



# Profile & Trends

NEW ZEALAND'S TERTIARY EDUCATION SECTOR

# 2012

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## STATISTICS AND RESEARCH

*Profile & Trends* has an associated set of statistical tables available on the Education Counts website:  
[www.educationcounts.govt.nz/statistics/tertiary\\_education](http://www.educationcounts.govt.nz/statistics/tertiary_education)

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: transitions from school to tertiary education, resourcing, financials, human resources, research, student support, Youth Guarantee, Foundation-Focused 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 the outcomes of tertiary education.



## PROFILE & TRENDS 2012: NEW ZEALAND'S TERTIARY SECTOR

*Profile & Trends 2012* contains data on tertiary education trends and changes mainly for the year ended December 2012. Most of the statistics in the publication are derived from returns provided by government-funded tertiary education organisations to the Ministry of Education and to the Tertiary Education Commission. 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. The topics covered in the report are listed on page 4 and a more detailed contents list is provided at the start of each chapter. A list of figures and tables is included at the end of the report.

This year's edition of *Profile & Trends* is the 15th annual survey of the tertiary education system published by the Ministry of Education. The report begins with the tertiary education highlights for 2012. Chapters 2 and 3 describe New Zealand's tertiary education system and the provision of tertiary education. Important events affecting tertiary education in 2013 are commented on at the end of chapter 1 and in the postscript (chapter 18).

The returns to people who invest in a tertiary education are described in chapter 4. The focus on tertiary education outcomes includes the qualification levels in the New Zealand population, the income premiums earned by people with higher-level qualifications and the differences in the employment opportunities for the tertiary qualified. Information on the employment outcomes of young graduates is also included in chapter 4. Chapters 5 to 10 profile tertiary students, their courses of study and their achievement.

*Profile & Trends* also contains information on student financial support, the performance of providers of tertiary education, and tertiary education funding. Chapters 12 and 13 discuss the sector's research performance and information on the funding of tertiary education research. The financial performance of public tertiary education institutions is described in chapter 14, followed by information on the human resources in the system. The Tertiary Education Commission has contributed chapter 17 on the performance of providers at the sub-sector level for the years 2009 through to 2011.

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### Notes:

1. Unless otherwise stated, the data in this publication is for the year ended 31 December 2012 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 is off-job purchased from tertiary education providers.
3. Data in this report and the analytical tables on the Education Counts website has been revised back to 2003 as tertiary education organisations can submit updates for previous years.
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.

# 1 TERTIARY EDUCATION HIGHLIGHTS

This chapter includes:

- ▲ up-to-date information on how young people fare in the labour market after they finish tertiary study
- ▲ the government's education targets for 18 year-olds and the population aged 25 to 34 years
- ▲ tertiary education enrolment trends in 2012
- ▲ New Zealand's fourth tertiary education strategy
- ▲ early indications for enrolments in 2013, and
- ▲ other tertiary education events in 2013.

## TERTIARY EDUCATION OUTCOMES FOR YOUNG NEW ZEALANDERS

More information to help people choose their study plans has been released in 2013.<sup>1</sup> The study *Moving on up* is based on what all young tertiary-qualified New Zealanders did and earned during the years ended March 2009 and March 2010. The evidence in this report confirms previous research findings.<sup>2</sup>

Earnings increase with the level of qualification completed. Five years after finishing study, the median earnings of young people who completed a bachelors degree were 53 percent above the national median and 46 percent above the median earnings of young people with a level 1 to 3 certificate.

Employment rates increase with the level of qualification gained. For example, in the first year after study, 56 percent of young bachelors graduates were in employment and 38 percent were in further study. Of young people who had completed a level 1 to 3 certificate, 37 percent were in employment and 48 percent were taking more study.

Very few young people who had completed a level 5 to 7 diploma or higher qualification were on a benefit in the first five years after study. The benefit rate was 4 percent for graduates with a level 5 to 7 diploma and 2 percent for those with a qualification at bachelors level. The benefit rate was around 10 percent for those who graduated with certificates at level 1 to 3.

Earnings vary by field of study. For example, the median earnings of young graduates with bachelors degrees in management and commerce were \$68,000 five years after leaving study, compared to \$45,000 for a graduate in graphics and design. The comparable figure for an accountancy graduate was \$64,000 and for electrical engineering graduates the figure was \$63,000. Engineering graduates with an honours degree had median earnings of \$65,000 after five years.

Chapter 4 provides more findings on the outcomes for young graduates after completing a qualification.

## DELIVERING BETTER PUBLIC SERVICES

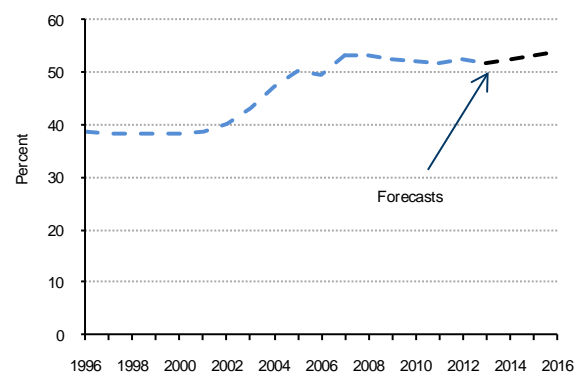
In 2012, the government set 10 targets for better public services, including two education targets aimed at boosting skills and employment.

1. Increase the percentage of 18 year-olds with NCEA level 2 or an equivalent qualification.
2. Increase the percentage of the population aged 25 to 34 years with a level 4 or higher qualification.

The first of these targets aims to have 85 percent of 18 year-olds achieve an NCEA level 2 or an equivalent qualification by 2017. In 2012, the proportion was 77 percent.

The second tertiary education target aims to have 55 percent of the population aged 25 to 34 years with a level 4 or higher qualification by 2017. From 2011 to 2012, the proportion increased from 51.8 percent to 52.6 percent.

**Figure 1.1** New Zealanders aged 25 to 34 years with a level 4 or higher qualification (December years)



<sup>1</sup>Mahoney, P., Park, Z. & Smyth, R. (2013), *Moving on up – what young people earn after their tertiary education*, Wellington: Ministry of Education.

<sup>2</sup> See also: [www.dol.govt.nz/publications/lmr/occupational-outlook/index.asp](http://www.dol.govt.nz/publications/lmr/occupational-outlook/index.asp).

Increasing the proportion of the population aged 25 to 34 years with a level 4 or higher qualification to 55 percent by 2017 is an ambitious target because of the increasing size of the population in this age group over the next five years, falling net migration of skilled young people and modest growth in enrolments at higher levels.

Actions being undertaken to achieve this target include increasing student enrolments in the younger age groups at level 4 and above, improving educational quality and achievement – especially through clearer pathways with a focus on employment – and providing better information on educational performance and outcomes.

In 2013, the New Zealand Qualifications Authority approved the award of Vocational Pathways, as part of the New Zealand Qualifications Framework, from 2014. That is, when students achieve the National Certificate of Education Achievement with enough credits from the standards recommended in the pathways, this will be reflected on their record of achievement held by the New Zealand Qualifications Authority. This means that Vocational Pathways are recognised as a part of the qualification system, helping to clarify pathways for learners.

## 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, and the skills it imparts, 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 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.

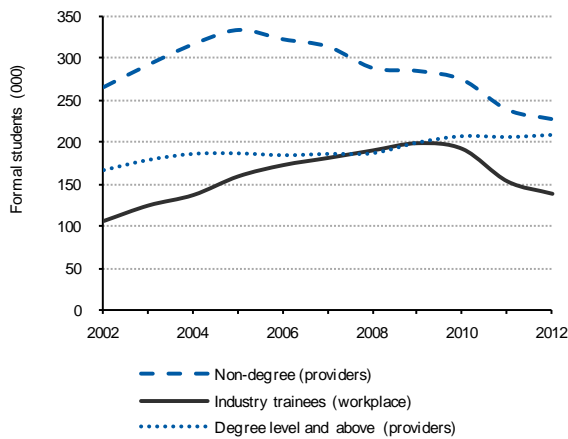
The results of learning through tertiary education can be viewed in terms of improving competencies and attainment, or progress towards attainment, of recognised qualifications. A competency includes the skills, knowledge, attitudes and values needed to perform important tasks. The literacy, language 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.

## TERTIARY EDUCATION ENROLMENTS IN 2012

There were 422,000 students enrolled in formal tertiary education<sup>3</sup> at providers in 2012. Of the students in formal tertiary study of more than one week’s duration, 47,700 were international students, 9,870 were in Foundation-Focused Training Opportunities, 8,920 were in Youth Guarantee. There were also 2,340 senior secondary students studying via trades academies in 2012. Of the students in formal tertiary study of less than one week’s duration, 16,500 were in the Secondary-Tertiary Alignment Resource (STAR) programme and 6,370 students were in other short courses.

**Figure 1.2** Trends in formal study by level and setting<sup>4</sup>



### Domestic tertiary education students continue their shift from lower- to higher-level qualifications

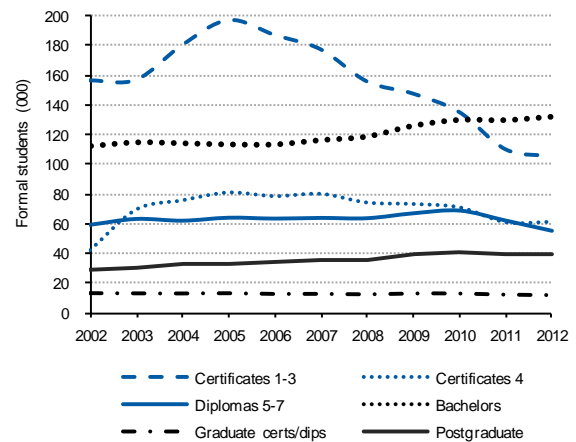
Formal enrolments by domestic students fell from 2011 to 2012, due to fewer enrolments in non-degree qualifications by students aged 25 years and over.<sup>5</sup> While enrolments in non-degree qualifications also fell for younger students – those aged 18 to 24 years – enrolments in degree and higher qualifications by this age group increased.

<sup>3</sup> The study of qualifications on the New Zealand Qualifications Framework. Learners in Youth Guarantee and Foundation-Focused Training Opportunities are required to achieve unit standards which count towards qualifications on the New Zealand Qualifications Framework. Data excludes students in non-government-funded providers.

<sup>4</sup> A new industry training data collection was introduced in 2011. Data from 2011 onwards is not strictly comparable with that collected in previous years. Workplace-based training is jointly funded by the government through the Industry Training Fund and by industry through financial and in-kind contributions.

<sup>5</sup> The government’s move to a capped funding system for tertiary education institutions, which began in 2008, has led to the preferences of the Tertiary Education Commission, tertiary education providers and tertiary education consumers to continue to shift away from non-degree qualifications, especially for older students, a trend that started in 2005.

**Figure 1.3** Domestic tertiary education students by level of study



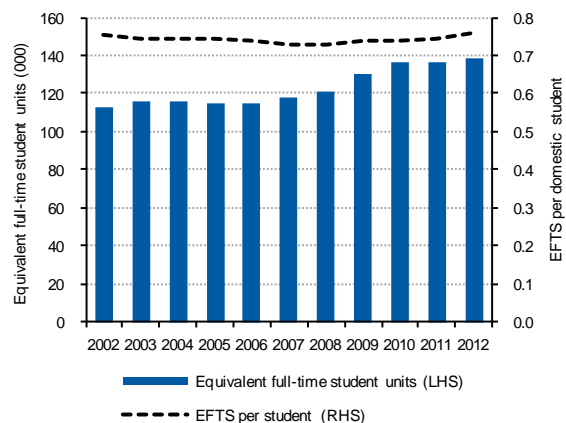
This continued upward trend in higher-level enrolments by young people aligns with the government’s tertiary education priority of having more young people achieve qualifications at level 4 and above. It also reflects increasing school achievement, with more young people qualified to study at higher tertiary education levels.

Enrolments by people aged 18 and 19 years increased in 2012, even though the New Zealand population aged 18 and 19 years declined. In part, this reflects the continuation of weak employment conditions for young people, even though the New Zealand economy expanded in 2011 and 2012.

From 2011 to 2012, there were fewer enrolments in degree and higher qualifications by people aged 25 years and over. These enrolments also fell from 2010 to 2011.

When converted to equivalent full-time student units, domestic enrolments remained stable in 2012. That is, domestic students continued to take on higher study loads in 2012 (on average), following a trend that began in 2007.

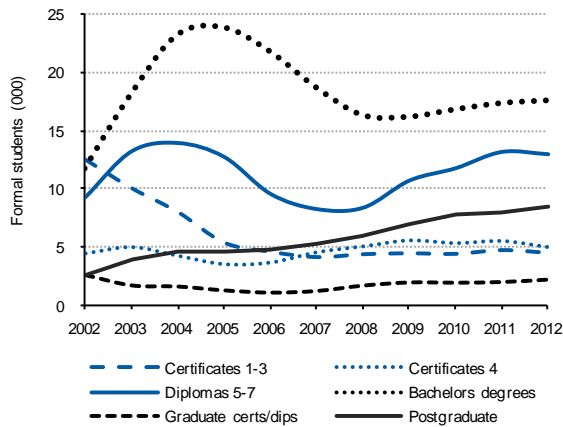
**Figure 1.4** Domestic equivalent full-time student units



### International tertiary education students

The upward trend in international students continued in terms of equivalent full-time student units, while the international student headcount remained stable at 47,700.

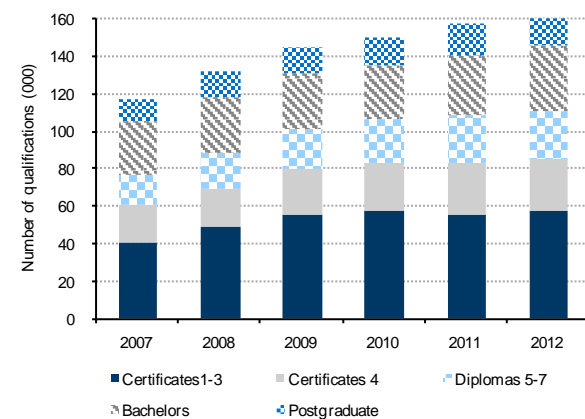
**Figure 1.5** International tertiary education students by level of study



### Qualification achievement

In 2012, 162,000 qualifications were completed, 18,500 by international students. Of the 143,000 qualifications completed by domestic students, 43,700 were bachelors or higher qualifications and 99,300 were non-degree qualifications.

**Figure 1.6** Number of qualifications completed by formal students by level of study<sup>6</sup>



<sup>6</sup> Due to the changes made to the collection of completions data in 2007, some private training establishments were not able to supply information. In 2007, the number of students completing a qualification has been adjusted for the missing data returns, however, the total number of qualifications completed in 2007 remains lower.

### Ka Hikitia – Managing for Success

Raising achievement for Māori students is a key priority and the next phase of Ka Hikitia has started for the period 2013 to 2017.

The participation rate of Māori aged 18 to 24 years in bachelors and higher qualifications increased from 11 percent in 2011 to 12 percent in 2012. The participation rate of this age group at level 4 and higher was 22 percent in 2012, up from 21 percent in 2011. In comparison, the participation rate of all domestic students in level 4 and higher qualifications was 31 percent in 2012.

### Pasifika Education Plan

The vision of the Pasifika Education Plan for the years 2013 to 2017 is to see ‘all Pasifika learners participating, engaging and achieving in education, secure in their identities, languages and cultures and contributing fully to Aotearoa New Zealand’s social, cultural and economic wellbeing.’

The participation rate of Pasifika aged 18 to 24 years in bachelors and higher qualifications increased from 14 percent in 2011 to 15 percent in 2012. Participation by this age group at level 4 and higher was 27 percent in 2012. This compared to 25 percent in 2011.

### Workplace-based learners

There were 139,000 industry trainees in 2012, including 15,300 modern apprentices. Since 2009, the number of trainees has declined, while, before this, the number of trainees followed a strong upward trend.

A number of factors have led to the decline in industry trainees since 2009. These included the:

- ▲ removal of inactive trainees from funded training in 2010
- ▲ implementation of new operational funding rules from 2011 that place emphasis on performance rather than just enrolments, and
- ▲ weak employment conditions since 2009.

In addition, there has been a change in the way industry training activity is recorded with the implementation of new industry training data collection from 2011 onwards.

The way industry training achievement information is collected also changed in 2011. This means that counts before 2011 may not be strictly comparable with those for earlier years.



## NEW ZEALAND'S FOURTH TERTIARY EDUCATION STRATEGY

New Zealand's fourth strategy, the Tertiary Education Strategy 2014-2019, will be published later this year. The strategy is expected to build on the reforms that began with the creation of the Tertiary Education Advisory Commission in 2000 and the changes to systems for planning, funding, monitoring and quality assurance that took effect from 2008.

It is also expected that the strategy, like its predecessors, will align the tertiary sector more closely with national development goals. The tertiary education sector can help build a more competitive and productive economy through ensuring that the system has the quality and capability to provide and develop relevant skills of New Zealanders. In turn, this will lead to meaningful employment for people and help businesses compete, both locally and internationally.

The draft Tertiary Education Strategy 2014-2019 is expected to be available from the Ministry of Education's website in October 2013. Following its release, the public consultation on the strategy is expected to take 6 weeks.

## EARLY ENROLMENT INDICATIONS FOR 2013

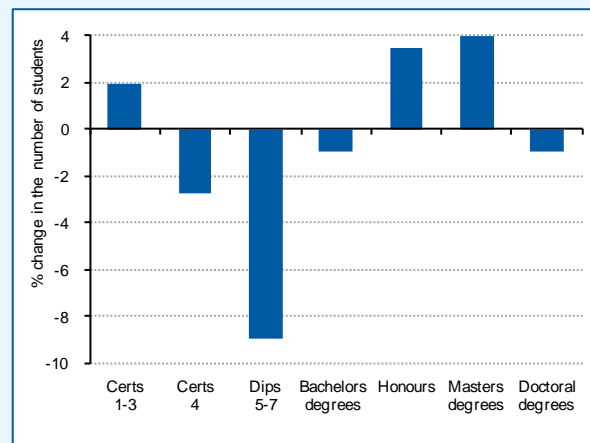
Early indications<sup>7</sup> are that the number of students enrolled in formal study<sup>8</sup> at tertiary education providers will decrease between one and two percent from 2012 to 2013. In terms of equivalent full-time student units the decrease is estimated to be slightly smaller. This means that the average study load of students is expected to continue to rise – an upward trend which started in 2007.

The latest figures indicate that domestic enrolments will fall in 2013, while the number of international students will remain stable.

From 2012 to 2013, the number of provider-based students is expected to decrease at universities, polytechnics and wānanga, with the strongest fall in the number of students at polytechnics. The number of students at private training establishments is likely to remain stable from 2012 to 2013.

Among the ethnic groups, Pasifika are the only group likely to continue to increase their student numbers. From 2002 to 2012, the number of enrolments by the Pasifika group has averaged an increase of 4.1 percent per year.

**Figure 1.7** Percentage change in the number of formal students (including international students) by qualification level



**Note:** Honours includes bachelors with honours degrees and postgraduate certs/ dips.

Enrolments by students aged under 20 years are also expected to increase from 2012 to 2013 even though the population aged 18 to 19 years has been decreasing in number. The weak employment conditions for this group continued in the early part of 2013. Although the rate of

<sup>7</sup> The analysis in this section is based on the enrolments made in the period from January to April 2013, compared with the enrolments made in the period from January to April 2012. It represents about three-quarters of the annual enrolments data and needs to be interpreted as provisional information that is subject to change when the final data comes available in 2012.

<sup>8</sup> Study towards a qualification of more than one week's duration on the New Zealand Qualifications Framework.

unemployment for young people was lower in the March 2013 quarter than in the December 2012 quarter, it was higher than in the March 2012 quarter. However, the proportion of under-20-year-olds not in education, employment or training (NEET), who are most at risk of poor outcomes, was lower in the March 2013 quarter than in the March 2012 quarter.

Looking at the latest change in formal enrolments by qualification level shows that the number of students is likely to decrease from 2012 to 2013 at most levels, except for postgraduate qualifications.

The most substantial decrease is expected to be for level 5 to 7 diplomas. The latest figures also indicate that the number of bachelors-degree students will decrease in 2013 – for the first time since 2007. This decrease is likely to be for older students. However, the early indications suggest that enrolments by 20 to 24 year-olds will also decrease in 2013, even though the population aged 20 to 24 years is expected to increase. In contrast, the population aged 18 to 19 years is expected to decline in 2013, while enrolments by this group are expected to increase. This may be due to the current weak employment conditions for this group. Enrolments by students aged under 18 years are also expected to increase in 2013.

The number of students in level 4 certificates is estimated to decrease slightly from 2012 to 2013, with a larger decrease in the amount of study at this level.

## TERTIARY EDUCATION FUNDING IN 2013

In May 2013, government announced a number of funding initiatives (refer also to chapter 18). These included an additional:

- ▲ \$9.34 million over four years to increase tuition subsidy funding rates for priority **engineering courses**, up by 2 percent
- ▲ \$17.9 million over four years to increase funding rates for **science tertiary education**, up by 2 percent
- ▲ \$28.7 million over four years to eliminate differences in funding policy treatment between public and private providers
- ▲ \$21.5 million over four years to allow highly-performing **private training establishments** to deliver an additional 1000 EFTS that do not attract tuition subsidies in their approved investment plans
- ▲ \$10.7 million over four years to extend the 99-105 percent **over-delivery tolerance** bands beyond 2013 to provide more flexibility in the tertiary system, and
- ▲ \$35 million over four years to expand the number of dedicated Māori and Pasifika trades training places available from 600 to 3000 by 2015 and provide additional support for learners.

The government also announced a number of savings initiatives during 2013. These included savings of:

- ▲ \$18.7 million in operating expenditure and \$20.2 million in capital expenditure through extending the student loan and allowance stand-down period for permanent residents and Australian citizens, and
- ▲ \$7.97 million in operating expenditure and 1.75 million in capital expenditure through removing student allowances eligibility for those aged 65 years and over.

## TERTIARY EDUCATION RESEARCH IN 2013

### Performance-Based Research Fund

The report on the Performance-Based Research Fund 2012 Quality Evaluation came available in May 2013.

An analysis of the three quality evaluations<sup>1</sup> of the Performance-Based Research Fund carried out in 2003, 2006 and 2012, showed that:

- ▲ there was a statistically significant increase in the average quality of research between 2003 and 2012
- ▲ the rate of increase between 2003 and 2006 was sustained between 2006 and 2012
- ▲ the improvements between 2003 and 2012 in the three component scores, that make up the average quality score, were all statistically significant
- ▲ the improvements in the scores for 'peer esteem' and 'contribution to the research environment' were greater than the improvement in the 'research output' score.

This may be due to both better performance and/or clearer and more effective presentation of material provided in the evidence portfolios, and

- ▲ the overall improvement in quality aligns with the improvements in the citation rates of research by New Zealand tertiary education institutions since the introduction of the Performance-Based Research Fund.

The above findings suggest that the increases in the quality measures over the three evaluations of the Performance-Based Research Fund reflect a true lift in performance.

As part of a broader review of the Performance-Based Research Fund, the Ministry of Education is currently developing a consultation proposal for changes to the fund. The proposal will focus largely on operational changes aimed at making the fund simpler and reducing the transaction costs for researchers, tertiary education organisations and the Tertiary Education Commission.

The discussion paper containing the proposal became available from the Ministry of Education website in August 2013. The public consultation will provide an opportunity for views from a wide range of stakeholders to be considered as part of the review process.

### Review of centres of research excellence

In March 2012, the government initiated a funding review of the centres of research excellence. The review was carried out in 2012 and 2013 by the Ministry of Education, with the support of the Tertiary Education Commission and the Ministry of Business, Innovation and Employment.

The review considered how to strengthen the role of centres of research excellence in supporting innovation through knowledge and technology uptake. It also looked at ways to strengthen the monitoring and assessment of the centres and their funding.

Final decisions on the review were confirmed in August 2013 and government confirmed the funding objectives for the centres. It also agreed to changes designed to further improve the performance of centres, including a:

- ▲ new policy statement
- ▲ mission statement that incorporates the purpose and characteristics of centres of research excellence, and
- ▲ new performance framework that includes reporting requirements.

Cabinet also agreed to increase funding by 10 percent, as signalled in the 2013 Budget announcements.

## INDUSTRY TRAINING IN 2013

Following a review of industry training operational rules in 2011 and 2012, the government announced a suite of changes to further improve the performance of the industry training system in January 2013. The proposals aim to develop the industry training system so that it is:

- ▲ well connected to industry with high employer buy-in
- ▲ educationally sound
- ▲ coherent with the wider tertiary system, and
- ▲ delivers value for money for employers and the government.

### Industry training organisation mergers

On 1 May 2013, the Forest Industries Training Education Council (FITEC) merged with Competenz.

In July 2013, Infratrains New Zealand announced an agreement in principle to merge with Electricity Supply Industry Training Organisation.

<sup>1</sup> Smart, W. and Engler, R. (2013), *In pursuit of excellence – analyzing the results of New Zealand's Performance-Based Research Fund quality evaluations*, Wellington: Ministry of Education.

