estimates for smaller groups. The sample estimates from these surveys for ethnic groups such as Māori and Pasifika tend to be less stable, due to a larger sampling error, than the

estimates achieved for larger population groups. Similarly, smaller age groups, such as those with a tertiary qualification aged 65 years and over, tend to have higher sampling errors. More technical information about these surveys is available from the Statistics New Zealand website.

### Research top-up funding

The funding for research top-ups and foreign-based research students is an estimate only. The top-ups funding is calculated by multiplying the number of government-funded equivalent full-time students at degree level and above by the margin between the non-degree funding rate and the various funding rates for bachelors degrees, postgraduate-taught and postgraduate-research programmes. The funding for foreign postgraduate research-based students is calculated by multiplying the number of government-funded equivalent full-time students by the rate at which they are funded.

### Retention rate

Retention as measured by the Ministry of Education relates to the proportion of students who started a qualification and are still enrolled (at the qualification level at which they started study or at a higher qualification level), or who successfully completed a qualification. The rate of retention is commonly calculated after one year. Retention is the complement of attrition, that is, retention = 1 – attrition.

### Students/learners

The main methods of counting tertiary students used in this report are listed below.

Student enrolment counts refer to the number of students enrolled at any time during the year with a tertiary education provider in:

- a recognised qualification listed on the New Zealand Qualifications Framework, and
- a programme of study being followed that is greater than 0.03 EFTS (more than one week's full-time study).

Industry training enrolments refer to the number of learners enrolled at any time during the year in training funded and approved by an industry training organisation.

Separate counts are provided in this report of learners who undertook adult and community education or whose total annual study load in formal qualifications was less than or equal to 0.035 EFTS (less than one week's full-time study). Students can be included in more than one of the above

counts. For example, off-job industry training involves formal study with a tertiary education organisation, meaning that learners will be counted in both student enrolments and industry training. Currently, it is not possible to accurately identify where the counts overlap in all cases. In Table 5.1 of this publication, an estimate has been made of the total number of students engaged in the counts listed above.

Unless otherwise stated, counts relate to students or learners enrolled at any time during the year.

Students enrolled in private training establishments and other tertiary education providers recognised under section 321 of the Education Act 1989 are excluded from the student enrolment counts prior to 1999.

Also excluded from the student enrolment counts are students enrolled with private training establishments and other tertiary education providers that do not receive government subsidies for tuition. However, information on Training Opportunities and Youth Training includes all contracted providers, including those that neither received tuition subsidies nor were approved for student loans or allowances.

### Study load

A student's study load is the total equivalent full-time student unit value of all the qualifications they are enrolled in during a given calendar year.

### Study type

Study type is a measure of a student's full-time/part-time status. This measure is based on a student's formal enrolment(s) with their provider(s) for a single calendar year. Study type has four values:

- 1 = 'studying full-time for the full year'
- 2 = 'studying full-time for part of the year'
- 3 = 'studying part-time for the full year'
- 4 = 'studying part-time for part of the year'

A full year is treated as 32 or more weeks in a calendar year, while full-time and part-time are based on the student loan entry threshold method for determining full-time/part-time. Under that method, an enrolment of 32 weeks or more, comprising 0.8 equivalent full-time student units or more, is treated as a full-time, full-year unit. These figures are pro rated for part-year study.

## Useful links

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New Zealand education statistics and research  
[www.educationcounts.govt.nz](http://www.educationcounts.govt.nz)

Ministry of Education  
[www.minedu.govt.nz/tertiary](http://www.minedu.govt.nz/tertiary)  
[www.educationcounts.govt.nz](http://www.educationcounts.govt.nz)  
[www.steo.govt.nz](http://www.steo.govt.nz) (Services for Tertiary Education Organisations)

Tertiary Education Commission  
[www.tec.govt.nz](http://www.tec.govt.nz)

New Zealand Qualifications Authority  
[www.nzqa.govt.nz](http://www.nzqa.govt.nz)

Careers New Zealand  
[www.careers.govt.nz](http://www.careers.govt.nz)

Association for Tertiary Education Management Inc.  
[www.atem.org.au](http://www.atem.org.au)

Funding Information Service  
[www.fis.org.nz](http://www.fis.org.nz)

Gateway to New Zealand Government  
[www.newzealand.govt.nz](http://www.newzealand.govt.nz)

Industry Training Federation  
[www.itf.org.nz](http://www.itf.org.nz)

Inland Revenue  
[www.ird.govt.nz](http://www.ird.govt.nz)

Ministry of Science and Innovation  
[www.msi.govt.nz](http://www.msi.govt.nz)

Ministry of Social Development  
[www.msd.govt.nz](http://www.msd.govt.nz)

New Zealand Association of Private Education Providers  
[www.nzapep.co.nz](http://www.nzapep.co.nz)

New Zealand Teachers Council  
[www.teacherscouncil.govt.nz](http://www.teacherscouncil.govt.nz)

New Zealand University Students' Associations  
[www.students.org.nz](http://www.students.org.nz)

Universities New Zealand  
[www.universitiesnz.ac.nz](http://www.universitiesnz.ac.nz)

Pacific Islands Tertiary Education Providers of New Zealand Inc.  
[www.pitponz.org.nz](http://www.pitponz.org.nz)

StudyLink  
[www.studylink.govt.nz](http://www.studylink.govt.nz)

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