## CHANGES TO FINANCIAL SUPPORT FOR STUDENTS IN 2013

### Student Allowances:

- ▲ From 1 January 2014, the student loan and allowances stand-down period for permanent residents and Australian citizens will be extended to 3 years. Exempt from this requirement are persons who hold refugee status, protected persons status, or persons sponsored by a family member who held refugee status or protected person status when they entered New Zealand. Transition arrangements will be in place for some students.
- ▲ From 1 January 2014, student allowances limits for those aged 40 years and over will be reduced from 200 weeks to 120 weeks. The new 120-week limit is around three academic years of support and transition arrangements will be in place for 2014.
- ▲ From 1 January 2014, student allowance eligibility for those aged 65 years and over will be removed. Transition arrangements will be in place during 2014. Students receiving New Zealand Superannuation or the Veteran's Pension are ineligible for student allowances.

### Student Loan Scheme:

- ▲ Overseas-based borrower repayments are being adjusted through the introduction of fixed repayment obligations and two new repayment thresholds for these borrowers. These changes will reduce repayment times for compliant overseas-based borrowers and take effect from 1 April 2014.
- ▲ Changes made in June 2012 restricted access to the Student Loan Scheme for fees-free study. Budget 2013 allocates administrative funds for full implementation of this policy by 1 January 2014.
- ▲ The ability to arrest non-compliant borrowers who have knowingly defaulted on an overseas-based borrower repayment obligation and are about to leave the country, will be introduced from 1 April 2014. Similar provisions exist under the Child Support Act.
- ▲ An ongoing information-sharing agreement between Inland Revenue and Internal Affairs that allows contact details from passport applications to be shared will take effect from 1 April 2014. This agreement will apply to overseas-based borrowers who are in default.
- ▲ From 1 January 2013, the cost of lending calculations for the Student Loan Scheme was shifted from a 'borrower account' basis to a 'year of lending' basis.

## 2 THE TERTIARY EDUCATION SYSTEM

This chapter includes:

- ▲ an overview of the system in 2012
- ▲ the organisations that make up the tertiary education sector
- ▲ information on tertiary education legislation, and
- ▲ a description of how the government-funded tertiary education system works.

### OVERVIEW

New Zealand's tertiary education sector provides government-funded and privately-funded tertiary education and training. Of the formal students<sup>1</sup> included in the Ministry's 2012 enrolments collection, 85 percent received tuition subsidies from government and about 10 percent were full-fee paying international or domestic students. The remaining proportion were funded through specialised government funds such as the Industry Training Fund and Youth Guarantee.

Most of the information presented in this report is based on the tertiary education enrolments collection provided to the Ministry of Education by government-funded tertiary education organisations. In 2012, 29 public tertiary education institutions and 309 private training establishments received government funding. About 85 percent of formal students were enrolled at public tertiary education institutions in 2012.

In order to access government funding, private training establishments have to be registered with the New Zealand Qualifications Authority. Registration is a first step for organisations to gain the necessary accreditation to provide quality-assured tertiary education and training. In 2012, there were 626 private training establishments registered with the New Zealand Qualifications Authority.

In 2012, all public tertiary education institutions and 198 NZQA-registered private training establishments received tuition subsidies from government. A further 125 NZQA-registered private training establishments received government funding, for example, through Youth Guarantee or Foundation-Focused Training Opportunities.

<sup>1</sup> Studying with a tertiary education provider at any time during the year towards a qualification on the New Zealand Qualifications Framework of more than one week's duration.

**Tertiary education in New Zealand** includes all post-school education. It also includes tertiary learning and training delivered in secondary schools such as Youth Guarantee, trades academies, Gateway, and the Secondary-Tertiary Alignment Resource (STAR).

Some tertiary education may be referred to as 'further education'. An example is foundation education which provides adult literacy and numeracy education for those with low-level qualifications. It also includes vocational education and training, such as, non-degree certificate and diploma qualifications, learners undertaking industry training, including younger people in apprenticeships. The term 'further education' also covers adult and community education and other non-formal adult education.

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

The many forms of tertiary education make an important 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.

There were 317 NZQA-registered private training establishments that did not receive government funding in 2012. Organisations that are not funded by government to provide tertiary education and training are not required to report to the Ministry of Education on the students they enrol. However, a number of private organisations do provide information on their tertiary education enrolments to the Ministry of Education. In 2012, 86 private organisations advised that they had enrolled students. Fifty-eight of these providers reported on 4,540 students in formal qualifications of more than 20 hours duration – 3,210 of these enrolments were made by international students. In 2012, there were also 28 private providers who only had enrolments from international fee-paying students. Over 80 percent of the 2,140 learners in these providers were studying the English language.

In 2011, there were 132 private organisations that provided information on their tertiary education enrolments covering 2,060 domestic students and 8,800 international students.

### Government-funding of tertiary education and training

In 2012, the majority of public tertiary education institutions received government funding based on two-year investment plans which covered 2011 and 2012. These plans were developed and finalised with the Tertiary Education Commission in 2010 based on New Zealand's third tertiary education strategy.<sup>2</sup> Most NZQA-registered private training establishments, and a few public tertiary education institutions, received funding approval in 2010 for one-year plans for 2011. These tertiary education organisations developed and finalised investments plans with the Tertiary Education Commission mid-2011 for the 2012 year.

### Performance-linked government funding

A portion of government funding became linked to a standardised performance process in 2012. Leading into this new system, the Tertiary Education Commission has published annual performance information since 2009 for all tertiary education organisations who received student achievement funding. The introduction of standardised performance-linked funding is aimed at providing tertiary education organisations with incentives for improving teaching and pastoral care. It is expected to lead to courses for some students being restricted, with the aim of having students only attempt those courses in which they have a realistic prospect of success.

### Tertiary education sector performance

Government-funded tertiary education organisations and industry training organisations are monitored against a set of common education performance indicators. The performance measures cover course pass rates, the completion of qualifications, the retention of students in study and their progression to higher-level tertiary study (chapter 17 covers the performance of tertiary education providers at sub-sector level).

### Changes to the student support scheme in 2012

Changes made to Student Allowances included:

- ▲ The definition of parents' income for determining the student allowance entitlement for students aged under 24 years (without children) was expanded to include additional income categories.
- ▲ From 1 April 2012 to 31 March 2016 the student allowances parental income threshold will not be increased.

- ▲ From 1 January 2013, student allowance eligibility will be removed for level 8 postgraduate qualifications (other than bachelors with honours degrees ) and for qualifications at levels 9 and 10 and for long programmes. A number of exemptions to the 200-week student allowance life-time limit will also be removed. Transitional arrangements will be in place for some recipients.

Changes made to the Student Loan Scheme included:

- ▲ Part-time, full-year students are no longer 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.
- ▲ The automatic three-year repayment holiday for overseas borrowers was reduced to a one year, application-based repayment holiday.
- ▲ The repayment threshold was held at \$19,084 until 31 March 2015.
- ▲ People aged 55 and over will not be eligible to borrow for living and course-related costs from the Student Loan Scheme.
- ▲ From 1 January 2013, the amount of study that a student can borrow for in a year will be capped at 2 EFTS.
- ▲ 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 2012. Borrowers who successfully apply for hardship to the Inland Revenue Department will not be affected by this change.

- ▲ From 1 April 2013, the voluntary repayment bonus scheme will be repealed.
- ▲ From 1 April 2013, the student loan repayment rate will increase from 10 cents to 12 cents in every dollar earned over the repayment threshold.
- ▲ The Inland Revenue Department now has the authority to demand full payment of a student loan, whether or not the whole amount is outstanding. This change will affect borrowers who have consistently been non-compliant with their repayment obligation.

Further details on these initiatives can be found on the Ministry of Social Development's Studylink website.

<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).

An historical account of all loans and allowances changes can be found on the Ministry of Education's Education Counts website.

### Industry training organisation mergers

In July 2013 there were 20 industry training organisations. Nineteen of these received government funding (the Funeral Services Training Trust does not receive government funding). In 2012, there were mergers among industry training organisations as follows:

- ▲ Building Service Contractors merged with Careerforce (Community Support Services Industry Training Organisation)
- ▲ Equine ITO merged with the Agriculture ITO
- ▲ Retail Meat merged with Competenz (engineering, food and manufacturing)
- ▲ Apparel and Textile merged with PaMPITO (Plastics and Materials Processing Industry Training Organisation)
- ▲ Extractives merged with MITO (Motor Industry Training Organisation)
- ▲ Seafood merged with the New Zealand Industry Training Organisation
- ▲ New Zealand Sports Turf merged with the Horticulture Industry Training Organisation
- ▲ Horticulture merged with Agriculture to become the Primary Industry Training Organisation
- ▲ Aviation, Tourism and Travel, the Hospitality Standards Institute and the Retail Institute merged to become the ServiceIQ (accommodation, aviation, bars and restaurants, cafés, clubs, food services, museums, quick service restaurants, retail, tourism, travel and wholesale sectors of the service industry)
- ▲ Opportunity merged with ETITO (now called The Skills Organisation)
- ▲ Learning State merged with The Skills Organisation
- ▲ Plumbing, Gasfitting, Drainlaying and Roofing merged with The Skills Organisation

## ORGANISATIONS THAT MAKE UP THE TERTIARY EDUCATION SECTOR

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 626 NZQA-registered private training establishments in 2012 and eight government training establishments. Many employers also provide training for their employees, including formal study programmes.<sup>3</sup> There is also non-formal learning provided by community groups, secondary schools and tertiary education organisations.

To provide safeguards for learners, all tertiary education organisations that receive government funding must meet financial, educational and management quality requirements set by the Tertiary Education Commission and the New Zealand Qualifications Authority. In the case of universities, quality requirements are set by the New Zealand Vice-Chancellors Committee (usually known as Universities New Zealand).

### 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 undertake research in a wide range of fields and develop new knowledge that underpins their teaching. They are expected to have well-established international links and to meet international standards of scholarship.

There are eight universities, which in 2012 collectively enrolled 175,000 students, including 23,400 international students. These enrolments represented 134,000 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 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

<sup>3</sup> Formal study is study that contributes towards a qualification on the New Zealand Qualifications Framework.

and for learners with low prior qualifications, preparing them to achieve at higher levels.

The network of 18 polytechnics offers tertiary education throughout New Zealand. The number of students enrolled at polytechnics in 2012 was 153,000, including 12,500 international students. These enrolments represented 80,400 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 āhuatanga Māori (Māori tradition) and tikanga Māori (Māori custom) are an integral part of the programme. In 2012, wānanga had 39,200 students, representing 24,700 equivalent full-time student units.

### **Government training establishments**

Eight government agencies provide training, including the New Zealand Armed Services and the New Zealand Police. They are each approved by the Minister for Tertiary Education, Skills and Employment as government training establishments. Government training establishments offer training, subject to the approval and accreditation requirements of the Education Act 1989.

### **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 some public tertiary education institutions, some private training establishments have arrangements with industry training organisations to deliver off-job programmes for industry trainees. Some private training establishments 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 2012, 323 of the 626 registered private training establishments received government funding through the student achievement component, Youth Guarantee, Youth Training and Foundation-Focused Training Opportunities.

The number of students enrolled in 2012 at private training establishments in receipt of government funding was 69,600, including 12,400 international students. These enrolments represented 40,200 equivalent full-time student units.

### **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 to further the prospects of individuals and ensure that a pool of competent employees is available to industry.

Much workplace-based learning is facilitated by industry training organisations. In July 2013, there were 20 industry training organisations in New Zealand, established by particular industries or groups of industries and recognised by the Minister for Tertiary Education, Skills and Employment under the Industry Training Act 1992.

Following reviews of industry training, conducted in 2011 and 2012, the government announced final changes to the system in January 2013. The most significant change is combining Modern Apprenticeships with other apprentice-type training to create New Zealand Apprenticeships. New Zealand Apprenticeships will provide the same level of government support to all apprentices regardless of age. New Zealand Apprenticeships are programmes of 120 credits or more at level 4 on the New Zealand Qualifications Framework that provide entry into an occupation or industry.

Other changes to the industry training system announced in January 2013 were as follows:

- ▲ introduces a sustainable funding regime for New Zealand Apprenticeships and other industry training
- ▲ sets clearer roles and performance expectations of industry training organisations to improve the quality of training and remove the co-ordination issues in the wider vocational education and training system
- ▲ “re-boots” apprenticeships to increase the number of apprentices, particularly for the coming construction boom, and
- ▲ increases competition by allowing employers direct access to industry training funding.



The apprenticeship re-boot commenced in March 2013. The other changes will come into effect from January 2014, once the necessary amendments to the Industry Training Act 1992 have been made.

Workplace-based training aims to raise workforce skill levels and boost competitive advantage for business. Its delivery is flexible. The training is conducted on-job, but can include off-job components, through a registered training provider. On-job training can take a number of forms. The learning can be self-paced, or the training can be delivered by a more experienced staff member or an external trainer. Some businesses run formal training sessions, while others train staff through their workplace tasks. Industry training organisations also have arrangements with tertiary education institutions and private training establishments to deliver programmes.

Some workplace-based training is entirely funded by employers. Some is jointly funded by the government through the Industry Training Fund, the Workplace Literacy Fund and by industry through financial and in-kind contributions.<sup>4</sup>

### Non-formal education providers

Non-formal learning does not contribute towards gaining a qualification listed on the New Zealand Qualifications Framework.<sup>5</sup>

Government-funded adult and community education is provided by community groups, secondary schools, public tertiary education institutions and some NZQA-registered private training establishments. 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 organisations, 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.

<sup>4</sup> The recent introduction of a new data collection, the industry training register, has caused delays in publishing industry training statistics. Chapter 6 covers the latest available information on industry training for the 2012 year.

<sup>5</sup> 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

New Zealand's fourth tertiary education strategy is expected to be published late in 2013. At the time of writing this report, planning for consultations on the next tertiary education strategy had begun.

The new strategy is expected to build on the system of investment plans introduced in 2008 which steer government funding in tertiary education and align funding with the strategy. The fourth strategy will reflect government's goals for the tertiary education system which are 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 current strategy - New Zealand's third tertiary education strategy - was released in December 2009. This strategy - 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 Tertiary Education Strategy 2010-15 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 2012, funding of most tertiary education institutions was approved on the basis of two-year investment plans developed with the Tertiary Education Commission. These plans covered 2013 and 2014 and were based on the goals and priorities of New Zealand's third tertiary education strategy.

Private training establishments had funding approved for 2013 on the basis of one-year plans also developed in 2012 and based on the third tertiary education strategy. These organisations will develop and finalise a one-year investment plan mid-2013 for the 2014 year.

## 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 and for quality assurance of tertiary education, and
- ▲ defines the constitution and functions of different types of public tertiary education institutions.

The Education Act defines the system for planning, funding and monitoring the provision of tertiary education. The planning system is 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 2011, an amendment to the Education Act 1989 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.

Another amendment was passed in 2011 - the Education (Freedom of Association) Amendment Bill, a private members' bill which made membership of students associations voluntary, instead of compulsory.

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.

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

## 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, Careers New Zealand and Education New Zealand. The Ministry of Social Development, Inland Revenue and the Ministry of Business, Innovation and Employment also have specific responsibilities relating to students and the tertiary education system.

### Ministry of Education

The Ministry of Education, Te Tāhuhu o te Mātauranga, is the government's policy agency responsible for developing the 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. Another area of responsibility involves developing advice to government on the resourcing of tertiary education, legislation relating to tertiary education, and the policy settings that govern the operation of the system. The Ministry also works with the Ministry of Social Development and Inland Revenue on the system for financial support of students.

### Tertiary Education Commission

The Tertiary Education Commission, Te Amorangi Mātauranga Matua, is a Crown agent.<sup>7</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

<sup>7</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.

- ▲ monitoring the viability and sustainability of tertiary education institutions, and
- ▲ conducting research and monitoring in support of its roles.

### New Zealand Qualifications Authority

The New Zealand Qualifications Authority, Mana Tohu Matauranga o Aotearoa, is also a Crown agent. Like the Tertiary Education Commission, it has a board appointed by the responsible Minister. In tertiary education, its responsibilities are to:

- ▲ oversee the setting of qualification standards
- ▲ monitor and regularly review qualification standards
- ▲ maintain 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.

In 2011, an amendment to the Education Act was passed that updated and strengthened the New Zealand Qualifications Authority's legal powers.

### Careers New Zealand

Careers New Zealand, Mana Rapuara Aotearoa, is a Crown agent that provides information, advice and guidance services designed to help people make informed career choices.<sup>8</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

<sup>8</sup> Careers New Zealand was known as Career Services until 2011.

- ▲ providing careers advice support to secondary schools and school careers advisors
- ▲ 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.

### **Education New Zealand**

Education New Zealand was established in September 2011 as a Crown agent tasked with, together with providers and other government agencies, delivering strategies, programmes, and activities for promoting New Zealand education overseas.

Education New Zealand works to:

- ▲ promote New Zealand as an educational destination for international students
- ▲ promote the provision of New Zealand education and training services overseas
- ▲ manage, in collaboration with other government agencies, activities undertaken by representatives appointed to act on behalf of the New Zealand Government in relation to international education
- ▲ carry out research on international education markets and marketing strategies
- ▲ administer any international programmes or activities that are consistent with the Government's policy on international education
- ▲ provide information, advice, and assistance, to providers on strategies to promote industry co-ordination and professional development
- ▲ provide information to international students about living and studying in New Zealand
- ▲ work with other agencies to ensure that international students are adequately supported while living and studying in New Zealand, and

- ▲ foster collaborative networks with former international students.

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

### **Ministry of Social Development**

The Ministry of Social Development, Te Manatū Whakahiato Ora, is responsible for providing advice to government in the areas of social development and social policy, and for the delivery of social services, particularly income support.

Financial support is provided to students through 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, the New Zealand government's taxation department, 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 Ministry of Business, Innovation and Employment**

The Ministry of Business, Innovation and Employment was established on 1 July 2012. It integrates the functions of the former Department of Building and Housing, Ministry of Economic Development, Department of Labour and the Ministry of Science and Innovation.

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

The Ministry of Business, Innovation and Employment is also responsible for advising government on New Zealand's science and innovation policy and for administering much of the government's funding for science and innovation.

## HOW THE GOVERNMENT-FUNDED TERTIARY EDUCATION SYSTEM WORKS

Government's goals for the tertiary education system are 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.<sup>9</sup> 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

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

- ▲ programme and training scheme approval and accreditation, including consents to assess against standards for all government-funded tertiary education providers
- ▲ entry processes of registration and on-going regulation 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.

<sup>9</sup> New Zealand's fourth tertiary education strategy covering the years 2014-2019 is expected to be published late 2013.

## QUALITY ASSURANCE IN TERTIARY EDUCATION IN NEW ZEALAND

Only those tertiary education programmes, training schemes 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, Youth Guarantee, Foundation-Focused Training Opportunities and trades-academy funding.

Also, qualifications must be approved for tuition subsidy funding before learners are eligible to access student allowances or student loans.

The quality assurance framework ensures that:

- ▲ New Zealand qualifications are regarded as credible and robust, both nationally and internationally
- ▲ learners are studying with credible organisations that meet minimum requirements and so are able to achieve quality educational outcomes, and
- ▲ tertiary education organisations are continually strengthening and improving educational outcomes through the use of ongoing organisational self-assessment.

### New Zealand Qualifications Authority

- ▲ The New Zealand Qualifications Authority has an overarching responsibility for the system of quality assurance in tertiary education.
- ▲ One of the mechanisms for managing quality is the **New Zealand Qualifications Framework**.<sup>10</sup> The New Zealand Qualifications Authority has responsibility for maintaining the framework which imposes common requirements 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.
- ▲ The New Zealand Qualifications Authority has the responsibility for approving all qualifications registered on the New Zealand Qualifications Framework, other

<sup>10</sup> The New Zealand Qualifications Framework replaced the National Qualifications Framework and the New Zealand Register of Quality Assured Qualifications in July 2010.

than for the universities, approving all programmes that lead to the awarding of a qualification on the framework, and accrediting all qualifications offered by providers.

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

The New Zealand Vice-Chancellors' Committee, Te Pōkai tara, 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. The unit maintains professional relationships with the New Zealand Qualifications Authority and with similar agencies internationally.

#### **Quality Assurance Consultative Group**

Established by the New Zealand Qualifications Authority as a forum for quality assurance bodies, this group provides opportunities for the two quality assurance bodies – the New Zealand Qualifications Authority and Universities New Zealand – to take a system-wide focus on the quality of tertiary education provision and qualifications.

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.

## **HOW GOVERNMENT FUNDING WORKS**

The government-funded tertiary education framework complements the tertiary education strategy. Its purpose is to resource and steer tertiary education programmes and training schemes, while providing public tertiary education institutions and NZQA-registered private training establishments with the flexibility to operate in responsive and innovative ways. The two largest funding components cover the teaching and learning of domestic students, and the research carried out by tertiary education organisations – especially the universities.

#### **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. The Tertiary Education Commission calculates and publishes revised funding rates annually.

#### **Industry training funding**

Government's investment in industry training for the 2013/14 baseline is \$200 million (including Modern Apprenticeships).

The Industry Training Fund is targeted towards employment-based training linked to national qualifications, predominately at levels 1 to 4 on the New Zealand Qualifications Framework. This training is managed (but not provided) by industry training organisations which are recognised under the Industry Training Act 1992.

Industry training funding is based on standard training measures. One standard training measure (STM) is defined as the amount of training that is required for a trainee to achieve 120 credits on the New Zealand Qualifications Framework in an approved, structured training programme.

Standard training measures have been funded at a single rate of \$2,919 since 2009. Additional co-ordination and support funding is provided for New Zealand Apprenticeships.<sup>11</sup>

Industry training funding is intended to meet a proportion of the costs required for developing qualifications, arranging training, and fulfilling each industry training organisation's sector leadership role. The balance of funding required to manage industry training organisations is provided by the contributions received from the recognised industry(ies) associated with each industry training organisation

Government provides approximately 70 percent of the cash cost of training, while employers are expected to fund 30 percent. This recognises that industry training benefits the employer as well as the individual and the wider economy.

### Youth Guarantee funding

The Tertiary Education Commission funds Youth Guarantee places in targeted institutes of technology and polytechnics, wānanga and NZQA-registered private training establishments who meet the Youth Guarantee eligibility criteria. Students must be full-time, full-year and aged 16 or 17 years at the time of commencing study. Priority is given to learners who are new to tertiary education.

In 2012, Youth Guarantee became separately funded. For every Youth Guarantee learner enrolled in a full-time non-trade place, providers will be paid \$10,800 and \$14,300 for a full-time trades place.<sup>12</sup> As these places are fully-funded, learners are not eligible for a student loan.

### Secondary-tertiary programmes

Secondary-tertiary programmes are funded partly through Vote Education and partly through Vote Tertiary Education, as they may be led by either a tertiary or a secondary provider.

In 2013, 50 percent of the formally approved secondary-tertiary programmes (including the one tertiary high school) are led by tertiary education organisations, comprising eight institutes of technology and polytechnics, two private training establishments and one industry training organisation. The other 50 percent are headed by secondary schools.

Tertiary lead providers are accountable to the Tertiary Education Commission for their performance in defined areas, including student retention, progression and

achievement. School lead providers have a similar formal agreement with the Ministry of Education, with strengthened accountability measures in 2013.

### Government funding for research

The main government funding for the research conducted by tertiary education organisations comes through the Performance-Based Research Fund.<sup>13</sup> 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.

The government also funds centres of research excellence – inter-institutional research networks focused on areas of established research excellence of importance to New Zealand. There are currently seven centres of research excellence:

- ▲ 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

<sup>11</sup> From 2014, standard training measures will be funded at a single rate of \$3,200 and apprenticeships will be funded at a single rate of \$5,200.

<sup>12</sup> Excluding goods and services tax.

<sup>13</sup> Before the introduction of the Performance-Based Research Fund, the main government 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.

- ▲ the 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 and innovation funds supported by the government through the Ministry of Business, Innovation and Employment. 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 2012* for more explanations of the research funding system and how its components relate to each other.

## INVESTING IN TERTIARY EDUCATION

The Tertiary Education Strategy 2010-2015 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

In general, developing an investment plan is a prerequisite for accessing public funding for quality-assured providers. The investment plan sets performance targets, and describes the provision aimed at achieving those targets 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.

Quality assurance and performance monitoring now have 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 was linked to its performance against educational performance indicators in 2012.

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 tertiary education sector.

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



# 3

## NEW ZEALAND'S TERTIARY EDUCATION PROVISION

This chapter includes:

- ▲ an overview of tertiary education provision in 2012
- ▲ provider-based tertiary education
- ▲ industry training
- ▲ Youth Guarantee
- ▲ Foundation-Focused Training Opportunities
- ▲ adult and community education
- ▲ adult literacy, language and numeracy education
- ▲ tertiary education within senior secondary schools
- ▲ the New Zealand Qualifications Framework, and
- ▲ research and knowledge creation and its transfer.

### OVERVIEW

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 system.

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 77 percent of New Zealand's indexed research papers come from the tertiary education sector.

### 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 on the New Zealand Qualifications Framework) and non-formal (that is, not contributing towards a recognised 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.

Key developments in tertiary education provision in 2012 were:

- ▲ The proportion of domestic students studying higher-level qualifications continued to increase.
- ▲ Provision of Youth Guarantee fees-free places increased to 8,920.
- ▲ Twelve more trades academies commenced operations, taking the total number of academies providing secondary and tertiary study to 20. The number of learners in this type of provision increased to 2,340.
- ▲ The Youth Training programme was discontinued and providers could apply to deliver Youth Guarantee fees-free places.
- ▲ The 2012 review of qualifications included building and construction allied industries, forestry, horticulture, creative and performing arts, automotive engineering and technology, fire protection, manufacturing, justice and law compliance, infrastructure works, sports and recreation, and maritime engineering and marine studies.<sup>1</sup>
- ▲ Provision of adult and community education increased in schools and community organisations, while it continued to fall in tertiary education institutions.

### Canterbury earthquakes

The tertiary education system in greater Christchurch is moving to recovery from the damage and disruption caused by the February 2011 Canterbury earthquake.

<sup>1</sup> The ongoing review of qualifications is part of the targeted review of qualifications held in 2010. The reviews aim to reduce proliferation and duplication at levels 1 to 6 of the New Zealand Qualifications Framework.

While tertiary education enrolments went down by 12 percent among domestic students in greater Christchurch in 2011 in response to the earthquakes (compared with a fall of 7 percent nationally), domestic enrolments went up slightly in 2012, with strong enrolments at polytechnic.

The three tertiary education institutions – which are responsible for 80 percent of the tertiary education delivery in greater Christchurch – face financial challenges as they embark on their repair and renewal programmes. The government has asked these institutions to prepare business cases that may lead to capital injections by the Crown.

After dipping in 2011, the labour market for young people in greater Christchurch strengthened in 2012.

### PROVIDER-BASED TERTIARY EDUCATION PROVISION

The government provides some funding for New Zealand students undertaking formal tertiary learning and training. The courses and qualifications delivered by public tertiary education institutions and NZQA-registered private training establishments 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 Youth Guarantee, Foundation-Focused Training Opportunities and 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 (12 percent of all enrolments, in terms of equivalent full-time student units, in 2012). New Zealand attracts learners from a variety of offshore markets –

notably Asia, which accounted for 73 percent of international students in 2012.

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.

**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>– School students in tertiary education</li> <li>– Students in the following programmes:                             <ul style="list-style-type: none"> <li>Youth Guarantee</li> <li>Trades academies</li> <li>Foundation-Focused Training Opportunities</li> <li>Secondary-Tertiary Alignment Resource programmes</li> </ul> </li> <li>– Industry trainees and 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>

## INDUSTRY TRAINING

Industry training is designed by, and delivered in conjunction with, industry. Most industry training counts towards recognised qualifications. The costs of training are met jointly by government and industry. In 2012, the training was administered and supported through 20 industry training organisations that have been established by particular industries or groups of industries.

Industry training organisations facilitate training for employees that leads to industry-relevant qualifications. 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 training components delivered by tertiary education providers.

**Apprenticeships** are an employment-based education initiative aimed at encouraging participation in industry training, especially by young people aged between 16 and 21 years. Apprenticeships offer a mentoring aspect as well as formal industry training that lead to recognised qualifications at levels 3 and/or 4 on the New Zealand Qualifications Framework. The Tertiary Education Commission contracts the services of apprenticeships coordinators who 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.

During 2011, changes were made to operational rules relating to industry training. In 2011 and 2012, the government conducted a policy review of industry training. As a result of the review, from 2014, Modern Apprenticeships and other apprenticeship-type training will be combined into New Zealand Apprenticeships that will provide quality support for apprentices regardless of age. Industry training organisations will have clearer roles and performance expectations to improve the quality of training. Funding rates for industry training and apprenticeships will also increase.

## YOUTH GUARANTEE

One of the key priorities of the government is building a more competitive and productive economy. The Ministry of Education's role is to ensure that the New Zealand education system has the quality and capability to provide and develop the skills that will lead to meaningful employment and help New Zealand businesses compete, both locally and internationally.

The government's guarantee to the youth of New Zealand is that all people aged 15 to 18 years will have access to a funded place in education or training. Youth Guarantee contributes to the government's Better Public Services target aimed at having 85 percent of 18 year-olds achieve NCEA level 2 or an equivalent qualification by 2017.

Youth Guarantee aims to:

- ▲ increase the educational achievement of targeted 16 and 17 year-olds (includes 18 year-olds with dependent children only) by providing them with fees-free access to tertiary education towards level 1 to 3 qualifications on the New Zealand Qualifications Framework, and
- ▲ improve the transitions from school to tertiary education and work, via the establishment of secondary-tertiary programmes based on partnerships between training providers, industry and employers.

Fees-free places create opportunities for 16 and 17 year-old school leavers to engage with education in a tertiary rather than a school-based setting. Learners who are not succeeding at school may find that an alternative learning environment better meets their needs and keeps them on an education pathway. Fees-free places provide learners with the opportunity to participate in a range of full-time, full-year<sup>2</sup> vocational courses.

In 2012, 8,920 students took up places – 76 percent of these were in private training establishments, 22 percent in polytechnics and just under 2 percent in wānanga.

Providers selected to provide Youth Guarantee programmes in 2012 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 tailored pastoral care

<sup>2</sup> Or 0.8 of an equivalent full-time student unit.

- ▲ achieving high rates of retention and completion, and
- ▲ providing the programme in places with the highest proportion of unemployed youth.

Tertiary education organisations providing fees-free places are required to meet the Tertiary Education Commission's performance expectations for the retention, progression and achievement of learners.

In 2012, the Youth Training programme was discontinued and providers could apply to deliver fees-free places through the new Youth Guarantee Fund, established in 2012.

## FOUNDATION-FOCUSED TRAINING OPPORTUNITIES

Government is planning to make changes to foundation-level education provision aimed at making the provision of level 1 and 2 qualifications fees-free from 2014 for all under-25-year-olds. More information on these proposals is included in chapter 18.

Currently, Foundation-Focused Training Opportunities is a programme for people aged 18 years and over who are considered disadvantaged in terms of employment and educational achievement. The programme focuses on improving people's literacy and numeracy.

Trainees enrolled in Foundation-Focused Training Opportunities can achieve unit standards that contribute towards national qualifications on the New Zealand Qualifications Framework.

In 2012, 9,870 learners participated in the Foundation-Focused Training Opportunities programme.

## ADULT AND COMMUNITY EDUCATION

Adult and community education (ACE) is non-formal<sup>3</sup> and provides a bridge to further learning opportunities. The three national priorities for government-funded adult and community education, introduced in 2010, are:

- ▲ 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 also 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.

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, New Zealand Sign Language, English as a second language and Te Reo. In 2012, adult and community education in schools attracted 26,100 learners.

In 2012, government-funded ACE programmes in tertiary education institutions were provided in seven universities, 18 institutes of technology and polytechnics, and two wānanga. This provision attracted an estimated 49,900 learners. A further 1,140 learners were provided ACE programmes by government-funded private training establishments in 2012.

In 2012, community organisations provided adult and community education to 38,400 learners with about 90 percent of these learners attracting government funding.

Some organisations that provide adult and community education are not government funded.

## 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 provides support to employees to increase their literacy, language and numeracy skills 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

<sup>3</sup> Non-formal learning does not contribute to a qualification on the New Zealand Qualifications Framework.

numeracy in trades training. Level 1 to 3 certificate provision that has embedded explicit teaching and assessment of literacy and numeracy is now expected as 'business as usual.'

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 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.

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

- ▲ Intensive Literacy and Numeracy Fund (ESOL funding stream)
- ▲ 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 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.

### Trades academies

This option allows 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.

Work on establishing trades academies began in 2010 and eight of these became operational in 2011. A further 12 trades academies commenced operations in 2012, providing a total of 2,340 places for 16 to 18 year-olds. In 2013, another trades academy is expected to commence operation taking the total number to 21, with learning opportunities for 3,520 students.

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. Trades academies aim to provide students with more options for, and information about, learning that will contribute to future employment. The objectives of trades academies are to:

- ▲ motivate students to stay at school by providing them with a greater range of courses
- ▲ raise student achievement of NCEA-level qualifications
- ▲ improve transitions by giving students a head start on training for vocational qualifications and access to employment, and
- ▲ make education institutions more responsive to local and national business and economic needs.

### Tertiary high school

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.

In 2012, there were 136 students enrolled in the tertiary high school, up from 89 students in 2011. This figure is expected to increase to 175 students in 2013.

### Gateway

This programme 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 and other qualifications on the New Zealand Qualifications

Framework. In 2012, there were 13,400 students enrolled in a Gateway workplace arrangement.

### Secondary-Tertiary Alignment Resource (STAR)

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 alternative learning opportunities for students to achieve NCEA level 2
- ▲ provide or purchase tertiary 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 unit standards for the National Certificate of Educational Achievement and other qualifications on the New Zealand Qualifications Framework. In 2012, there were 16,800 STAR students.

## NEW ZEALAND QUALIFICATIONS FRAMEWORK

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>4</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 tertiary education programmes and training schemes, 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 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.

<sup>4</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.

**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	
2	Certificates
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 degree 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.

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

Following the introduction in 2010 of a single framework for all New Zealand's quality-assured qualifications, annual reviews of level 1 to 6 qualifications have been held aimed at reducing qualification proliferation and duplication.

Industry involvement in qualification development has been strengthened to ensure that qualifications at level 1 to 6 remain relevant, current and fit for purpose.

Stakeholders from different industry sectors 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.

The ongoing reviews are being carried out in groups/clusters of similar qualifications. The complete list of qualifications under review in 2013, and the proposed list for 2014, can be viewed at: [www.nzqa.govt.nz/studying-in-new-zealand/nzqf/reviews-of-qualifications/schedule/](http://www.nzqa.govt.nz/studying-in-new-zealand/nzqf/reviews-of-qualifications/schedule/)

The following recommendations from the targeted review were also implemented in 2010:

- ▲ 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.

Over the years from 2011 to 2013, the mandatory reviews have helped to achieve a 49 per cent reduction in out-dated and duplicated qualifications. Government has set a target to reduce the number of qualifications by December 2014 to around 1300. Achievement of this target will reduce the number of qualifications from June 2010 by 72 percent.

### 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 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, particularly, in the area of basic research,<sup>5</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. While university-based researchers do some applied research, they have greater opportunity to work in basic research because of the

<sup>5</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 Statistics New Zealand's *Research and Development Survey*, estimates that 49 percent of all research conducted in the tertiary education sector in 2012 was basic research. The survey reports that, around 61 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 of research excellence were established during 2002 and 2003. The centres have been designed to support world-class research that will contribute to New Zealand's development as a knowledge society. They 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. 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.

There have been three quality evaluations held for the Performance-Based Research Fund which looked at the research performance of staff at participating tertiary education organisations. The first evaluation was held in 2003, before the fund commenced, the second in 2006 and the third in 2012.<sup>6</sup>

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 Business, Innovation and Employment. 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>6</sup> Detailed information on the operation of the Performance-Based Research Fund can be found in Tertiary Education Commission: [www.tec.govt.nz/Documents/Reports%20and%20other%20documents/PBRF-Assessment-Interim-Report-2012.pdf](http://www.tec.govt.nz/Documents/Reports%20and%20other%20documents/PBRF-Assessment-Interim-Report-2012.pdf)

## 4 RETURNS ON THE INVESTMENT IN TERTIARY EDUCATION

This chapter includes:

- ▲ tertiary qualification achievement
- ▲ tertiary qualifications and ethnic group
- ▲ labour force participation and earnings for the tertiary qualified
- ▲ the youth population, and
- ▲ the tertiary education outcomes of young graduates (including earnings and employment rates).

### Contribution of high-level skills to economic growth

People's earnings and employment status generally reflect the quality of their skills and the demand for these skills in the workplace. Men and women with high-level skills can help business to be more productive and they are more likely to be remunerated at higher levels than those with lower-level skills. However, remuneration levels also depend on the strength of the economy – people with high-level skills may attract a larger premium when there are more jobs demanding these skills and a shortage of people with these skills exists. This is more likely to occur when the economy is at its strongest. While the New Zealand economy expanded in 2011 and 2012, employment measures, such as earnings and the labour force participation rate remained flat in 2012. The unemployment rate also remained flat overall, while for young people it increased. During the economic downturn some people enrolled in tertiary study to enable them to improve their employment prospects. Government has responded to the weaker economic conditions by expanding and improving education options and by making labour market information available that helps people make good study choices.

### Population continues to become more qualified

The New Zealand population now holds higher levels of skills than before. The proportion of the population aged 15 years and over with a bachelors degree or higher qualification has increased from 11 percent in 2002 to 18 percent in 2012. In turn, the proportion of people without a qualification, or only a school qualification, has declined. The proportion of the population with a tertiary qualification increased from 47 percent in 2002 to over 52 percent in 2012.

Of the ethnic groups, Māori had the biggest decrease in the proportion without a qualification over the last 10 years. The proportion of Māori with a bachelors or higher qualification has increased from 4.5 percent in 2002 to 7.9 percent in 2012. The proportion of Pasifika peoples without a qualification decreased slightly, while those with a bachelors or higher qualification increased from 5.5 percent in 2002 to 6.6 percent in 2012.

The proportion of the adult population holding a bachelors or higher qualification continued to be 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 qualifications continues to be higher than for older people. In 2012, 30 percent of people aged 25 to 34 years held a bachelors or higher qualification, compared to 19 percent for people aged 45 to 64 years.

### Tertiary qualified more likely to be employed than people without a qualification

In 2012, the unemployment rate for people with tertiary qualifications remained under 6 percent. In 2012, the unemployment rate was 3.6 percent for people with bachelors or higher qualifications, 5.7 percent for those with level 1 to 4 certificates, or diplomas, 8.5 percent for those with only a school qualification and 10 percent for people without a qualification.

Overall, employment conditions weakened in 2012 and this was reflected in the income premiums earned by people with a tertiary qualification. The earnings of people with bachelors or higher qualifications were 64 percent higher than for people with no qualification in 2012. This compared to 65 percent in 2011. The comparable figures for holders of level 1 to 4 certificates, or diplomas, were 23 percent in 2012 and 28 percent in 2011.

Men continued to participate in the labour market at a higher rate than women, but the participation gap between them is smaller for people with higher-level qualifications. Men aged 20 to 24 years were most affected by the continued weak employment market for younger people – 13 percent of them were not in employment or study in 2012. Women aged 20 to 24 years have higher rates of non-participation compared to men because they are more likely to be engaged in caregiving. Twenty-one percent of women aged 20 to 24 years were not in employment or study in 2012 and just over half of them were caregivers.

### Employment outcomes and destinations for young graduates

More information to help people choose their study plans has become available.<sup>1</sup> The study *Moving on up* looks at what young tertiary-qualified New Zealanders earned and did in the years ended March 2009 and March 2010. The evidence in this report confirms previous research findings.

Information on the destinations of young graduates after study shows that the proportion of young graduates who spend time overseas increased during the five years after study (Figures 4.10 and 4.18). This was the case for all qualification levels except doctorates, where the proportion of people overseas peaks in the second year after study.

Masters and doctoral graduates go overseas in higher proportions than other young graduates. This may reflect the portability of higher qualifications, the international employment market for research-degree holders and/or the limited availability of relevant jobs in New Zealand.

Of the young graduates with a bachelors or higher qualification, men were more likely than women to be overseas five year after study.

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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>Mahoney, P., Park, Z. & Smyth, R. (2013), *Moving on up – What young people earn after their tertiary education*, Wellington: Ministry of Education.

**MORE TERTIARY QUALIFIED PEOPLE**

In 2012, over half of the population aged 15 years and over held a tertiary qualification, compared to 47 percent in 2002. The proportion of the population with a bachelors or higher qualification increased from 11 percent in 2002 to 18 percent in 2012. The proportion of the population with a bachelors or higher qualification increased from 11 percent in 2002 to 18 percent in 2012. Those without a qualification dropped from 27 percent of the total in 2002 to 24 percent in 2012. The proportion with other tertiary qualifications (level 1 to 4 certificates and level 5 to 7 diplomas) as their highest qualification has declined from 36 percent in 2002 to 34 percent in 2012.

**Proportions of the population by highest qualification in 2012**

Bachelors degree or higher	18%	(17% in 2007)
School qualification	24%	(24% in 2007)
No qualification	24%	(26% in 2007)
Other tertiary qualification	34%	(33% in 2007)

**Note:** The data in the graphs and tables for highlights 1 to 9 is from the Statistics New Zealand *Household Labour Force Survey (June quarter)*. The sampling errors for the smaller groups are larger than for the larger groups requiring caution to be exercised in interpreting changes in this data over time.

**BACHELORS OR HIGHER LEVEL QUALIFICATIONS**

The proportion of people aged 15 years and over with a bachelors or higher qualification remained steady between 2008 and 2011, and it increased to 18 percent in 2012.

Of those with a bachelors or higher qualification, the proportion aged 25 to 44 years has increased most rapidly from 2002 to 2012. Those aged 45 to 64 years have increased from 2002 to 2012 at the average rate for people aged 15 years and over, up by 7 percentage points to 19 percent.

**Proportions of the population with a bachelors or higher qualification in 2012**

15 years and over	18%	(17% in 2007)
15-24 years	7.1%	(7.8% in 2007)
25-34 years	30%	(29% in 2007)
35-44 years	27%	(23% in 2007)
45-64 years	19%	(18% in 2007)
65 years and over	7.9%	(7.5% in 2007)

**Source:** Statistics New Zealand (2013), *Household Labour Force Survey*.

**OTHER TERTIARY QUALIFICATIONS**

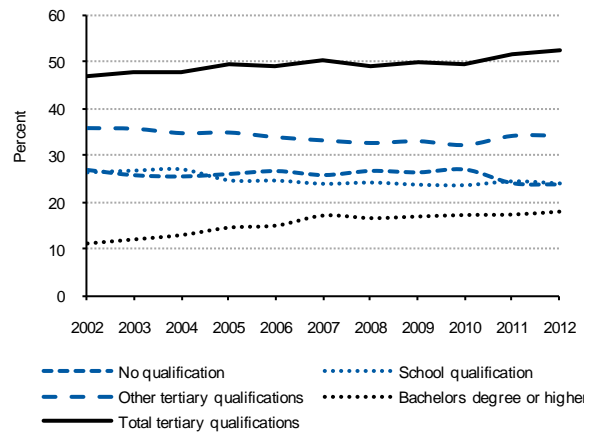
In 2012, just over a third of the population aged 15 years and over held a level 1 to 4 certificate or diploma (other tertiary qualifications) – a slight drop from 36 percent in 2002. Least likely to hold other tertiary qualifications are people aged 15 to 24 years and most likely are people aged 25 to 64 years. Except for those and 65 years and over, the proportions holding other tertiary qualifications declined from 2002 to 2008 and have remained stable or increased since then. This is probably a consequence of the economic downturn where people have tried to improve their prospects during weaker employment conditions through obtaining vocationally-focused qualifications.

**Proportions of the population with other tertiary qualification in 2012**

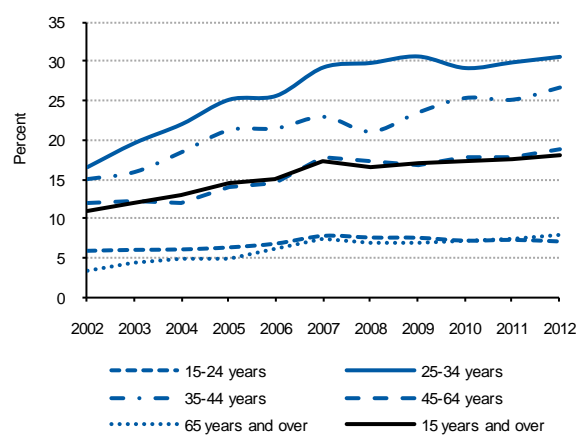
15 years and over	34%	(33% in 2007)
15-24 years	19%	(18% in 2007)
25-34 years	38%	(37% in 2007)
35-44 years	39%	(38% in 2007)
45-64 years	40%	(38% in 2007)
65 years and over	33%	(31% in 2007)

**Source:** Statistics New Zealand (2013), *Household Labour Force Survey*.

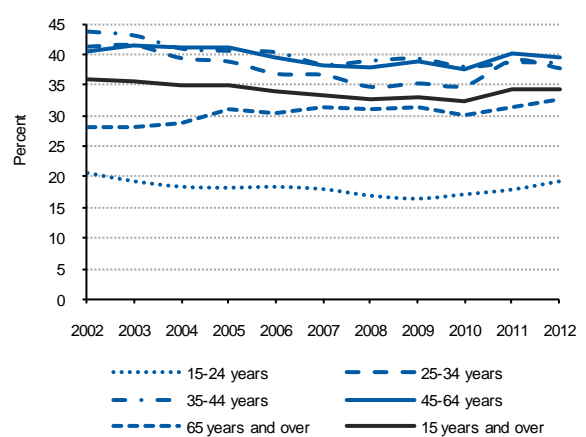
**Figure 4.1** Population aged 15 years and over (June quarter) by highest qualification



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



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



**TERTIARY QUALIFICATIONS AND ETHNIC GROUP**

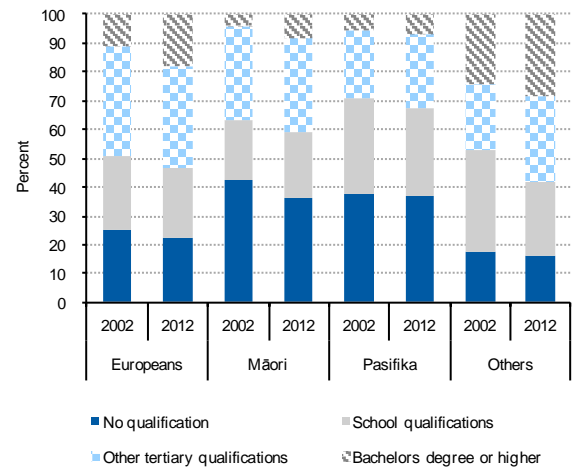
Europeans had the highest proportion of people with ‘other’ tertiary qualifications, and the Other ethnic group had the highest proportion of people with bachelors or higher qualification in 2012. While the proportion of Māori holding bachelors or higher qualifications has increased from 4.5 percent in 2002 to 7.9 percent in 2012, it is lower than the proportion for overall population. The proportion of Pasifika with a bachelors or higher qualification increased by 1.1 percentage points from 2002 to 2012 to 6.6 percent.

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

	Bachelors degree or higher		Other tertiary qualifications	
	2002	2012	2002	2012
Europeans	11%	18%	38%	36%
Māori	4.5%	7.9%	32%	33%
Pasifika	5.5%	6.6%	24%	26%
Other	24%	29%	23%	30%

Source: Statistics New Zealand (2013). 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

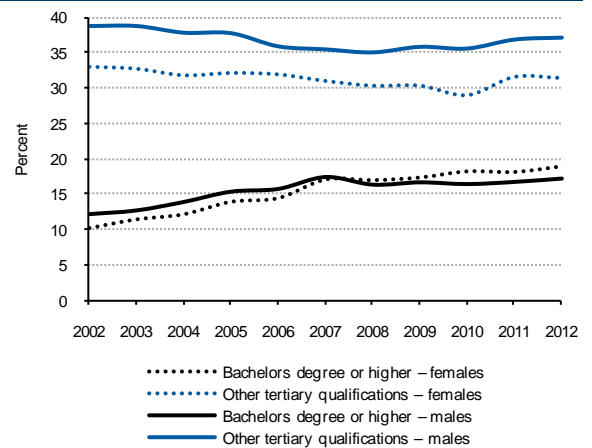
**TERTIARY QUALIFICATIONS AND GENDER**

Women continue to be slightly more likely than men to hold a bachelors or higher qualification. Males are more likely than females to hold a level 1 to 4 certificate or diploma and this proportion increased between 2011 and 2012, while it declined slightly for women.

**Proportion of the population aged 15 years and over with a tertiary qualification in 2012 by gender**

Bachelors degree or higher - females	19%	(17% in 2007)
Bachelors degree or higher - males	17%	(17% in 2007)
Other tertiary qualifications - females	31%	(31% in 2007)
Other tertiary qualifications - males	37%	(36% in 2007)

Source: Statistics New Zealand (2013). Household Labour Force Survey.



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

**EMPLOYMENT ADVANTAGE FOR TERTIARY QUALIFIED**

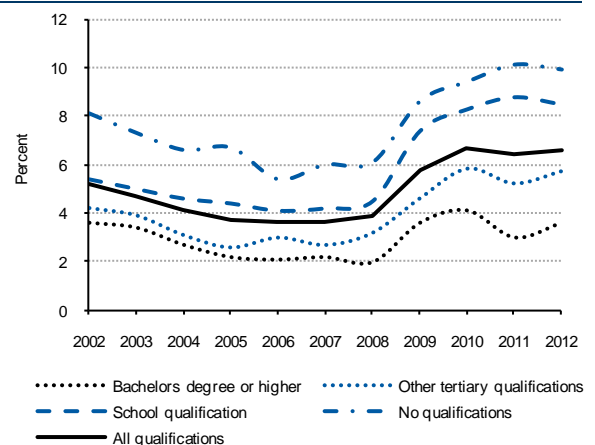
People with tertiary qualifications are less likely to be unemployed than people without a qualification or only a school qualification. While unemployment increased at every qualification level from 2008 to 2010 due to weak economic conditions, the rise was sharper for people with no or lower-level qualifications.

In 2012, unemployment remained stable for people with no or only school qualifications, while it dropped from 2010 to 2011 and then rose again for people with tertiary qualifications. The unemployment rate for people with tertiary qualifications stayed was 4.9 percent in 2012.

**Unemployment rates of the population aged 15 years and over by highest qualification in 2012**

Bachelors degree or higher	3.6%	(2.2% in 2007)
Other tertiary qualifications	5.7%	(2.7% in 2007)
School qualifications	8.5%	(4.2% in 2007)
No qualification	10%	(6.0% in 2007)
Total all qualifications	6.6%	(3.6% in 2007)

Source: Statistics New Zealand (2013). Household Labour Force Survey.



**LABOUR FORCE PARTICIPATION**

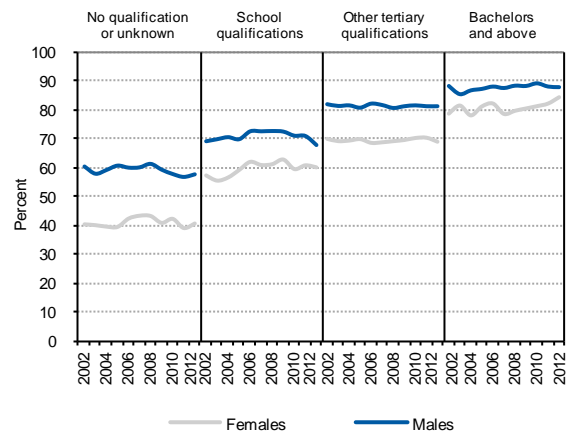
Participation in the labour market tends to increase as people’s qualification levels increase. However, women participate in the labour force at lower rates than men, although the gap decreases at higher qualifications levels. For example, the participation difference between men and women with bachelors or higher qualifications was 3.4 percentage points in 2012, compared to 17 percentage points for men and women with no qualifications. The labour force participation rate fell for people with school or other tertiary qualifications in 2012, but stayed constant or rose for all other groups.

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

	Females		Males	
	2011	2012	2011	2012
Bachelors degree or higher	82%	84%	88%	88%
Other tertiary qualifications	71%	69%	81%	81%
School qualifications	61%	60%	71%	68%
No qualifications	39%	41%	57%	58%

Source: Statistics New Zealand (2013), Household Labour Force Survey.

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



**HIGHER EARNINGS FOR THE TERTIARY QUALIFIED**

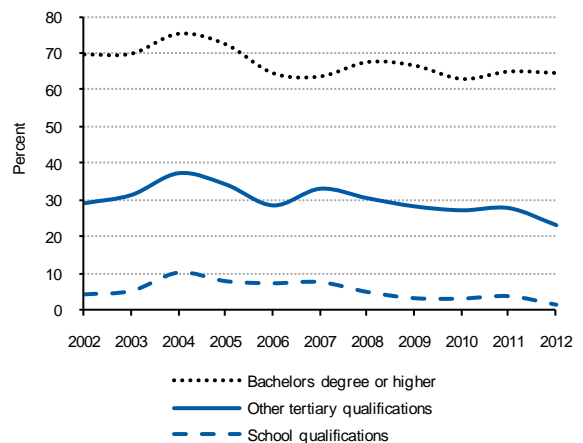
People with a tertiary qualification generally earn more than those with no qualification or only a school qualification. The median hourly earnings of people holding a bachelors or higher qualification were 64 percent higher in 2012 than people without a qualification. This compared to 65 percent in 2011 and 63 percent in 2010. The median hourly earnings premium for people with a school qualification or level 1 to 4 tertiary certificates or diplomas also declined in 2012 after increasing in 2011.

**Median hourly earnings premiums by highest qualification compared with those with no qualifications**

	2002	2012
Bachelors degree or higher	69%	64%
Other tertiary qualifications	29%	23%
School qualifications	4.2%	1.4%

Source: Statistics New Zealand (2013), Household Labour Force Survey.

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



**YOUTH ACTIVITY**

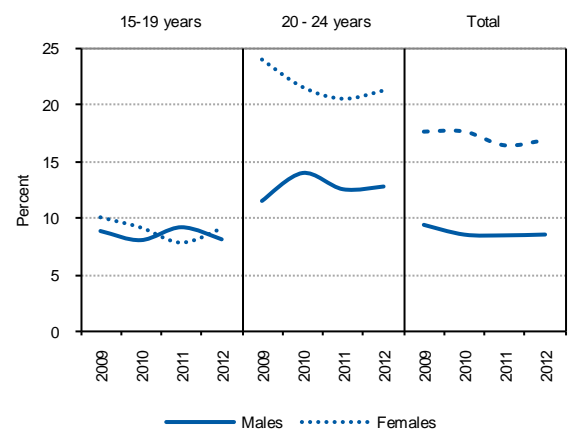
The proportion of the youth population not in employment, education or training (NEET), has been higher since 2009, due to the effects of weak employments conditions, especially for young people. This suggests a weakening of the labour market for low-skilled occupations. The effect of this on 15 to 19 year-olds has been lessened through more of this age group remaining in formal education, such as school. In 2012, the NEET proportions increased slightly for most groups. Females aged 20 to 24 years have the highest NEET rates because 10 percent of them are caregivers.

**Proportions of youth not in employment, education or training**

	2009	2010	2011	2012
15-19 year olds	9.5%	8.6%	8.5%	8.6%
20-24 year olds	18%	18%	16%	17%

Source: Statistics New Zealand (2013), Household Labour Force Survey.

**Figure 4.9** Proportion of youth not in employment, education or training by gender and age group



**TERTIARY EDUCATION OUTCOMES FOR YOUNG GRADUATES**

Studies show that people with tertiary qualifications are more frequently associated with positive outcomes such as higher rates of employment and participation in further study.<sup>1</sup>

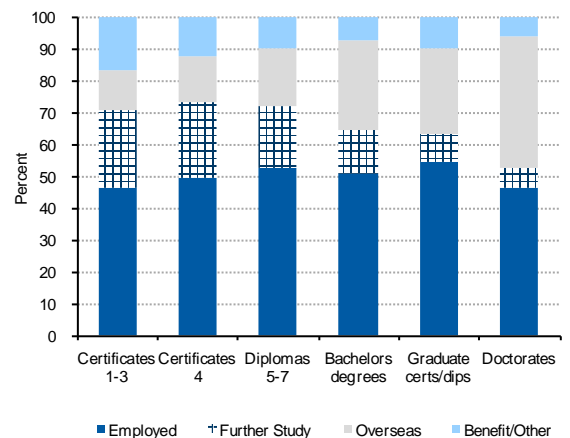
The likelihood of going overseas is greater for young people with higher qualification levels.

Employment rates are highest for people with graduate certificates/diplomas, especially in the first year after study. The employment rates of graduates at all other qualification levels vary within a range of 10 percentage points.

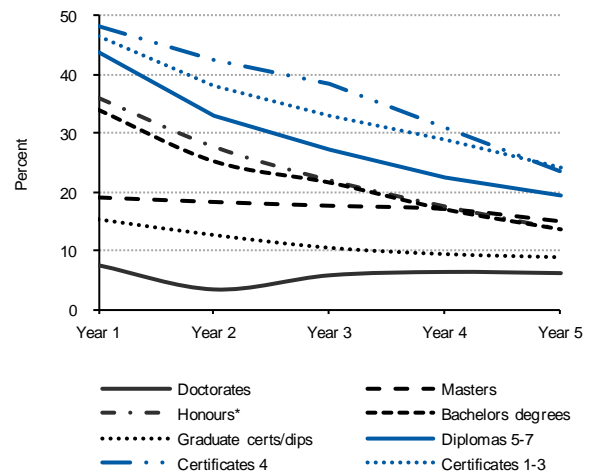
Young people who complete level 1 to 3 certificates are more likely to be studying five years later than those who graduate with a higher qualification. Also, the proportion of young graduates who were benefit recipients, five years after study, was highest for those with a level 1 to 3 certificate and lowest for those with a postgraduate degree.

**Note:** The benefit/other destination includes those whose destination after study is unknown or who are overseas.

**Figure 4.10** Destinations of young graduates by qualification level (5 years after study)



**Figure 4.11** Further study rates of young graduates by qualification level (1 to 5 years after study)



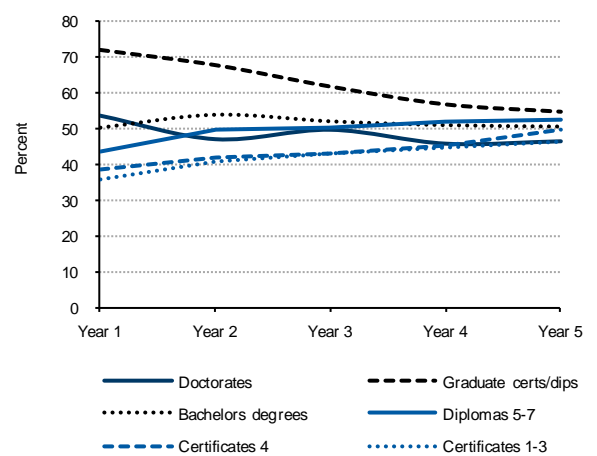
**FURTHER STUDY BY YOUNG GRADUATES**

There are differences in the rates of further study in New Zealand by young people who have completed a tertiary qualification. As expected young doctoral graduates are least likely to do further study in New Zealand, while those with level 4 certificates were most likely to do further study.

The rates at which young graduates undertake further study decline over time (Figure 4.11), except for people who gain a masters or doctoral degree as they have lower rates to begin with. Young degree graduates who complete a graduate certificate/diploma also have lower rates of further study which do not tend to vary over time, reflecting their specialised nature.

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

**Figure 4.12** Employment rates of young graduates by selected qualification levels (1 to 5 years after study)



**EMPLOYMENT RATES OF YOUNG GRADUATES**

Five years after study, young people with graduate certificates/diplomas have the highest rates of employment. Seventy-two percent of them were employed one year after study, compared to 36 percent of young graduates with level 1 to 3 certificates. Five years after study, this difference had narrowed to 54 percent for young people with graduate certificates/diplomas and 46 percent for those with level 1 to 3 certificates.

One year after study, the employment rate of young graduates with level 1 to 3 certificates is lowest. Over time the employment rates of these graduates increase and, five years after study, they were slightly more likely to be in employment than young graduates with a doctoral qualification.

**Employment rates of young graduates by selected qualification levels**

	Years after study:	1	4	3	4	5
Certificates 1-3		36%	41%	43%	45%	46%
Bachelors degrees		50%	54%	52%	51%	51%
Doctorates		53%	47%	50%	46%	46%

<sup>1</sup> See the recent study on tertiary education outcomes by Mahoney, P., Park, Z. & Smyth, R. (2013), *Moving on up – what young people earn after their tertiary education*, Wellington: Ministry of Education. This report looks at the employment outcomes and destinations of young graduates in the 2009 and 2010 tax years. The measures reported here differ from *Moving up* as they include overseas as a destination after graduating, where 'overseas' is defined as being out of New Zealand for nine months or more in a tax year.

**YOUNG GRADUATES ON A BENEFIT OR NOT LABOUR MARKET\***

While the proportion on a benefit increased over time for all young graduates, Figure 4.13 shows that this varies by qualification level.

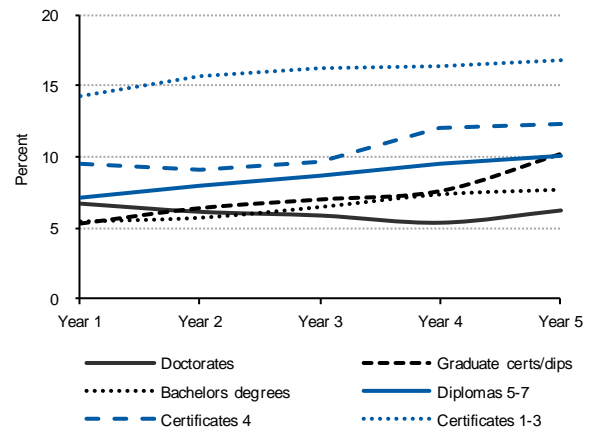
Five years after study, the proportion of young graduates with level 1 to 3 certificates who were on a benefit, or not in the labour market, was more than twice as high, at 17 percent, than for those with bachelors degrees, at 7.7 percent.

**Young graduates on a benefit, or not in the labour market, by selected qualification level**

Years after study:	1	2	3	4	5
Certificates 1-3	14%	16%	16%	16%	17%
Certificates 4	9.6%	9.1%	9.7%	12%	12%
Diplomas 5-7	7.2%	8.0%	8.7%	9.5%	10%
Bachelors degrees	5.5%	5.8%	6.5%	7.4%	7.7%
Graduate certificates/diplomas	5.3%	6.4%	7.0%	7.6%	10%
Doctorates	6.7%	6.1%	5.8%	5.3%	6.2%

\*Excludes people who are studying.

**Figure 4.13** Young graduates on a benefit, or not in the labour market, by selected qualification level (1 to 5 years after study)



**YOUNG GRADUATES SPENDING TIME OVERSEAS**

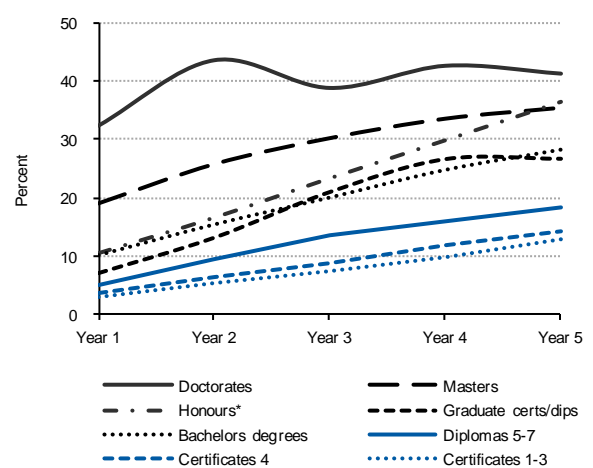
The proportion of young graduates who spend nine months or more overseas in a year increased during the five years after study. Masters and doctoral graduates go overseas in higher proportions than other young graduates. The pattern of departure overseas by young graduates has not changed in recent years. Those with lower-level qualifications may also need to work longer after study to accumulate sufficient earnings for overseas travel.

**Proportions of graduates who were overseas by selected qualification level**

Years after study:	1	2	3	4	5
Certificates 1-3	3.0%	5.4%	7.6%	9.9%	13%
Certificates 4	3.5%	6.5%	9.0%	12%	14%
Diplomas 5-7	5.2%	9.4%	14%	16%	18%
Bachelors degrees	10%	15%	20%	25%	28%
Doctorates	33%	43%	39%	43%	41%

\*Honours covers bachelors with honours degrees and postgraduate certificates/diplomas.

**Figure 4.14** Proportions of young graduates who were overseas by qualification level (1 to 5 years after study)



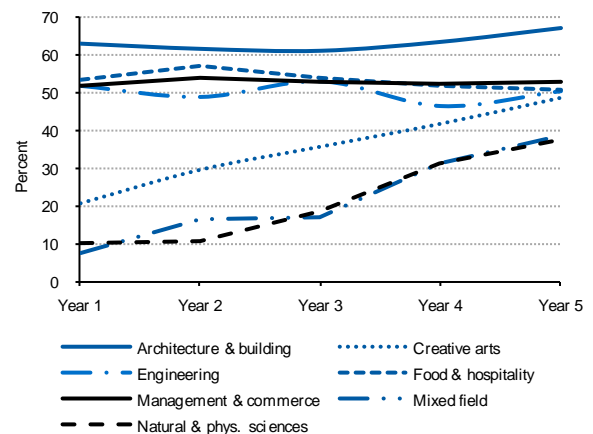
**Figure 4.15** Employment rates for young graduates with level 4 certificates by selected broad field of study

**EMPLOYMENT RATES FOR PEOPLE WITH LEVEL 4 CERTIFICATES**

The employment rates of young graduates with level 4 certificates were influenced by their field of study as well as the level of study. For example, these young graduates were only likely to be employed in all years after study when having studied in the following fields: architecture and building; management and commerce; and food, hospitality and personal services.

Employment rates for young graduates with level 4 certificates tended to increase over time, except for those who studied food, hospitality and personal services, and engineering and related technologies. The employment rates for food and engineering graduates changed very little overall.

Employment rates increased the fastest for young people with level 4 certificates in mixed field programmes, creative arts, and natural and physical sciences, although the employment rates in the first year after study were low. Growth in the rate of employment was slowest for graduates in management and commerce; and architecture and building, however, the employment rates in the first year after study were high.





**TERTIARY EDUCATION OUTCOMES BY GENDER**

There are differences in the outcomes for men and women following the completion of a tertiary qualification. Some of this could be due to differences in the fields of study and occupations/professions chosen by men and women.

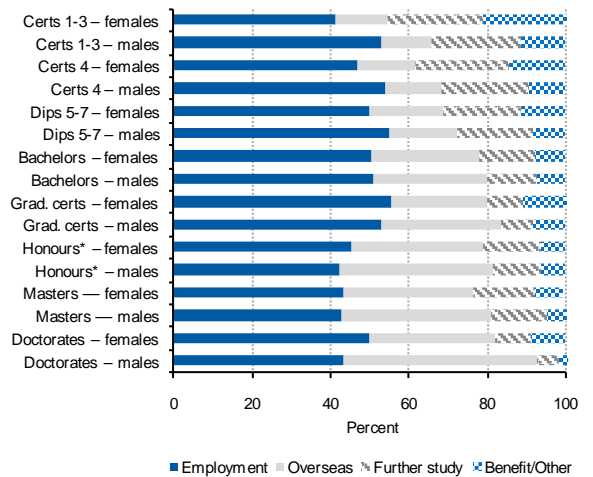
Of the young graduates with level 1 to 4 certificates or diplomas, men were more likely than women to be in employment five years after study.

Of the young graduates with a bachelors or higher qualification, men were more likely than women to be overseas five years after study.

Women were more likely than men to be in further study five years after having completed a qualification. Women were also more likely than men to be benefit recipients, or not active in the labour market, five years after study.

\*Honours covers bachelors with honours degrees and postgraduate certificates/diplomas. Benefit/Other includes those whose destination after study is unknown.

**Figure 4.16** Destinations after study by qualification level and gender (5 years after study)



**EMPLOYMENT EARNINGS OF YOUNG GRADUATES**

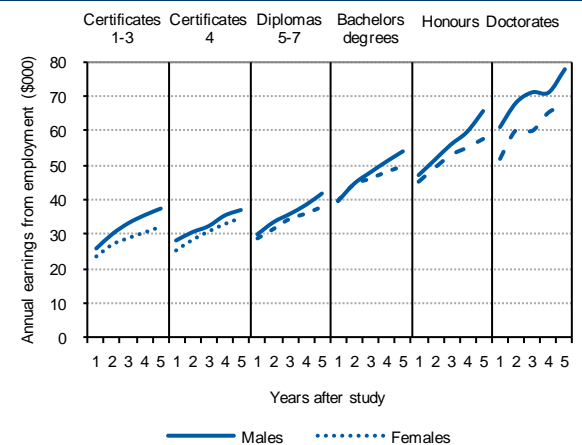
The median annual earnings from employment can differ between men and women. However, as information on the hours worked and pay rates is not available, differences due to these factors cannot be determined.

Of those in employment, men earned more than women and the differences between the genders increased at higher qualification levels. Earnings were closest between genders after completion of a bachelors degree.

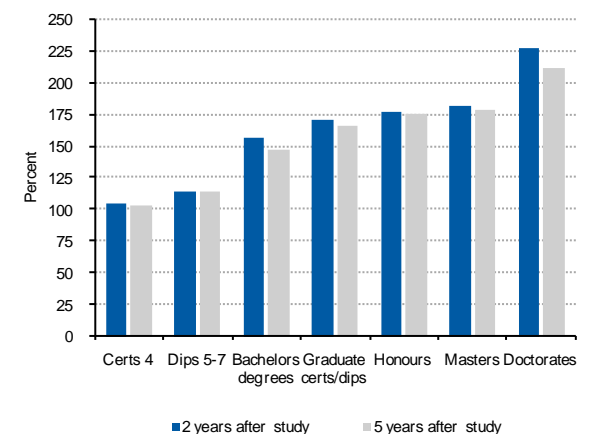
**Proportion of female to male employment earnings by qualification level**

Qualification Level	Years after study:		
	1	2	5
Certificates 1-3	91%	89%	86%
Certificates 4	90%	93%	94%
Diplomas 5-7	96%	94%	90%
Bachelors degrees	100%	99%	92%
Graduate certificates/diplomas	101%	98%	90%
Honours & postgraduate certificates/diplomas	96%	95%	87%
Masters	93%	92%	86%
Doctorates	85%	88%	86%

**Figure 4.17** Median annual earnings of young graduates by qualification level and gender (1 year, 2 years and 5 years after study)



**Figure 4.18** Median annual earnings of young graduates compared to those with level 1-3 certificates



**EARNINGS PREMIUMS BY QUALIFICATION LEVEL**

There are differences by qualification level in the median annual earnings of young graduates. Earnings tend to be higher for graduates with higher-level qualifications.

Doctoral graduates earned 227 percent more, two years after study, and 212 percent more, five years after study, than graduates with level 1 to 3 certificates. The comparable figures for graduates with a bachelors degree were 156 percent and 147 percent.

**Annual earnings premiums compared to those with level 1 to 3 certificates by qualification level**

Qualification Level	Years after study:	
	2	5
Certificates 4	104%	102%
Diplomas 5-7	114%	114%
Bachelors degrees	156%	147%
Graduate certificates/diplomas	170%	166%
Honours & postgraduate certificates/diplomas	177%	176%
Masters	181%	179%
Doctorates	227%	212%

# 5 TERTIARY STUDENTS' OVERVIEW

This chapter includes:

- ▲ trends in formal tertiary education<sup>1</sup>
- ▲ qualification achievement
- ▲ international students, and
- ▲ an estimate of the size of the sector.

## Domestic students enrolled at tertiary education providers continue their shift from lower- to higher-level qualifications

The shift from lower- to higher-level qualifications that started in 2005, continued in 2012. This trend is likely to increase the number of New Zealanders with high-level skills, in line with government's aim to lift productivity.

Domestic students enrolled at tertiary education institutions and private providers declined in number in from 2011 to 2012, mainly due to fewer non-degree enrolments by students aged 25 years and over.

More domestic students enrolled in bachelors degrees in 2012 than in 2011. This increase in bachelors degrees was due to more enrolments by students aged 18 to 24 years.

Enrolments by people aged 18 and 19 years increased from 2011 to 2012, even though the New Zealand population aged 18 and 19 years declined. In part, this reflects the continuation of weak employment conditions for young people, even though the New Zealand economy expanded in 2011 and 2012. Another factor that is likely to have contributed to the increase in enrolments by younger people at bachelors level is the improved performance of school students in NCEA.

When converted to equivalent full-time student units, domestic enrolments remained stable in 2012. That is, domestic students continued to take on higher study loads in 2012 (on average), following a trend that began in 2007.

## Workplace-based learners

The number of industry trainees decreased from 2011 to 2012 to 139,000. Since 2008, the number of trainees has declined, while, before this, the number of trainees followed a strong upward trend.

## International tertiary education students

The upward trend in international students continued in terms of equivalent full-time student units, while the number of international students remained stable at 47,700.

## Qualification achievement

In 2012, 162,000 qualifications were completed, 18,500 by international students. Of the 143,000 qualifications completed by domestic students, 43,700 were bachelors or higher qualifications and 99,300 were non-degree qualifications.

## 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 represents 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 disaggregated into component courses. The Tertiary Education Commission assigns 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'.

<sup>1</sup> The category 'bachelors' used in this report includes graduate certificates and diplomas.

**STUDENT ENROLMENTS IN 2012<sup>1</sup>**

There were approx. 575,000 students (including international students) in 2012.\*

<b>Provider-based students (more than 1 week's duration)</b>		
Levels 1-10 (excl. programmes listed below)	402,000	(down 1.8% from 2011)
Youth Guarantee fees-free places	8,920	(3,590 places in 2011)
Trades academies	2,340	(713 in 2011)
Foundation-Focused Training Opportunities <sup>2</sup>	9,870	(up 11% on 2011)
Estimate for non-government funded students	15,000	
<b>Total</b>	<b>438,000</b>	
<b>Workplace-based learners (more than 1 week's duration)</b>		
Industry trainees (incl. modern apprentices)	139,000	(down 9.5% on 2011)
Modern Apprenticeships	15,300	(up 3.8% on 2011)
Gateway	13,400	(up 6.6% on 2011)
<b>Tertiary study of less than 1 week's duration</b>		
Secondary-Tertiary Alignment Resource	16,800	(down 3.6% on 2011)
Other short qualifications	6,200	(down 26% on 2011)

\*Excludes students in short courses and the estimate for non-government-funded provision.  
**Notes:** In 2012, Youth Training was discontinued and providers could apply to deliver Youth Guarantee fees-free places. See Table 5.1 for fuller information on the size of the tertiary education sector and chapter 6 for recent trends in industry trainees.

**TRENDS IN FORMAL TERTIARY EDUCATION**

Formal tertiary education enrolments decreased from 2011 to 2012, due to a 2.2 percent decrease in domestic students, while the number of international students remained stable. The amount of study, in terms of equivalent full-time student units, remained stable from 2011 to 2012.

The tertiary education participation rate of New Zealanders in bachelors and higher qualifications has remained stable in recent years, at 5.1 percent, while the rate in non-degree qualifications has fallen from a high point of 9.6 percent in 2005 to 5.8 percent in 2012.

**Students in provider-based formal study by level and setting in 2012**

Non-degree	227,000	(down 4.7% on 2011)	Domestic participation rate 5.8%
Degree or higher	208,000	(up 1.2% on 2011)	Domestic participation rate 5.1%

Source: Ministry of Education and Tertiary Education Commission.

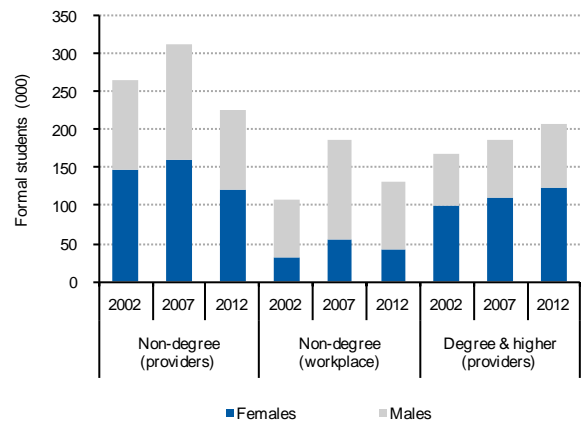
**PROVIDER-BASED ENROLMENTS BY LEVEL OF STUDY**

The shift from lower- to higher-level qualifications continued in 2012. The decrease in non-degree qualifications from 2011 to 2012 was mainly due to fewer domestic enrolments by students aged 25 years and over, while the increase in degree and higher qualifications was mainly due to more bachelors enrolments by domestic students aged 18 to 24 years.

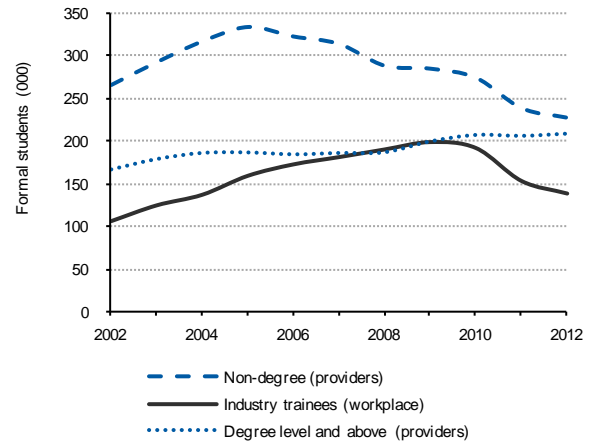
**Provider-based formal enrolments in 2012**

	Domestic		International		Total	
	2012	% change from 2011	2012	% change from 2011	2012	% change from 2011
All study levels	375,000	-2.2	47,700	-0.2	422,000	-2.0
Certificates 1-3	105,000	-4.1	4,580	-4.6	109,000	-4.2
Certificates 4	61,200	+0.5	4,990	-10.0	66,200	-0.4
Diplomas 5-7	55,500	-10.4	13,000	-1.5	68,500	-8.9
Bachelors degrees	132,000	+1.7	17,600	+1.4	149,000	+1.7
Graduate certs/dips	11,400	-4.3	2,270	+10.2	13,700	-2.2
Postgraduate	39,500	-1.0	8,530	+6.6	48,000	+0.3

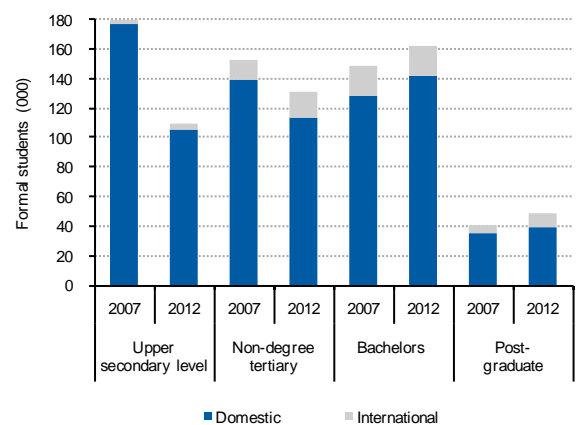
**Figure 5.1** Formal students by level of study, setting and gender



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



**Figure 5.3** Provider-based formal enrolments by level of study



Note: In Figure 5.3 bachelors includes degrees and graduate certificates/diplomas

<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.

<sup>2</sup> Some Training Opportunities' funding was moved to Ministry of Social Development programmes in 2011.

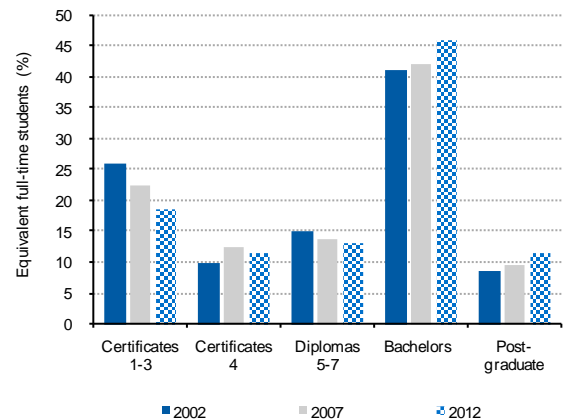
**PROVIDER-BASED EQUIVALENT FULL-TIME STUDENTS**

The equivalent full-time student unit count remained stable from 2011 to 2012, while the student headcount decreased. In 2012, bachelors and higher-level study comprised 57 percent of the total, compared to 52 percent in 2007. The decrease in student numbers has meant that their study load has increased (on average). From 2011 to 2012, the average study load of domestic students increased from 0.64 to 0.66 equivalent full-time student units. The comparable figures for international students were 0.68 and 0.69.

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

	Domestic		International		% of total enrolments
	2012	% change from 2011	2012	% change from 2011	
All study levels	247,000	+0.2	32,800	+1.8	11.8
Certificates 1-3	50,000	-1.9	1,720	-12.2	3.3
Certificates 4	29,700	+1.1	2,290	-7.3	7.2
Diplomas 5-7	28,500	-4.4	7,930	+0.7	21.8
Bachelors	113,000	+2.3	14,500	+3.5	11.3
Postgraduate	25,200	-0.7	6,460	+7.6	20.4

**Figure 5.4** Distribution of equivalent full-time students by level of study



**FORMAL STUDENTS BY PROVIDER TYPE**

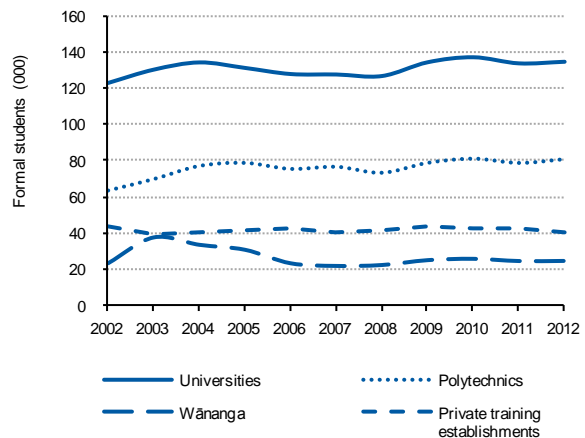
The equivalent full-time student unit count increased for public tertiary education institutions in 2012, while it decreased for private training establishments. At polytechnics, the increase was due to more enrolments at all qualification levels, except level 5 to 7 diplomas and level 2 certificates. At private training establishments the decrease was due mainly to fewer level 1 to 4 certificate enrolments.

**Equivalent full-time students by selected provider type in 2012**

All formal enrolments	279,000	(up 0.3% on 2011)
Tertiary education institutions	239,000	(up 1.3% on 2011)
Private training establishments	40,200	(down 4.7% on 2011)
Universities	134,000	(up 0.7% on 2011)
Polytechnics	80,400	(up 2.6% on 2011)
Wānanga	24,700	(up 0.3% on 2011)

**Note:** In Figure 5.5 college of education data has been added to the universities for each year shown in the graphs to enable comparisons to be made over time.

**Figure 5.5** Equivalent full-time students by provider type



**PARTICIPATION RATES BY ETHNIC GROUP**

In 2012, the age-standardised participation rate in higher-level qualifications continued to increase for Europeans, Māori and Pasifika, while for Asians, who have the highest rate at this level, participation continued to decrease.

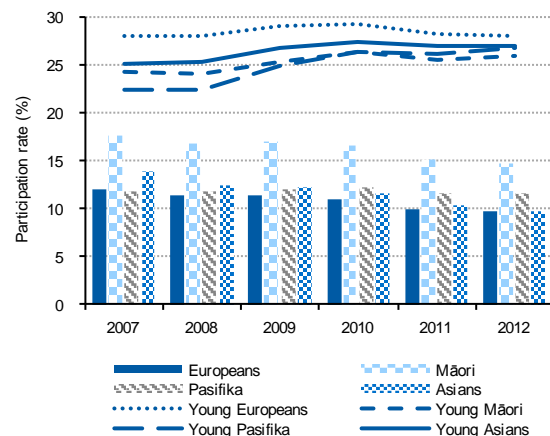
The total participation rates of young people by ethnic group have converged in recent years. However, at level 4 and higher there are differences between participation rates for young people by ethnic group: 25 percent for Asians; 23 percent for Europeans; 19 percent for Pasifika; and 16 percent for Māori.

**Age-standardised participation rates in tertiary education for the population aged 15 years and over**

	Non-degree		Degree and higher		All levels	
	2007	2012	2007	2012	2007	2012
Europeans	7.7%	4.8%	4.6%	5.0%	12.0%	9.7%
Māori	14.5%	11.0%	3.7%	4.1%	17.6%	14.6%
Pasifika	8.7%	7.7%	3.4%	4.0%	11.8%	11.4%
Asians	7.4%	3.7%	6.9%	6.1%	13.8%	9.6%
Total	8.8%	5.8%	4.8%	5.1%	13.3%	10.6%

**Notes:** Students may be counted in more than one ethnic group. Young people are those aged under 25 years.

**Figure 5.6** Participation rates in provider-based tertiary education by ethnic group



**COMPLETING A QUALIFICATION**

The number of qualifications completed by domestic students increased by 3.2 percent from 2011 to 2012 – degree and higher qualifications up by 4.0 percent and non-degree qualifications up by 2.8 percent. The number of qualifications completed by international students increased by 0.9 percent – degree and higher qualifications up by 13 percent, while non-degree qualifications decreased by 6.8 percent.

**Qualifications completed in 2012**

	Domestic	International
All study levels	143,000	18,500
Certificates 1	5,000	317
Certificates 2	19,600	806
Certificates 3	29,800	1,170
Certificates 4	25,900	2,260
Diplomas 5-7	19,000	5,930
Bachelors degrees	25,900	3,530
Graduate certificates/diplomas	4,810	1,310
Honours	9,020	1,510
Masters	3,380	1,240
Doctorates	636	427

**STUDENTS RETAINED IN STUDY IN 2012**

In 2012, the five-year retention of domestic students was higher than in 2008 at most qualification levels, especially for bachelors and masters degrees. It is likely that the weaker employment conditions in recent years contributed to this increase.

**Five-year retention rates of domestic students in formal study**

	2003-2008	2004-2009	2005-2010	2006-2011	2007-2012
All study levels	55%	55%	55%	52%	53%
Certificates 1-3	56%	54%	54%	45%	46%
Certificates 4	47%	47%	47%	47%	46%
Diplomas 5-7	47%	49%	48%	49%	51%
Bachelors degrees	63%	66%	66%	68%	70%
Graduate certs/dips	56%	58%	57%	59%	61%
Honours	74%	72%	72%	71%	72%
Masters	69%	70%	71%	73%	74%
Doctorates	81%	79%	80%	80%	83%

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

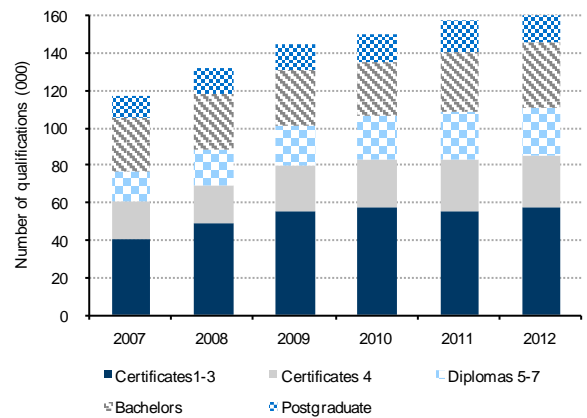
**INTERNATIONAL STUDENTS**

The number of international students remained stable in 2012. In terms of equivalent full-time student units, the upward trend that started from 2008 continued in 2012. International enrolments increased in bachelors and higher qualifications in 2012, while there were fewer enrolments in non-degree qualifications.

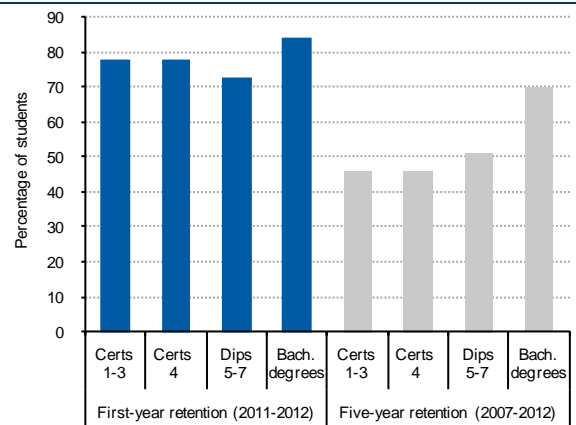
- ▲ 11 percent of tertiary education enrolments were made by overseas students (12 percent in terms of equivalent full-time student units).
- ▲ 73 percent of the international students were from Asia, 7.5 percent from Europe, 5.9 percent from Northern America, 5.5 percent from the Middle East, 4.2 percent from the Pacific, 2.4 percent from Central and South America and 1.2 percent from Africa.
- ▲ 6.9 percent more international students were enrolled in doctoral studies in 2012 than in 2011.

Note: 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.

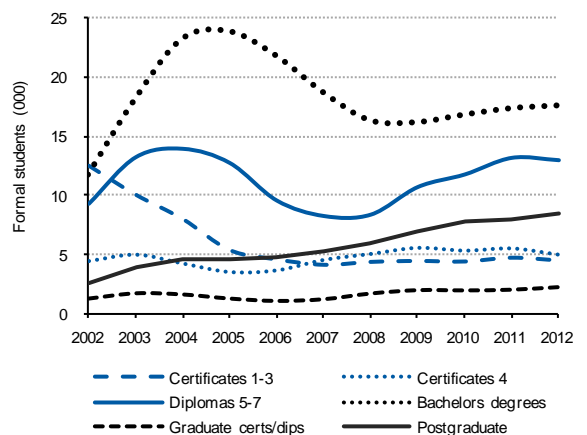
**Figure 5.7** Qualifications completed by formal students by level of study



**Figure 5.8** First-year and five-year retention rates for domestic formal students (full-time and part-time)



**Figure 5.9** International students by level of study



**Table 5.1** Estimate of the size of the tertiary education sector in 2012 by level of study

Estimated numbers of 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 programmes listed below)	91,177	106,604	142,360	39,502	354,730
International students (excl. industry training and programmes listed below)	4,140	17,299	19,821	8,527	46,982
Students in non-government-funded providers	10,000	5,000	-	-	15,000
Youth Guarantee fees-free places	8,923				8,923
Trades academies (senior-secondary students)	2,340				2,340
Foundation-Focused Training Opportunities	9,871	-	-	-	9,871
Students in qualifications of > 1 week's duration	126,455	128,903	162,181	48,029	437,851
Secondary-Tertiary Alignment Resource < 1 week's duration	16,487	319	-	-	16,768
Students in qualifications of < 1 week's duration	5,096	1,098	73		6,198
<b>Total provider-based students</b>	<b>148,038</b>	<b>130,320</b>	<b>162,254</b>	<b>48,029</b>	<b>460,817</b>
<b>Workplace-based</b>					
- Learners in industry training (excl. Modern Apprenticeships)	97,377	41,262	-	-	123,890
- Modern apprentices	5,352	12,698			15,310
- Gateway learners	13,377	-	-	-	13,377
<b>Total workplace-based learners</b>	<b>116,106</b>	<b>53,960</b>	<b>-</b>	<b>-</b>	<b>152,577</b>
<b>Total provider- and workplace-based learners</b>	<b>264,144</b>	<b>184,280</b>	<b>162,254</b>	<b>48,029</b>	<b>613,394</b>
<b>Non-formal learners</b>					
ACE* through tertiary education institutions					49,881
ACE* through private training establishments					1,235
International students in non-formal tertiary education					3,158
Adult literacy and English as a second or other language (estimated funded learners)					Not available
ACE funded through schools					26,137
ACE through community organisations (provisional)					38,361
<b>Student component-funded learners in 2012</b>	<b>86,565</b>	<b>104,033</b>	<b>142,725</b>	<b>41,906</b>	<b>352,474</b>

\* Adult, community and other education not elsewhere classified.

**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. Foundation Focused Training Opportunities, Youth Guarantee, Secondary-Tertiary Alignment Resource, Gateway, and ACE programmes are included in chapters 7 and 10.
3. Learners in industry training, including Modern Apprenticeships, are described in chapter 6.
4. 'Bachelors' includes degrees and graduate certificates and diplomas.
5. In 2012, 58 percent of domestic provider-based enrolments of more than one week's duration were made by women. The comparable figure in 2002 was 57 percent.
6. Youth Training discontinued in 2012 and providers could apply to deliver Young Guarantee fees-free places.

## 6 WORKPLACE-BASED LEARNERS

This chapter includes:

- ▲ participation rates in industry training
- ▲ credit and qualification achievement trends for industry trainees and apprentices
- ▲ Gateway students, and
- ▲ trades academies.

The number of industry trainees decreased from 2011 to 2012 to 139,000. Since 2009, the number of trainees has declined, while, before this, the number of trainees followed a strong upward trend.

A number of factors have led to the decline in industry trainees since 2009. These included the:

- ▲ removal of inactive trainees from funded training in 2010
- ▲ implementation of new operational funding rules from 2011 that place emphasis on performance rather than just enrolments, and
- ▲ continued weak employment conditions since 2009.

In addition to this, there has been a change to the way industry training activity is recorded, with the implementation of a new industry training register. The way trainees are counted has changed and this means that counts before 2011 may not be strictly comparable to the counts from 2012 onwards.

For the years from 2003 to 2010, the number of trainees has been revised from the numbers previously published.

Similarly, the way achievement information is collected in industry training has changed, which means the counts of credits and qualifications awarded from 2011 onwards may not be strictly comparable with those for the years 2003 to 2010.

There are some clear differences:

- ▲ The level of training has declined due to a steady decrease in the proportion of trainees in programmes at level 3 or above.
- ▲ The proportion of trainees with a low or no previous qualification entering training has declined from one in two trainees in 2003 to one in three in 2012.

- ▲ The credit value and duration of industry training programmes have reduced, on average, reflecting the response of industry training organisations to industry's need for shorter, more focused training.

### Credit achievement

The average credit achievement of trainees has increased. In 2012, 29 percent of trainees attained no credits, down from 53 percent in 2003. Most of this change occurred after the removal of inactive trainees from funding in 2010 and the implementation of the new rules about minimum credit achievement from 2011. Qualification completion rates have also improved although the changes in the way qualifications are validated and awarded in the industry training register makes precise estimation of the change difficult. The proportion of qualifications awarded at levels 1 and 2 has increased to 48 percent in 2012, up from 28 percent in 2003.

### Modern Apprenticeships

Modern apprenticeship numbers increased from 2011 to 2012. This follows a decline in 2011, which may have reflected the reluctance of some employers to take on new apprentices at a time of low economic growth.

To enter a modern apprenticeship, people have to be aged between 16 and 21 years, although some people in older age groups may participate in certain circumstances. Modern apprenticeships are widely used by the building and construction industry and the number of trainees in this industry increased strongly in 2012, following the decline between 2008 and 2011.

Following reviews of industry training, conducted in 2011 and 2012, the government announced final changes to the system in January 2013. The most significant change is combining Modern Apprenticeships with other apprentice-type training to create New Zealand Apprenticeships. New Zealand Apprenticeships will provide the same level of government support to all apprentices regardless of age. New Zealand Apprenticeships are programmes of 120 credits or more at level 4 on the New Zealand Qualifications Framework that teach proficiency in an occupation or industry.

### Gateway

The number of students involved in Gateway continued to increase substantially from 2011 to 2012. Gateway offers senior secondary students workplace-based learning, and the programme has expanded substantially since its introduction in 2001.

### Trades academies

Twenty-two trades academies were active in 2012, providing 2,340 places for 16 and 17 year-olds who are concurrently enrolled in a secondary school. 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.

## 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. Participants 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, and 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, apprenticeships and Gateway (a programme designed to help secondary school students experience workplace-based learning) 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 apprenticeships, is linked to the completion of national certificates and diplomas on the New Zealand Qualifications Framework. Learners can also gain credits through limited credit programmes and supplementary credit programmes, and recognition of prior learning and current competencies.

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 (INCLUDING MODERN APPRENTICES)<sup>1</sup>**

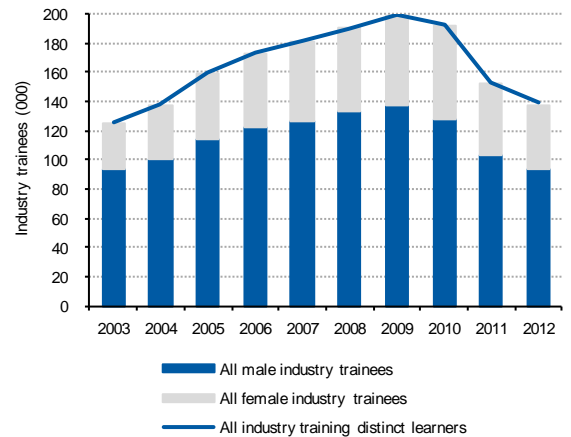
The number of industry trainees declined from 2011 to 2012. This was due to a number of factors, including changes to industry training operational rules in 2011 and the effects of a continued weak labour market. From 2011 to 2012, the number of trainees fell by 9.5 percent. This compared to a 3.6 percent fall from 2008 to 2009. Before this, the number of trainees had been increasing. From 2004 to 2008, the number of trainees averaged an increase of 8.5 percent per year.

**Number of workplace-based learners (incl. modern apprentices) in 2012**

Total	139,000	(down 9.5% on 2011)
Males	93,600	(down 9.5% on 2011)
Females	43,300	(down 11% on 2011)

**Note:** Each person involved in training is counted just once per year, regardless of the number of placements, industry training organisations or funds in which they have been active within that year. About a third of trainees are women. Women are unevenly spread among industries and this may reflect employment patterns in the labour market, eg over 80 percent of hairdressing, Careerforce (incl. health, aged care, disability, social services and cleaning services) and pharmacy trainees were women in 2012.

**Figure 6.1** Learners in industry training (including modern apprentices)



Source: Tertiary Education Commission.

**PARTICIPATION RATE IN INDUSTRY TRAINING**

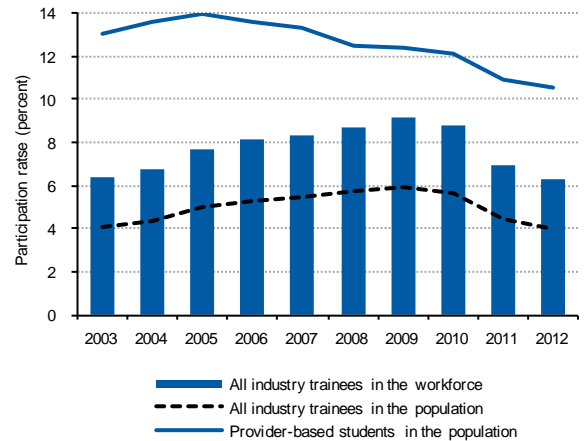
The decline in the proportion of the workforce in industry training slowed in 2012. From 2009 to 2011, the proportion of industry trainees decreased from 9.2 percent of the workforce to 6.9 percent. In 2012, the proportion was 6.3 percent. This measure is shown in Figure 6.2, together with the proportions of industry trainees and provider-based students in the population aged 15 years and over. Since 2010, the pattern of decline in the participation rate of industry trainees matches the pattern of decline for provider-based students.

**Participation rates of industry trainees in the employed workforce**

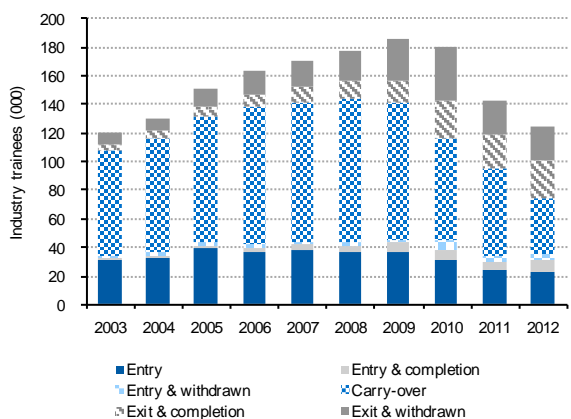
Year	2007	2008	2009	2010	2011	2012
Rate (%)	8.4%	8.7%	9.2%	8.8%	6.9%	6.3%

Source: Tertiary Education Commission and Statistics New Zealand (2013) *Household Labour Force Survey*.

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



**Figure 6.3** Number of industry trainees (excluding modern apprentices) by main activity



**ACTIVITY OF INDUSTRY TRAINEES**

The number of people entering and leaving industry training was steady until 2008. Following the weakening of the New Zealand economy in 2008, the number of trainees leaving without completing a qualification increased by 34 percent from 2008 to 2009 and by 37 percent from 2009 to 2010.

The number of new entrants to training declined from 2007 to 2008 with strong falls in 2010 and 2011. This reflected more difficult trading conditions in most industries during that time, with some trainees losing their positions, and employers taking on and training fewer new staff.

In 2010, inactive trainees were removed from funded training and, in 2011, changes to the operational funding rules aimed at improving achievement, also had an effect. The number of trainees leaving with a completed qualification increased by 47 percent from 2009 to 2010. Of trainees who had studied in previous years, 19 percent left with a qualification in 2010, compared to 11 percent in 2009.

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

### INDUSTRIES ACCESSING TRAINING

Figure 6.4 shows the distribution of trainees by the highest level of the Australian and New Zealand Industry Classification. Industries with the largest number of trainees include manufacturing, agriculture, forestry and fishing, health care and social assistance, public administration and safety, and the retail trade. The mining and electricity, gas, water and waste services industries have the highest workforce industry training participation rates.

**Workforce participation rate in industry training by selected industry in 2012**

	% in the employed workforce	% of all trainees
Mining	30	1.6
Electricity, gas, water and waste services	16	2.1
Public administration and safety	9.7	9.1
Agriculture, forestry and fishing	9.3	11
Manufacturing	7.3	14
Health care and social assistance	5.3	9.4
Construction	5.2	6.8

Source: Tertiary Education Commission and Statistics New Zealand, *Household Labour Force Survey*.

**Figure 6.4** Distribution of industry trainees by industry



### LEVEL OF TRAINING

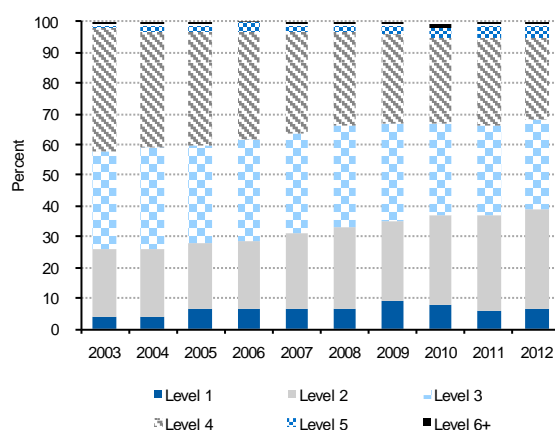
In 2012, two-thirds of industry trainees were enrolled in levels 1 to 3 as their highest level of training and 32 percent were enrolled at level 4 and above. Five percent studied at level 5 or higher – industry training organisations can only enrol up to a maximum of 10 percent of their learners at level 5 and above. The proportion of trainees at levels 1 and 2 has gradually increased to 39 percent in 2012, up from 26 percent in 2003, while the proportion studying at level 4 and higher has reduced to 32 percent, down from 42 percent in 2003. Māori and Pasifika trainees generally participate at lower levels than European or ‘other’ trainees.

**Distribution of trainees by ethnic group and highest qualification level in 2012**

	Europeans	Māori	Pasifika	Other
Levels 1 & 2	34%	43%	54%	34%
Level 3	28%	30%	28%	35%
Level 4 and higher	38%	27%	18%	31%

Source: Tertiary Education Commission.

**Figure 6.5** Distribution of industry trainees by highest level of training



### ETHNIC PROFILE OF INDUSTRY TRAINEES

The majority of industry trainees are European. However, this group has declined from 70 percent of all trainees in 2003 to 64 percent in 2012. Māori have traditionally participated in industry training in high numbers, making up 19 percent of all trainees from 2003 to 2008. Māori have declined to 15 percent of all trainees since 2009.

Of the workforce, the proportion of Māori participating in training has fallen from 12 percent in 2008 to 7.4 percent in 2012. Pasifika participation, as a proportion of the workforce, has also fallen and it is now under 10 percent, while European participation fell from 6.1 percent in 2008 to 4.7 percent in 2012.

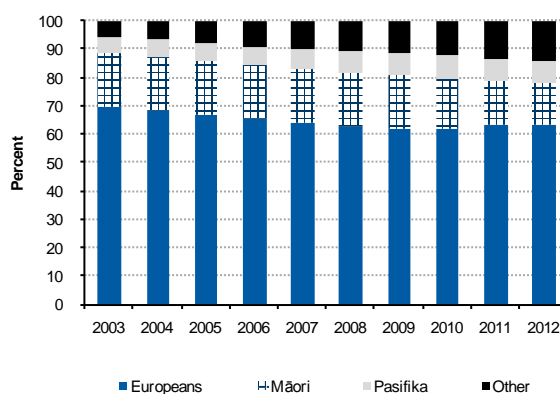
**Participation in industry training in the workforce by ethnic group**

	2008	2009	2010	2011	2012
Europeans	6.1%	6.5%	6.3%	5.3%	4.7%
Māori	12%	13%	12%	8.8%	7.4%
Pasifika	12%	13%	13%	9.5%	8.8%
Other	7.8%	7.8%	7.4%	6.5%	6.0%

Note: Trainees are counted in each ethnic group indicated.

Source: Tertiary Education Commission.

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



**AGE GROUPS VARY BY INDUSTRY**

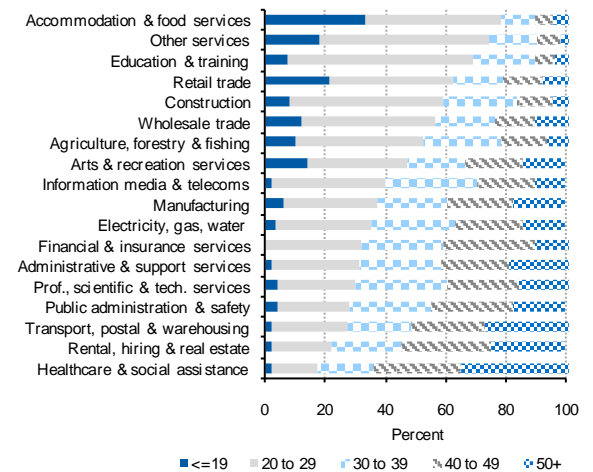
The age distribution of trainees varies considerably across industries. In 2012, younger trainees – those aged 15 to 19 years – comprised one-third of the trainees in accommodation and food services and one fifth of the trainees in retailing. More workers aged 40 years and over train in industries such as healthcare and social assistance; rental, hiring and real estate services; transport postal and warehousing; and public administration and safety. The decline in industry training in the workforce since 2008 has varied by age group with the strongest decline for those aged 20 to 34 years.

**Participation in industry training in the workforce by age group**

	2008	2009	2010	2011	2012
15 to 19 years	13%	13%	13%	12%	11%
20 to 24 years	16%	15%	15%	12%	11%
25 to 34 years	10%	11%	11%	8.2%	7.5%
35 to 44 years	7.8%	8.5%	8.0%	6.4%	5.7%
45 to 54 years	5.9%	6.8%	6.5%	4.9%	4.1%
55 to 64 years	3.9%	4.6%	4.4%	3.1%	2.6%
65 years and over	2.3%	2.8%	2.7%	1.5%	1.2%

Source: Tertiary Education Commission and Statistics New Zealand.

**Figure 6.7** Distribution of learners by selected industry and age group



**PROVIDING ACCESS TO QUALIFICATIONS-BASED LEARNING**

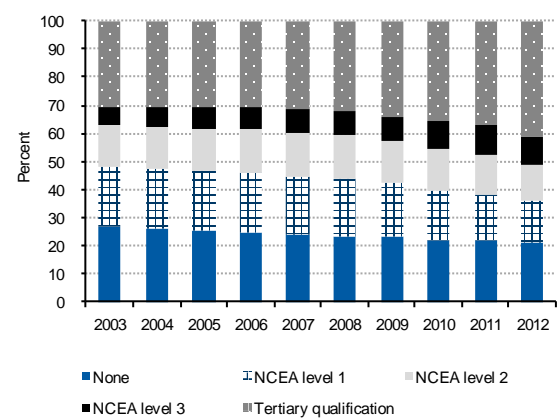
The mix of qualifications held by trainees prior to starting training changed rapidly in 2011 and 2012. Over half of all trainees in 2011 held an NCEA level 3 or higher qualification, compared to 37 percent in 2003. The largest increase has been in the proportion with tertiary qualifications (41 percent in 2012 compared to 31 percent in 2003). Of new entrants into industry training, 46 percent held a tertiary qualification in 2012, compared to 33 percent in 2008.

**New entrants into industry training by previous highest qualification**

	2008	2009	2010	2011	2012
None	22%	22%	21%	22%	21%
NCEA level 1 or equivalent	19%	17%	16%	14%	12%
NCEA level 2 or equivalent	15%	15%	16%	14%	12%
NCEA level 3 or equivalent	10%	11%	13%	11%	8.9%
Tertiary qualifications	33%	35%	34%	38%	46%

Source: Tertiary Education Commission and Statistics New Zealand.

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



**NATIONAL QUALIFICATION ACHIEVEMENT**

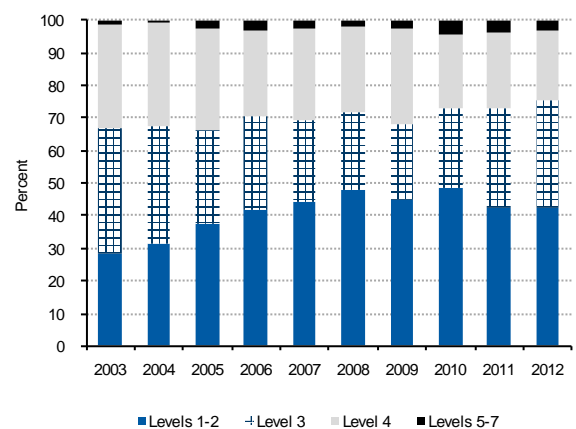
From a high of 46,000 qualifications awarded in 2010, the number declined by 17 percent in 2011 and by another 5 percent from 2011 to 2012. The method of qualification validation and reporting has changed with the introduction of a new industry training register in 2011, so comparisons with previous years should be made with caution. The proportion of national certificates gained at higher levels (level 4 or above) has declined from 32 percent in 2010 to 25 percent in 2012.

**Number of national certificates awarded by qualification level**

	2008	2009	2010	2011	2012
Levels 1-2	15,800	17,900	22,300	16,300	15,500
Level 3	7,860	9,350	11,400	11,800	11,900
Level 4	8,490	11,684	10,400	8,950	7,900
Levels 5-7	678	1,050	1,860	1,390	1,060
Total	32,831	40,000	46,000	38,400	36,350

Source: Tertiary Education Commission.

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



### NATIONAL CERTIFICATE ACHIEVEMENT

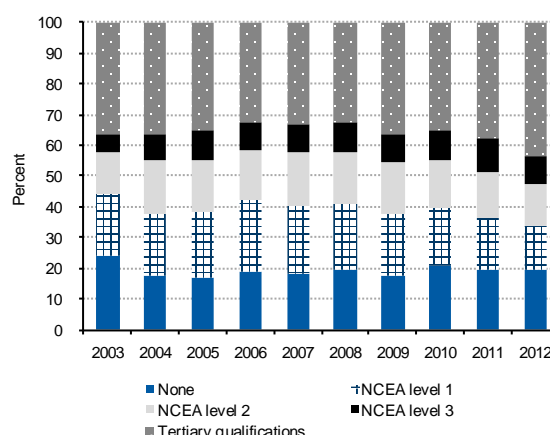
The proportion of national certificates gained by industry trainees with no previous qualification has remained steady at 20 percent of all qualifications gained. Trainees with tertiary qualifications accounted for 43 percent of all those who gained a national certificate in 2012, up from 37 percent in 2011. At all other qualification levels, the proportion of national certificates gained by industry trainees declined.

**Proportion of national certificates awarded by previous qualification level**

	2008	2009	2010	2011	2012
None	20%	18%	21%	20%	20%
NCEA level 1	22%	20%	18%	16%	14%
NCEA level 2	17%	17%	16%	15%	13%
NCEA level 3	10%	9.3%	10%	11%	9.5%
Tertiary qualifications	32%	37%	35%	37%	43%

Source: Tertiary Education Commission.

**Figure 6.10** Distribution of national certificates awarded by previous qualification level



### CREDIT ACHIEVEMENT

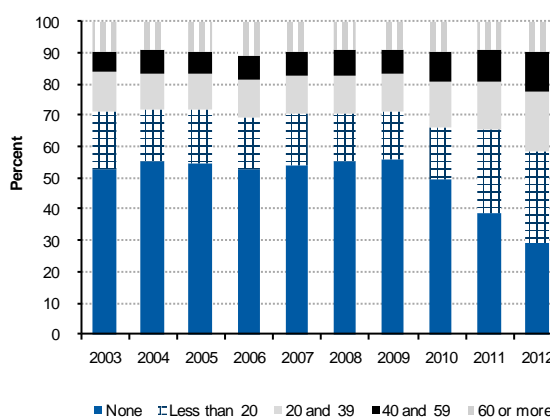
The proportion gaining between 40 and 59 credits has increased to 13 percent in 2012, up from 8.3 percent in 2008. The proportion gaining 20 or fewer credits has almost doubled between 2008 and 2012. The proportion of trainees gaining no credits per year has fallen to 29 percent in 2012, down from 55 percent in 2008. From 2011, trainees are required to attain at least one credit per year and inactive trainees were withdrawn from the register in 2010. The method of credit attainment validation and reporting has changed since the introduction of the industry training register in 2011, so comparisons with previous years should be made with caution.

**Distribution of number of credits achieved**

	2008	2009	2010	2011	2012
No credits	55%	56%	50%	39%	29%
Less than 20	15%	15%	17%	27%	29%
20 to 39	12%	12%	14%	15%	19%
40 to 59	8.3%	7.9%	9.3%	10%	13%
60 or more	9.2%	8.6%	9.8%	9.0%	9.4%

Source: Tertiary Education Commission.

**Figure 6.11** Distribution of credits awarded by qualification level



### FIVE-YEAR QUALIFICATION COMPLETION RATES

Of the industry trainees who started training in 2008, 36 percent had gained a national qualification by 2012, up 4 percentage points compared to trainees who started study in 2005. However, comparisons of data from 2011 onwards with that from previous years should be made with caution as the qualification validation process changed in 2011.

In 2012, 34 percent completed their qualification at the intended or higher level and 2.4 percent at a level lower than intended.

**Five-year qualification completion rates of industry trainees**

	Completion years: 2009	2010	2011	2012
At the intended or higher level	29%	35%	33%	34%
At a lower level	2.2%	2.1%	2.0%	2.4%
At any level	32%	37%	35%	36%

**Notes:**

1. These qualification completion rates are for industry trainees excluding modern apprentices.
2. Intended level is the programme qualification level at the time of starting training.
3. These qualification completion rates cover all programmes of study of varying duration.

Source: Ministry of Education and Tertiary Education Commission.

**Figure 6.12** Five-year qualification completion rates of industry trainees



**MODERN APPRENTICESHIPS**

The number of modern apprentices increased by 3.8 percent from 2011 to 2012, following decreases in 2011 and 2010. The recent decreases may have reflected the reluctance of some employers to take on and train young employees and new apprentices at a time of low economic growth. People who wish to enter an apprenticeship are mostly aged between 16 and 21 years.

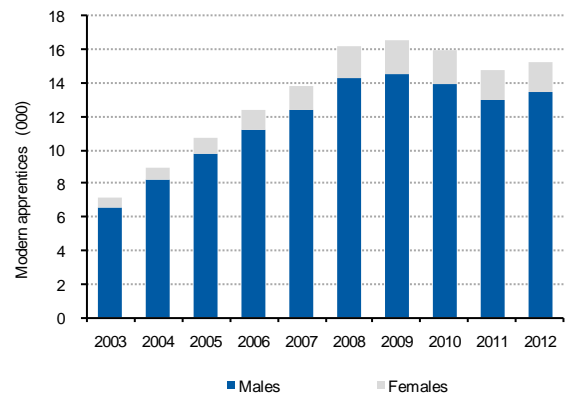
The number of female modern apprentices increased from 2011 to 2012 by 2.2 percent; however, women only accounted for 12 percent of the total number of modern apprentices in 2012.

**Number of modern apprentices in 2012**

All apprentices	15,300	(up 3.8% on 2011)
Males	13,500	(up 3.9% on 2011)
Females	1,790	(up 2.2% on 2011)
Proportion of the workforce (15 to 19 years)	15%	(13% in 2009)

Source: Tertiary Education Commission and Statistics New Zealand.

**Figure 6.13** Number of modern apprentices by gender



**ACTIVITY IN MODERN APPRENTICESHIPS**

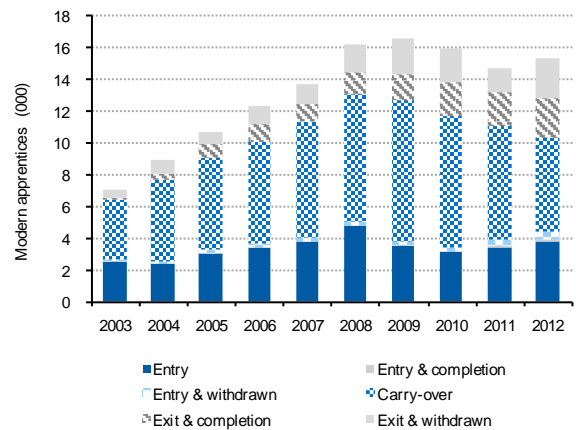
In 2012, 29 percent of modern apprentices were new entrants, and 39 percent were continuing training previously started. Sixteen percent of trainees completed a programme and stopped training and another 16 percent left without completing. The proportion of modern apprentices continuing training in 2009 was 53 percent, compared to 39 percent in 2012, while the proportion of new entrants in 2009 was 24 percent, compared to 29 percent in 2012. The distribution of modern apprentices by ethnic group has remained largely unchanged, with 81 percent of apprentices reporting to be European. Māori modern apprentices have a slightly higher workforce participation rate than other ethnic groups.

**Proportion of modern apprentices by ethnic group in 2012**

	% of the employed workforce	% of modern apprentices
Europeans	0.7	81
Māori	0.8	14
Pasifika	0.4	2.4
Other	0.2	3.4

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 modern apprentices by main activity



**MODERN APPRENTICES BY INDUSTRY**

Around a quarter of all modern apprentices were in the construction industry in 2012. Manufacturing accounted for 16 percent of apprentices in 2012 (up from 15 percent in 2011), while agriculture, forestry and fishing accounted for 12 percent of all apprentices (10 percent in 2011).

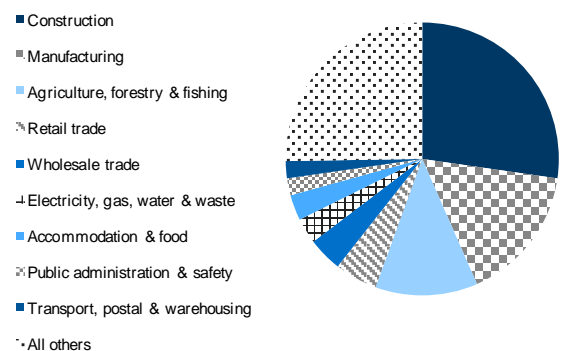
The proportion of apprentices in training with NCEA level 1 or equivalent declined from 32 percent in 2008 to 24 percent in 2012. The proportion in training with tertiary qualifications increased from 10 percent in 2008 to 20 percent in 2012.

**Proportion of modern apprentices by previous qualification level**

	2008	2009	2010	2011	2012
None	15%	14%	13%	13%	13%
NCEA level 1	32%	31%	30%	27%	24%
NCEA level 2	30%	31%	32%	32%	31%
NCEA level 3	12%	13%	13%	13%	12%
Tertiary qualification	10%	11%	11%	16%	20%

Source: Tertiary Education Commission.

**Figure 6.15** Distribution of apprentices by industry



### FIVE-YEAR QUALIFICATION COMPLETION RATES

Modern apprentices often gain lower-level qualifications on the way towards their intended qualification (a process called ‘staircasing’). Figure 6.16 shows the proportions who achieved their intended final qualification within five years and who attained at lower qualification levels. Of the apprentices who started study in 2007, 35 percent had gained a qualification at the intended or higher level by 2012, while 11 percent gained a qualification at a lower level than intended.

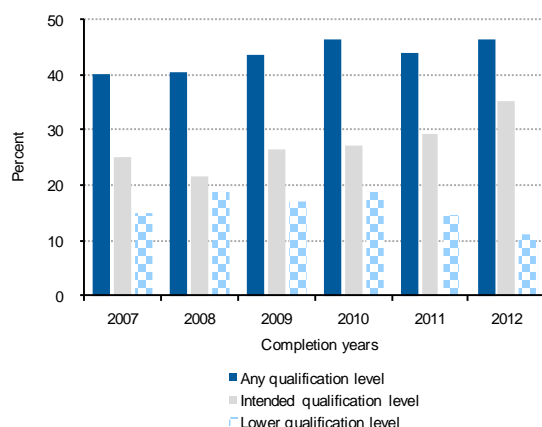
#### Five-year qualification completion rates of modern apprentices

Completion years:	2008	2009	2010	2011	2012
At intended or higher level	22%	27%	27%	29%	35%
At a lower level	19%	17%	19%	15%	11%
At any level	41%	44%	44%	44%	46%

**Notes:** 1. Qualification completion rates are for modern apprentices only. 2. These qualification completion rates cover all programmes of study of varying durations.

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

**Figure 6.16** Five-year qualification completion rates of modern apprentices



### MORE GATEWAY STUDENTS

The Gateway programme was introduced in 2001 to provide school students with workplace experience while learning. The programme is open to all schools. Participation in Gateway has risen strongly in recent years, while the number of students remained stable from 2011 to 2012. Students aged 16 years are the largest group in the programme, but students aged 17 years are increasing in number – up from 32 percent of students in 2007 to 38 percent in 2012.

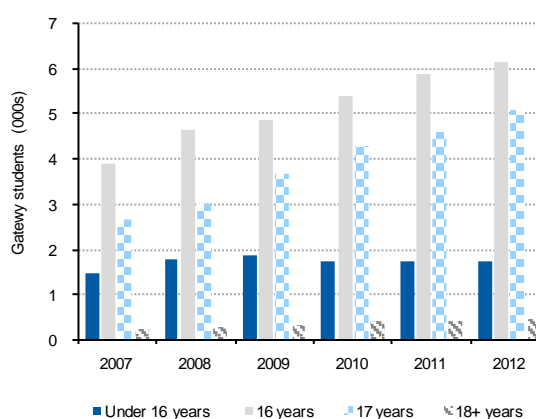
#### Number of Gateway students by age group

	2007	2008	2009	2010	2011	2012
Gateway students	8,240	9,680	10,800	11,800	12,600	13,400
% change from previous year	23	11	11	10	6.4	6.6
	Proportions by age (%)					
15 years or under	18	18	17	15	14	13
16 years	47	48	45	46	47	46
17 years	32	31	34	36	36	38
18 years and over	3	3	3	3	3	3

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

**Source:** Tertiary Education Commission.

**Figure 6.17** Gateway students by age group



### OUTCOMES OF GATEWAY

Gateway students continued to achieve positive outcomes at a similar rate to previous years, with 95 percent of students progressing to a higher level of education or employment following placement.

The proportion of students gaining an employment destination has decreased: 19 percent of Gateway students entered employment in 2012, compared to 35 percent in 2007. The decrease in recent years in the proportion of Gateway students entering employment coincides with the weaker employment conditions for young people, even though the New Zealand economy strengthened in 2011 and 2012.

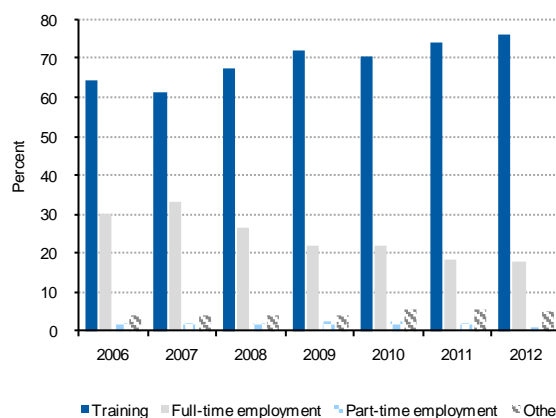
#### Proportion of students progressing to further education or employment

	2007	2008	2009	2010	2011	2012
To education	61%	68%	72%	71%	74%	76%
To employment	35%	28%	24%	24%	20%	19%

**Note:** Outcomes are measured two months after the student leaves a Gateway placement.

**Source:** Tertiary Education Commission.

**Figure 6.18** Gateway students by outcome achieved



# 7 PROVIDER-BASED STUDENTS IN LEVEL 1 TO 3 QUALIFICATIONS

This chapter includes:

- ▲ an overview of students in level 1 to 3 qualifications
- ▲ students achievement component-funded learners
- ▲ Foundation-Focused Training Opportunities
- ▲ Youth Guarantee fees-free places, and
- ▲ the Secondary-Tertiary Alignment Resource.

From 2011 to 2012, there was a small decrease in the number of students in provider-based level 1 to 3 certificate study. This contrasts with a period of significant decrease in the previous years.

The number of international students decreased slightly from 2011 to 2012. The largest number continues to come from Asia.

There has also been a small decrease in the number of student achievement component-funded domestic students at level 1 to 3. The largest decrease was for those studying level 2 certificates. The number studying level 1 and 2 certificates at polytechnic decreased significantly, while in level 3 certificates, the main decrease was in those studying at private training establishments.

By contrast, there was an increase in students participating in Foundation-Focused Training Opportunities. This programme was re-focused in 2011 to target people who are disadvantaged in terms of employment and educational achievement. The outcomes being achieved with this more disadvantaged group are lower than were achieved under the previous programme. One reason for the apparent reduction in achievement levels was the shift of students who were more work-ready to the Ministry of Social Development training for work programme.

As of 2012, the Youth Training programme was discontinued and its funding was transferred to Youth Guarantee fees-free places. Youth Training providers were able to contract fees-free places. This enabled a large increase in the number of fees-free places. All of these additional places were available at private training establishments.

## PROVIDER-BASED LEARNING AT LEVELS 1 TO 3

- ▲ Provision of level 1 to 3 qualifications is funded through the student achievement component and specific training funds. It includes enrolments in level 1 to 3 certificates at polytechnics, wānanga and private training establishments.
- ▲ International students can also enrol in level 1 to 3 qualifications at providers.
- ▲ For people who are disadvantaged in the labour market, the government provides specialised training programmes through Foundation-Focused Training Opportunities.
- ▲ Tertiary study options are also provided through programmes aimed at improving the transition and pathways from senior secondary school to vocational education. These include fees-free places for 16 and 17 year olds, as part of the Youth Guarantee programme, and the Secondary-Tertiary Alignment Resource, which allows schools to purchase courses from tertiary education providers.

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

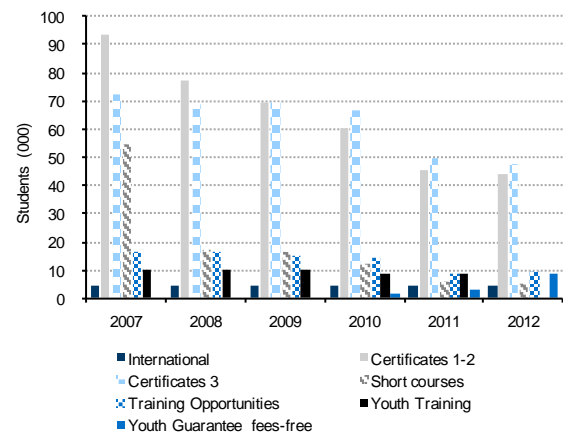
Most domestic students in level 1 to 3 qualifications are funded through the student achievement component fund. In 2012, the number of component-funded students at level 3 was slightly higher than the number at levels 1 and 2.

Overall, the number of component-funded students in level 1 to 3 qualifications decreased, reflecting continued tightening of funding allocations. The decreases from 2011 to 2012 continued for short courses and most level 1 to 3 qualifications.

In 2012, the Youth Training programme was ceased. Funding was transferred to Youth Guarantee fees-free places. Youth Training providers were able to apply to deliver these places.

Source: Ministry of Education and Tertiary Education Commission.

Figure 7.1 Students in level 1 to 3 qualifications

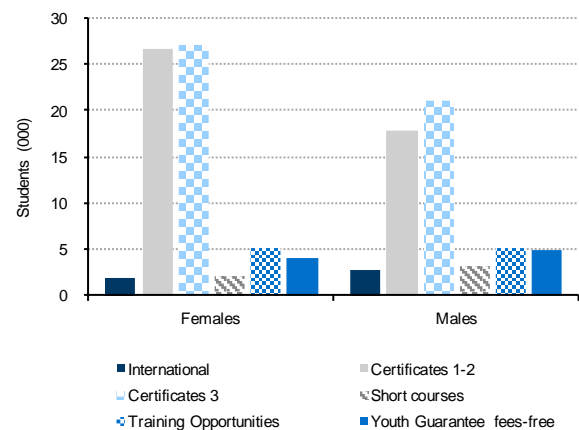


### LEVEL 1 AND 3 STUDENTS BY GENDER

Women are more likely than men to be enrolled in level 1 to 3 certificates. A higher proportion of men than women were enrolled in short courses, Youth Guarantee fees-free places 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 enrolments by international students in level 1 to 3 qualifications decreased by 4.5 percent from 2011 to 2012. The largest number of students continued to come from Asia.

#### International students in level 1 to 3 qualifications in 2012

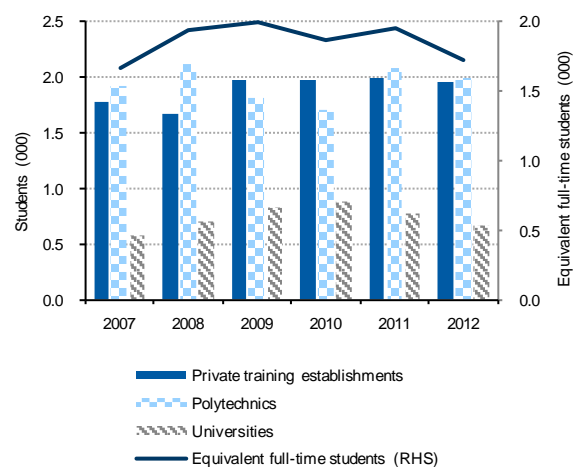
Total	4,590	(down 4.5% on 2011)
Private training establishments	1,950	(down 1.8% on 2011)
Polytechnics	1,990	(down 4.2% on 2011)
Universities	666	(down 12.6% on 2011)

#### Region of origin for international students in level 1 to 3 qualifications in 2012

Asia	3,140	(down 2.9% on 2011)
Middle East	382	(down 34% on 2011)
Europe	356	(up 25% on 2011)
Pacific	338	(down 8.6% on 2011)

The amount of study at levels 1 and 3 by international students decreased from 2011 to 2012 to 1,720 equivalent full-time student units (down by 12 percent).

Figure 7.3 Enrolments by international students in level 1 to 3 qualifications





## STUDENT ACHIEVEMENT COMPONENT-FUNDED STUDENTS

### FOUNDATION SKILLS AND ENTRY-LEVEL JOB SKILLS

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 student achievement component-funded learners at these levels now study towards level 3 certificates. There were more enrolments at level 1 in 2012 but, before this, numbers in levels 1 and 2 had been decreasing for a number of years. Enrolments at level 3 fell in 2011 and 2012 while these numbers had been steady before this.

#### Student achievement component-eligible learners in 2012

Level 1	8,000	(up 14% on 2011)
Level 2	37,600	(down 5.6% on 2011)
Level 3	47,800	(down 4.9% on 2011)
Total	86,600	(down 4.3% on 2011)

Expressed as equivalent full-time student units, enrolments in student achievement component-eligible certificates totalled 40,800 down 0.4 percent on 2011.

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

The number of students studying towards level 1 and 2 certificates has been decreasing. In 2012, 54 percent studied at polytechnics. This is where there has been the largest decrease since 2007. The numbers at wānanga have been smaller, while the downward trend at wānanga has been weaker than at polytechnics.

#### Students in level 1 and 2 certificates in 2012

Total	44,300	(down 2.6% on 2011)
Polytechnics	23,700	(down 11% on 2011)
Wānanga	17,300	(up 3.6% on 2011)

**Note:** In 2012, private training establishments could not take funded enrolments in level 1 and 2 qualifications.

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

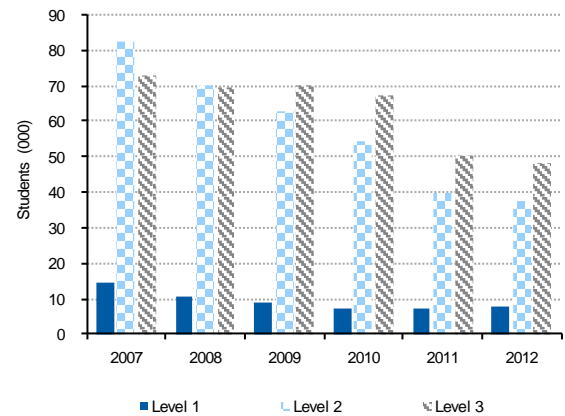
The largest number of students at levels 1 and 2 were studying towards certificates in society and culture. These were mostly in Māori language and culture and English as an additional language. Management and commerce was the next largest field of study, with business administration and office studies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

#### Students in level 1 and 2 certificates in 2012

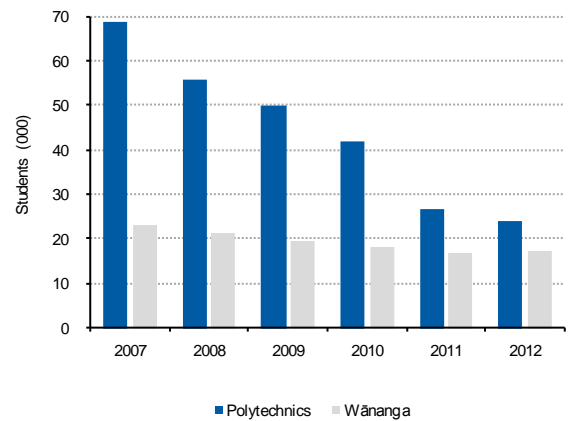
##### Most common fields of study

Society and culture	13,400	(down 3.3% on 2011)
Management and commerce	8,160	(down 12% on 2011)
Agriculture, environmental and related studies	7,080	(up 13% on 2011)
Mixed field programmes	4,990	(up 32% on 2011)
Engineering and related technologies	3,740	(down 2.2% on 2011)

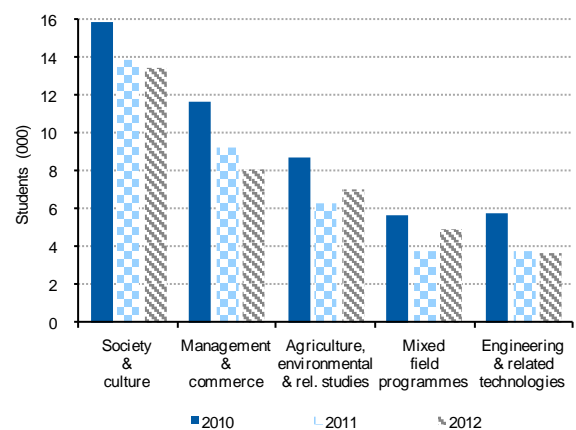
**Figure 7.4** Student achievement component-funded students by qualification level



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



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



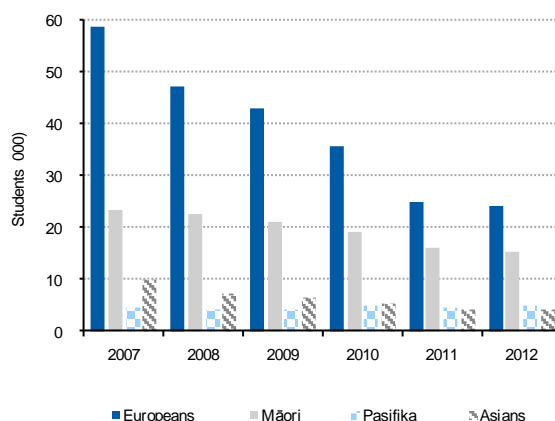
## STUDENT ACHIEVEMENT COMPONENT-FUNDED STUDENTS

### CHARACTERISTICS OF LEVEL 1 AND 2 STUDENTS

#### Characteristics of level 1 and 2 students in 2012

Studying full-time	43%
Employed in year prior to enrolment	48%
No school qualification	36%
Females	60%
Aged under 25 years	30%
Aged 25 to 39 years	30%
Aged 40 years and over	41%
Europeans	55%
Māori	35%
Pasifika	11%
Asians	9%

Figure 7.7 Level 1 and 2 students by ethnic group



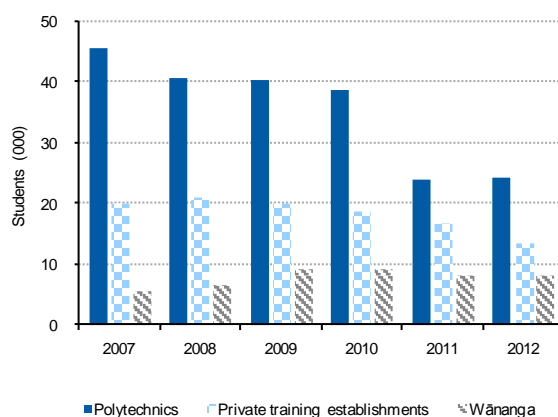
### LEVEL 3 STUDENTS BY SUB-SECTOR

The majority of level 3 component-funded learners 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 2012

Total	47,800	(down 4.9% on 2011)
Polytechnics	24,100	(up 0.6% on 2011)
Private training establishments	13,400	(down 19% on 2011)
Wānanga	8,080	(up 0.7% on 2011)

Figure 7.8 Students in level 3 certificates by sub-sector



### LEVEL 3 STUDENTS BY FIELD OF STUDY

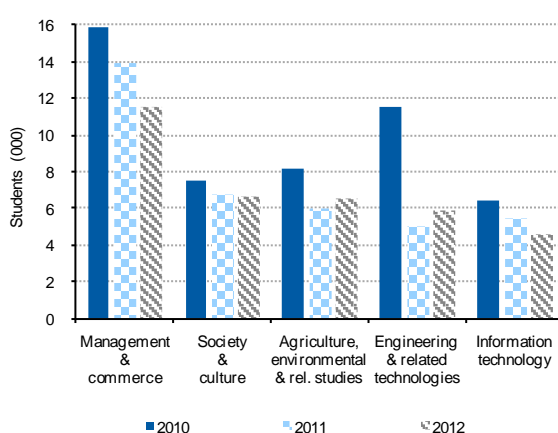
The largest numbers of students at level 3 were studying towards certificates in management and commerce in 2012. These were mostly in business administration and computing. Society and culture was the next largest field, with English for speakers of other languages being the dominant qualification in this field.

#### Students in level 3 certificates in 2012

##### Most common fields of study

Management and commerce	11,500	(down 18% on 2011)
Society and culture	6,700	(down 1.4% on 2011)
Agriculture, environmental and related studies	6,550	(up 9.8% on 2011)
Engineering and related technologies	5,880	(up 16% on 2011)
Information technology	4,590	(down 16% on 2011)

Figure 7.9 Students in level 3 certificates by field of study



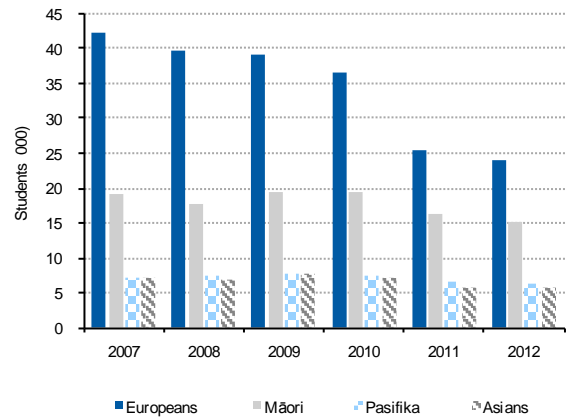
STUDENT ACHIEVEMENT COMPONENT-FUNDED STUDENTS

CHARACTERISTICS OF LEVEL 3 STUDENTS

Characteristics of level 3 students in 2012

Studying full-time	65%
Employed in year prior to enrolment	44%
No school qualification	31%
Females	56%
Aged under 25 years	42%
Aged 25 to 39 years	28%
Aged 40 years and over	30%
Europeans	50%
Māori	32%
Pasifika	13%
Asians	12%

Figure 7.10 Level 3 students by ethnic group



STUDENTS IN SHORT COURSES

The number of students enrolled in courses of one week or less continued to decrease in 2012. The decreases in these enrolments reflect effects of tightened funding rules and the cutting of government funding for regulatory compliance courses.

Nearly all short courses were delivered at polytechnics in 2012.

Students in short courses in 2012

Total students	5,250	(down 9.9% on 2011)
Equivalent full-time students	114	(down 8.0% on 2011)

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

Figure 7.11 Students and equivalent full-time student units in courses of less than one week's duration

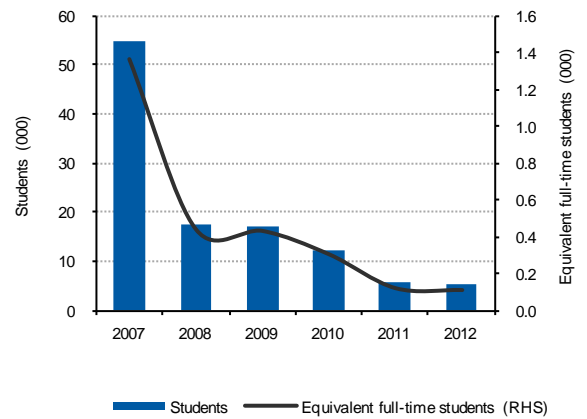


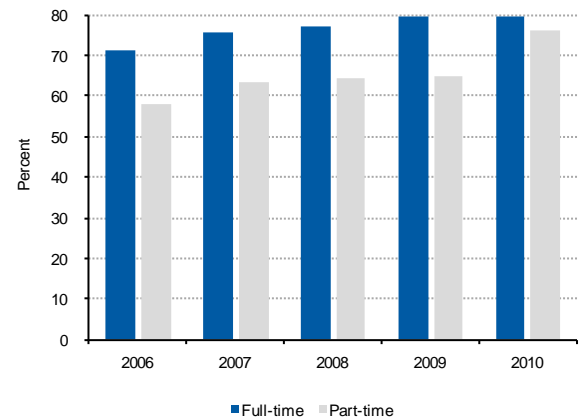
Figure 7.12 First-year retention rates of domestic students in level 1 to 3 certificates by study type

FIRST-YEAR RETENTION

Seventy-eight percent of domestic students who started a level 1 to 3 certificate in 2011 either completed it in the same year or were still studying towards it in 2012. The rate was higher for full-time students, at 80 percent, and lower for part-time students, at 76 percent. In both cases rates have been increasing since 2007.

First-year retention rates in 2012 (for domestic students who started study in 2011)

	Part-time	Full-time
Polytechnics	69%	78%
Private training establishments	81%	84%
Wānanga	97%	80%
Māori	80%	74%
Pasifika	79%	79%
Asians	79%	86%
Europeans	74%	80%



## STUDENT ACHIEVEMENT COMPONENT-FUNDED STUDENTS

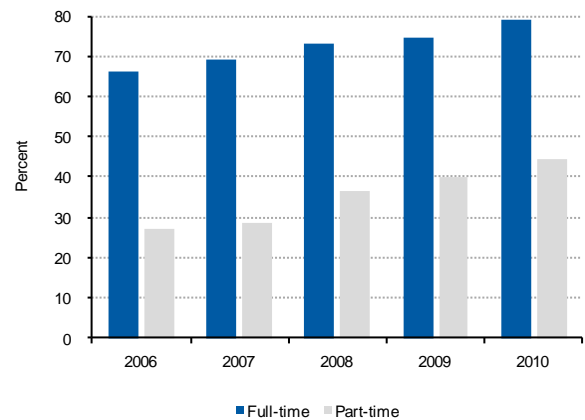
### THREE-YEAR QUALIFICATION COMPLETION

Fifty-seven percent of domestic students who started a level 1 to 3 certificate in 2010 had completed it by 2012. The rate was higher for full-time students, at 79 percent, and much lower for part-time students, at 44 percent. In both cases rates have been increasing over the last four years.

#### Three-year qualification completion rates in 2012 (for domestic students who started study in 2010)

	Part-time	Full-time
Polytechnics	35%	76%
Private training establishments	61%	84%
Wānanga	72%	83%
Māori	48%	75%
Pasifika	51%	76%
Asians	56%	82%
Europeans	41%	80%

**Figure 7.13** Three-year qualification completion rates of domestic students in level 1 to 3 certificates by study type



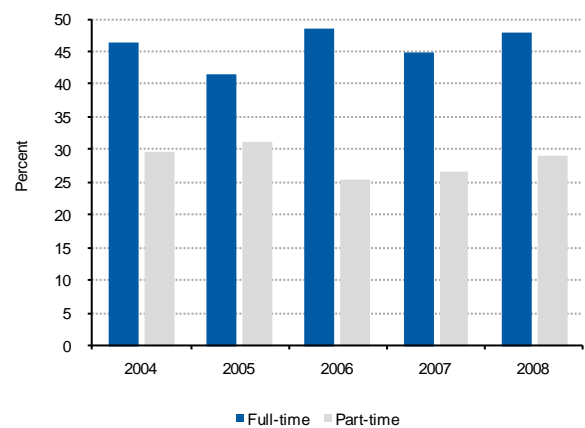
### FIVE-YEAR PROGRESSION

Thirty-three percent of domestic students who started a level 1 to 3 certificate in 2008 had gone on to study at a higher level by 2012. The rate was higher for full-time students, at 48 percent, and much lower for part-time students, at 29 percent. The rate has varied for both full-time and part-time students over the last ten years.

#### Progression rates in 2012 (for domestic students who started study in 2008)

	Part-time	Full-time
Polytechnics	27%	46%
Private training establishments	33%	51%
Wānanga	35%	48%
Māori	32%	51%
Pasifika	33%	48%
Asians	36%	42%
Europeans	27%	48%

**Figure 7.14** Five-year progression rates of domestic students in level 1 to 3 certificates by study type



**FOUNDATION-FOCUSED TRAINING OPPORTUNITIES**

From 2011, Training Opportunities was split into Foundation-Focused Training Opportunities and Ministry of Social Development training for work programmes. This split caused a significant drop in the numbers in the programme in 2011.

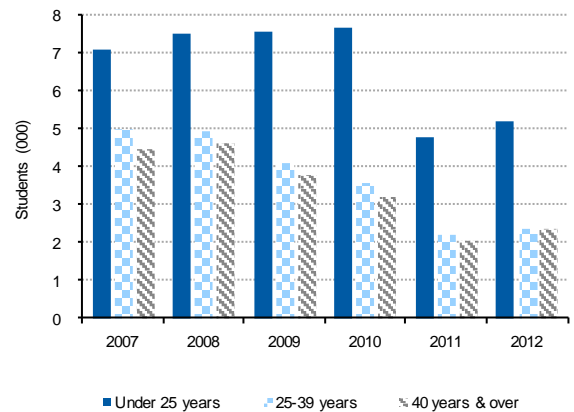
Foundation-Focused Training Opportunities is a full-time, fully-funded programme providing vocational and foundation skills for people who are disadvantaged in terms of employment and educational achievement.

**Numbers of trainees in 2012**

Total	9,870	(up 11% on 2011)
Women	50%	
Māori 41%, Europeans 33%, Pasifika 15%, Asians 6.5%, Other ethnic group 4.5%.		
Aged 18 to 24 years 53%, aged 25 to 39 years 24%, aged 40 years and over 24%.		

Source: Tertiary Education Commission.

**Figure 7.15** Trainees in Foundation-Focused Training Opportunities by age group



Note: Data for 2006 to 2010 refers to Training Opportunities.

**CREDITS GAINED IN FOUNDATION-FOCUSED TRAINING OPPORTUNITIES**

About one in three trainees gain more than 20 credits on the New Zealand Qualifications Framework. About one in four trainees did not gain any credits in 2011 and 2012. One reason for the apparent reduction in achievement levels between 2010 and 2011 is the change in the targeting of the programme that occurred when it was split from 2011.

**Credits gained through Foundation-Focused Training Opportunities in 2012**

No credits	27%	(26% in 2011)
1-20 credits	44%	(43% in 2011)
21-40 credits	15%	(16% in 2011)
41-60	8.1%	(7.8% in 2011)
More than 61 credits	6.5%	(7.2% in 2011)

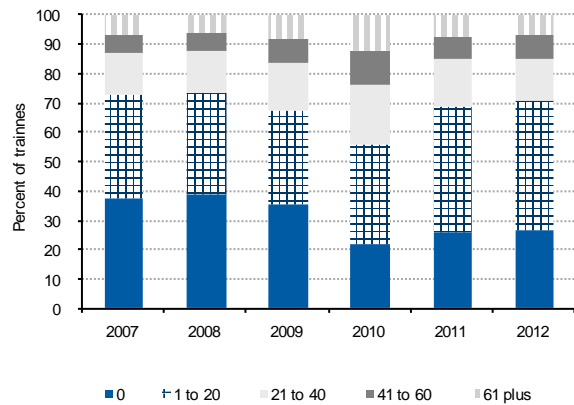
Proportion with more than 20 credits:

Māori 30%, Asians 30%, Europeans 29%, Pasifika 27%, Other ethnic group 39%.

Women 32%, men 26%.

Source: Tertiary Education Commission.

**Figure 7.16** Credits gained by trainees in Foundation-Focused Training Opportunities



Note: Data for 2006 to 2010 refers to Training Opportunities.

**OUTCOMES OF FOUNDATION-FOCUSED TRAINING OPPORTUNITIES**

In 2011 and 2012, a lower proportion of trainees went on to employment than in previous years. This reflects the split of the programme with those most ready to make a successful transition to the labour market being allotted to the Ministry of Social Development programme. The proportion with other outcomes also increased in 2011 and 2012.

**Outcomes achieved in Foundation-Focused Training Opportunities in 2012**

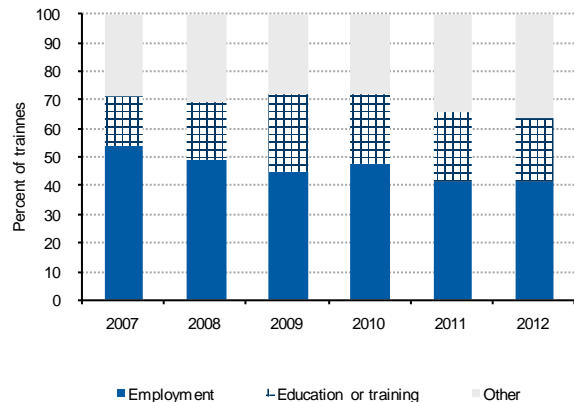
To employment	42%	(41% in 2011)
To education and training	22%	(24% in 2011)
Other	36%	(34% in 2011)

In 2012, European and Pasifika trainees were more likely to move to employment than trainees in other ethnic groups. Asian trainees were more likely than European, Maori and Pasifika trainees 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 7.17** Outcomes achieved by trainees in Foundation-Focused Training Opportunities



Note: Data for 2006 to 2010 refers to Training Opportunities.

### YOUTH GUARANTEE PLACES AND ACHIEVEMENT

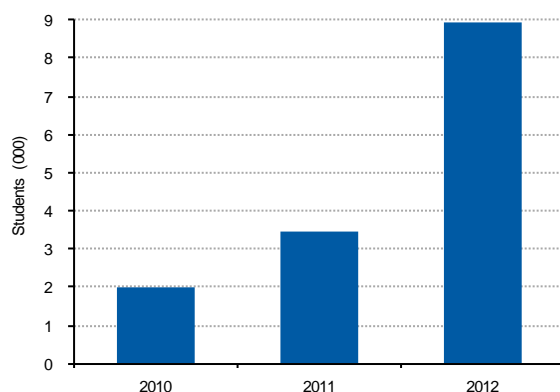
Fees-free places were created as part of the Youth Guarantee programme in 2010. They allow 16 and 17 year-olds to study for vocational certificates at tertiary providers. In 2012, the Youth Training programme was discontinued and providers could apply to deliver fees-free places. As a result the total number of Youth Guarantee places available increased.

In 2012, 8,920 students took up these places. Fifty-six percent of students were male, 40 percent were European, 42 percent Māori and 15 percent Pasifika.

The median average credit achievement across the 116 Youth Guarantee providers in was 38, up from 24 in 2011. Of the 116 providers, 90 increased their average credit achievement from 2011 to 2012 and 26 showed a reduction. Course completion rates in 2012 were: 55 percent at level 1; 60 percent at level 2; and 70 percent at level 3.

Source: Ministry of Education and Tertiary Education Commission.

Figure 7.18 Students in Youth Guarantee



### YOUTH GUARANTEE LEARNERS BY SUB-SECTOR

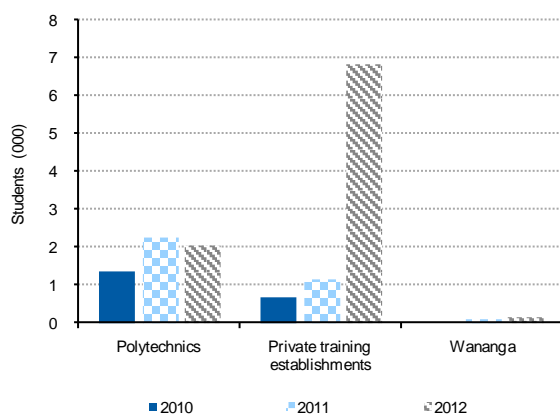
All of the additional fees-free places in 2012 were funded in private training establishments. These were funded at providers who had previously delivered Youth Training programmes.

#### Youth Guarantee learners at tertiary education providers in 2012

Polytechnics	22%
Private training establishments	76%
Wānanga	1.6%

Source: Ministry of Education and Tertiary Education Commission

Figure 7.19 Students in Youth Guarantee by sub-sector



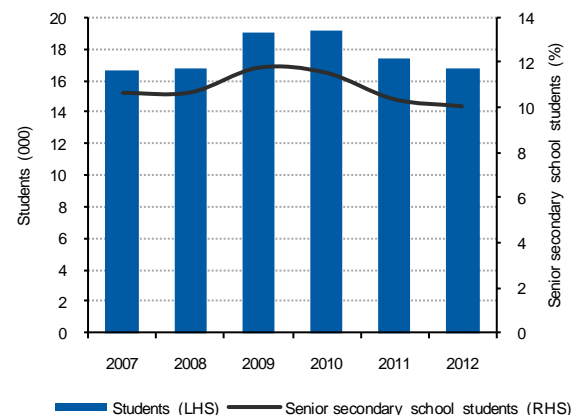
### SECONDARY-TERTIARY ALIGNMENT RESOURCE

The Secondary-Tertiary Alignment Resource (STAR) assists schools to meet the needs of their senior secondary students by providing funding for a wide range of courses. In 2012, STAR students represented 10 percent of secondary school students (year 11 and above).

#### STAR students at tertiary education providers in 2012

Total students	16,800	(down 3.6% on 2011)
Equivalent full-time students	1,590	(down 4.4% on 2011)
At 18 polytechnics	84%	
At 11 private training establishments	17%	
At 6 universities	6.6%	
In mixed field programmes	27%	
In food, hospitality and personal services	17%	
In engineering and related technologies	16%	
In agriculture, environmental and related studies	11%	
In society and culture	11%	

Figure 7.20 Students in STAR courses at tertiary education providers



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

This chapter includes:

- ▲ trends in level 4 to 7 non-degree qualifications
- ▲ qualification achievement of level 4 to 7 non-degree students, and
- ▲ international students in level 4 to 7 non-degree qualifications.

From 2011 to 2012, the number of domestic and international students enrolled in level 4 to 7 non-degree study decreased. The overall study load, as measured in equivalent full-time student units, also declined.

For domestic students, this fall occurred in level 5 to 7 diplomas, with study in level 4 certificates increasing slightly. For international students the reverse situation occurred, with less study in level 4 certificates and slightly more in level 5 to 7 diplomas.

In 2012, there were 114,000 domestic students enrolled in level 4 to 7 non-degree study and 17,600 international students.

### Domestic students

- ▲ Enrolments by men declined slightly more from 2011 to 2012 than those by women.
- ▲ Enrolments by domestic students aged 25 years and over declined more from 2011 to 2012 than those by students aged 18 to 24 years.
- ▲ Enrolments by European and Asian students declined more from 2011 to 2012 than by Māori students, while the number of enrolments by Pasifika students increased.

Enrolments in level 4 to 7 non-degree study declined substantially at universities, although only a small percentage of students in level 4 to 7 qualifications study at a university. Enrolments at Wānanga showed less of a decline compared with other tertiary providers.

Study in information technology was down a little and up somewhat in food, hospitality and personal services. Study in education has declined since 2009. Following a large drop from 2010 to 2011, study in education also fell substantially from 2011 to 2012.

The rate at which students complete these qualifications has increased this year, but the numbers of students completing is showing signs of reaching a plateau. The rate rise is therefore primarily driven by falling enrolment numbers at these qualification levels. It is most pronounced for level 4 certificates.

Overall, five-year completion rates for these qualifications for full-time students are on a par with the full-time completion rate for bachelor degrees with almost three out of every four students completing a qualification. However, there is variation in this rate between ethnic groups.

The rate at which students progress onto higher-level study after completing a level 4 certificate is higher than for students who complete a level 5 to 7 diploma. The one-year progression rate has been increasing for level 4 certificate graduates, but for graduates of level 5 to 7 diplomas the rate has been relatively constant over the years.

**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

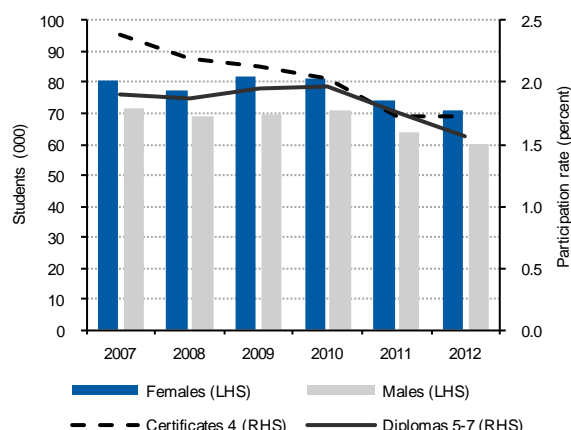
Total student numbers, both domestic and international, enrolled in level 4 to 7 non-degree study decreased by 4.7 percent from 2011 to 2012. Enrolments by women dropped by 4.2 percent and for men the drop was 5.3 percent. Fifty-four percent of students in level 4 to 7 non-degree study were women in 2012 and this proportion has remained stable over the past 10 years.

The participation rate of New Zealanders in level 4 certificates remained steady at 1.7 percent, while for level 5 to 7 diplomas it declined in 2012. Participation in level 4 certificates has fallen from 2007 to 2011, while a decline in participation in level 5 to 7 diplomas has only occurred over the past two years.

#### Students in level 4 to 7 non-degree study by gender in 2012

Total	131,000	(down 4.7% on 2011)
Females	71,000	(down 4.2% on 2011)
Males	60,300	(down 5.3% on 2011)

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



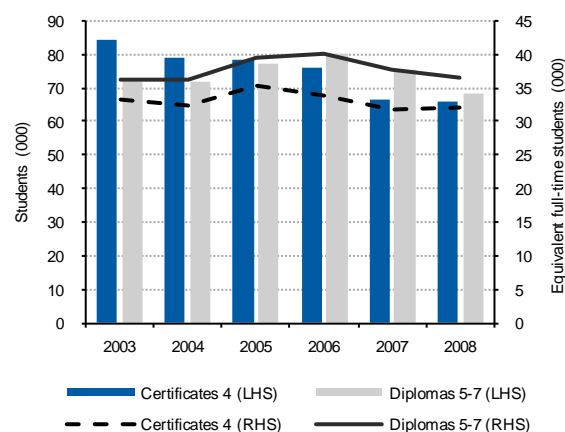
### ENROLMENTS BY LEVEL OF STUDY

While total student numbers declined for both level 4 certificates and level 5 to 7 diplomas, the greater decline was in diploma study. However, domestic student numbers, and the amount of study as measured by equivalent full-time student units, increased slightly in level 4 certificates.

#### Enrolments in level 4 to 7 non-degree study by level in 2012<sup>1</sup>

	Students	% change from 2011	Equivalent full-time student units	% change from 2011
<b>All students</b>	131,000	-4.7%	68,400	-1.6%
Certificates 4	66,200	-0.4%	32,000	+0.5%
Diplomas 5-7	68,500	-8.9%	36,400	-3.3%
<b>Domestic students</b>	114,000	-4.8%	58,200	-1.7%
Certificates 4	61,200	+0.5%	29,700	+1.1%
Diplomas 5-7	55,500	-10%	28,500	-4.4%

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



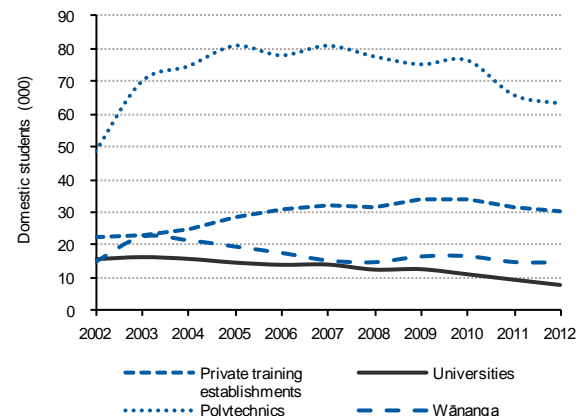
### TYPE OF PROVIDER

Most domestic students who study level 4 to 7 non-degree qualifications are enrolled at polytechnics. The latest fall in the number of domestic students was highest at universities and lowest at wānanga. Historically, private training establishments have been increasing their numbers, but this trend is showing signs of reversing. All other provider types have more or less declining numbers of students enrolled at these levels in recent years.

#### Domestic students in level 4 to 7 non-degree study by provider type in 2012

Total	114,000	(down 4.8% on 2011)
Polytechnics	63,200	(down 4.0% on 2011)
Private training establishments	30,100	(down 5.0% on 2011)
Wānanga	14,400	(down 1.0% on 2011)
Universities	7,630	(down 18% on 2011)

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



<sup>1</sup> Diplomas 5-7 include certificates at levels 5 to 7 unless otherwise stated.



**FIELD OF STUDY**

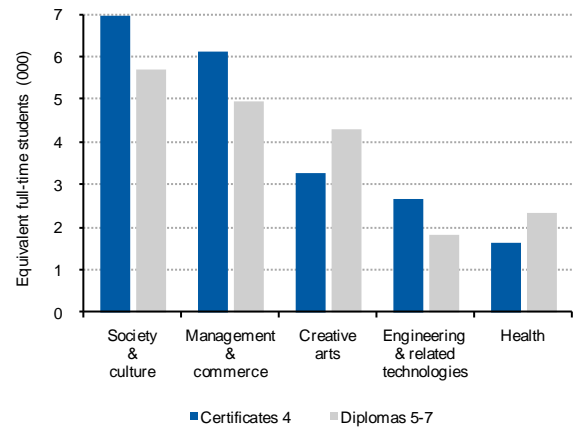
The most common fields of study continue to be society and culture and management and commerce. Study loads remained fairly static for many fields of study, but declined in information technology, and fell substantially in education. Study in the field of education fell 19 percent from 2011 to 2012, and 41 percent since 2009. There was a substantial increase in the study of food, hospitality and personal services from 2011 to 2012.

**Domestic equivalent full-time student units in level 4 to 7 non-degree study by selected broad fields of study in 2012**

Society and culture	12,700	(down 3.1% on 2011)
Management and commerce	11,000	(up 1.7% on 2011)
Creative arts	7,580	(down 0.9% on 2011)
Engineering and related technologies	4,460	(up 0.2% on 2011)
Food, hospitality and personal services	3,850	(up 7.4% on 2011)
Information technology	3,280	(down 6.1% on 2011)
Education	3,100	(down 24% on 2011)

Note: Figure 8.4 uses equivalent full-time student units.

**Figure 8.4** Domestic students in level 4 to 7 non-degree study for the most common fields of study in 2011



**ETHNIC GROUP**

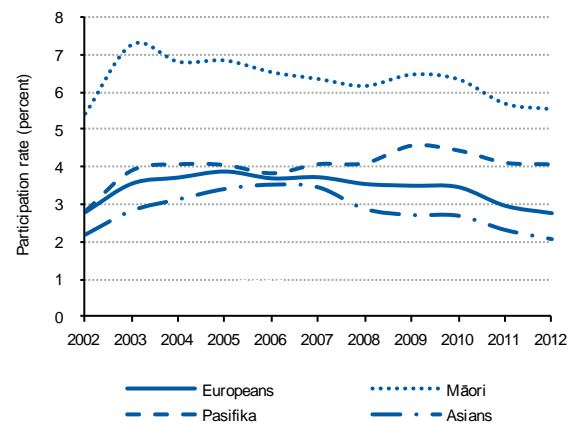
While the majority of domestic enrolments in level 4 to 7 non-degree study are by students from the European ethnic group, Māori have the highest participation rate at this level of study.

Most ethnic groups showed decreases in level 4 to 7 enrolments from 2011 to 2012. European and Asian students had the largest decreases in enrolments at these levels. For Māori students the decrease in enrolments at these levels was smaller, while those by Pasifika students increased.

**Domestic students enrolled in level 4 to 7 non-degree study by ethnic group in 2012**

Europeans	68,600	(down 6.6% on 2011)
Māori	29,400	(down 1.0% on 2011)
Pasifika	12,000	(up 1.7% on 2011)
Asians	10,500	(down 7.8% on 2011)
Other	5,140	(up 0.9% on 2011)

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



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

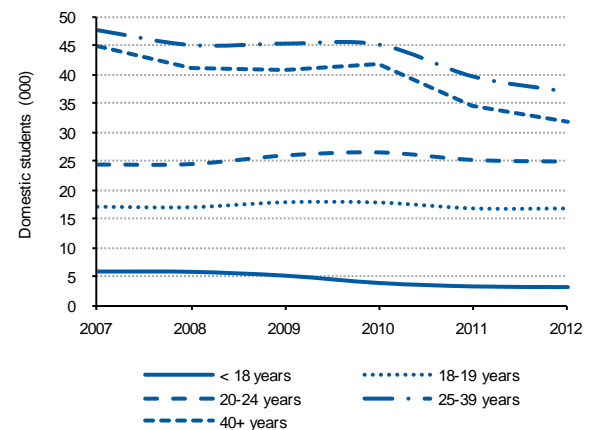
**AGE AND GENDER**

In 2002, domestic students aged 25 years and over made up 66 percent of enrolments in level 4 to 7 non-degree qualifications, but in 2012, this had dropped to 60 percent. Over the past ten years, enrolments by 18 to 19 year-olds have risen by 21 percent, while enrolments by 25 to 39 year-olds have declined by 24 percent. Most of the decline has been at diploma level.

Enrolments in level 4 to 7 non-degree study by women fell 4.1 percent from 2011 to 2012, while for men the fall was 5.8 percent.

**Domestic students in level 4 to 7 non-degree study by age group in 2012**

Under 18 years	3,260	(down 3.2% on 2011)
18-19 years	16,800	(down 0.1% on 2011)
20-24 years	24,900	(down 1.3% on 2011)
25-39 years	37,000	(down 6.6% on 2011)
40 years and over	31,800	(down 7.9% on 2011)



**FIRST-YEAR RETENTION**

The first-year retention rate of students who started a level 4 certificate or level 5 to 7 diploma was higher for those who started study in 2011 than in 2010. This rise in the retention rate was driven by fewer student enrolments at these levels in 2012, particularly for level 4 certificates, while the number of students retained remained at a similar level from 2011 to 2012.

Retention rates in the various sub-sectors are almost always higher for level 4 certificates, except for private training establishments where the rates are similar.

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

	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012
Certificates 4	68	69	73	68	78
Diplomas 5-7	69	71	72	71	73

**GRADUATE PROGRESSION TO HIGHER-LEVEL STUDY**

Students are more likely to progress to higher-level study after completing level 4 certificates than level 5 to 7 diplomas. An increasing proportion of students who completed a level 4 certificate, have been enrolling in higher level study in the following year, while for level 5 to 7 diplomas progression to higher levels of study has been more uniform, although there was an increase in the rate this year. An additional 13 percent of students progress to higher levels of study within five years after completing a non-degree level 4 to 7 qualification.

**Progression rates to higher-level study by 2012 for domestic students who completed a level 4 to 7 non-degree qualification**

First-year progression – for students who completed a qualification in 2011:		
Certificates 4	29%	(28% for students who completed in 2010)
Diplomas 5-7	19%	(18% for students who completed in 2010)
Five-year progression rates – for students who completed a qualification in 2007:		
Certificates 4	37%	(37% for students who completed in 2006)
Diplomas 5-7	30%	(29% for students who completed in 2006)

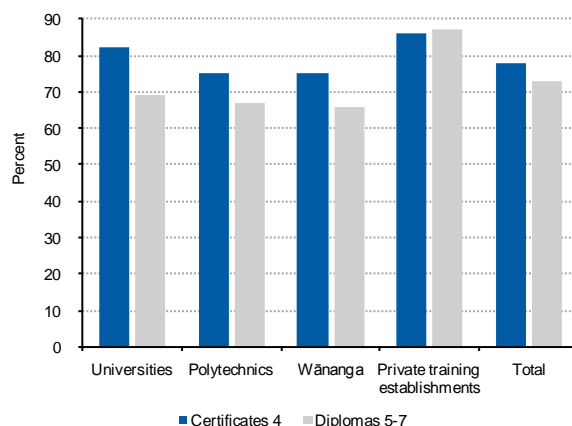
**COMPLETION OF QUALIFICATIONS**

There was a 1.6 percent increase in the number of domestic students who completed level 4 certificates in 2012, and a 1.1 percent decrease in the number of students who completed level 5 to 7 diplomas. The long-term trend suggests that the number of students who complete qualifications at these levels is beginning to plateau.

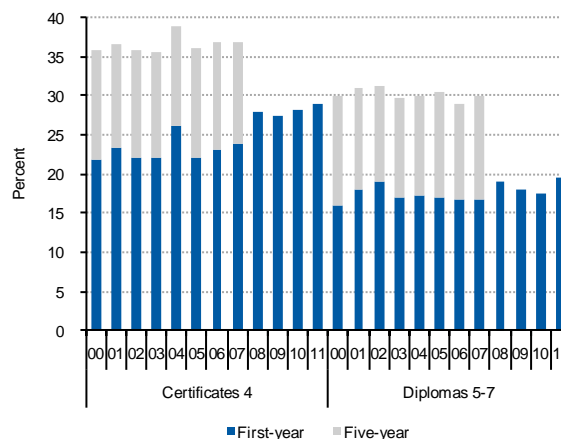
**Domestic students who completed a qualification in 2012**

Certificates 4	24,900	(up 1.6% on 2011)
Diplomas 5-7	17,800	(down 1.1% on 2011)

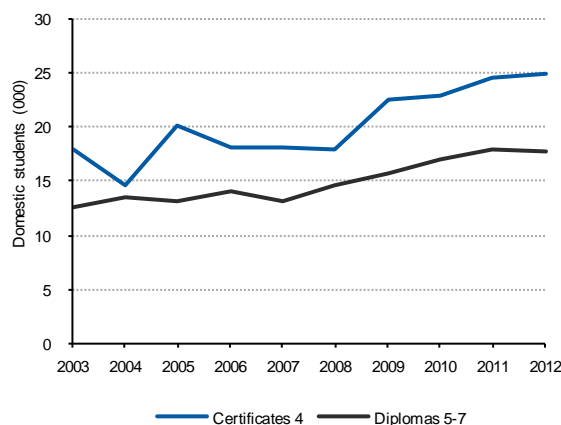
**Figure 8.7** First-year retention rates for domestic students who started a level 4 to 7 non-degree qualification in 2011 by sub-sector



**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



**FIVE-YEAR COMPLETION RATES**

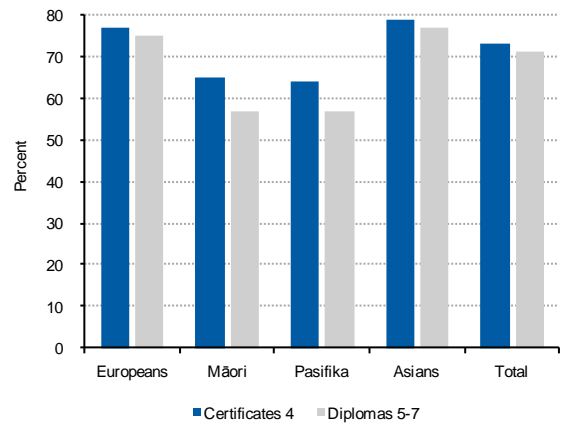
Of the full-time students who started a level 4 to 7 non-degree qualification in 2008, those studying level 4 certificates were slightly more likely to complete this qualification within 5 years. This difference was more pronounced for Pasifika and Māori students.

The five-year completion rates for full-time and part-time students have been increasing at both qualification levels.

**Five-year completion rates of domestic students in level 4 to 7 qualifications**

	2005-2009	2006-2010	2007-2011	2008-2012
<b>Full-time</b>				
Certificates 4	66%	69%	73%	73%
Full-time diplomas 5-7	66%	67%	67%	71%
<b>Part-time</b>				
Certificates 4	28%	30%	28%	34%
Diplomas 5-7	28%	30%	33%	36%

**Figure 8.10** Full-time domestic students who completed a level 4 to 7 non-degree qualification within 5 years (2008-2012) by ethnic group



**INTERNATIONAL STUDENTS**

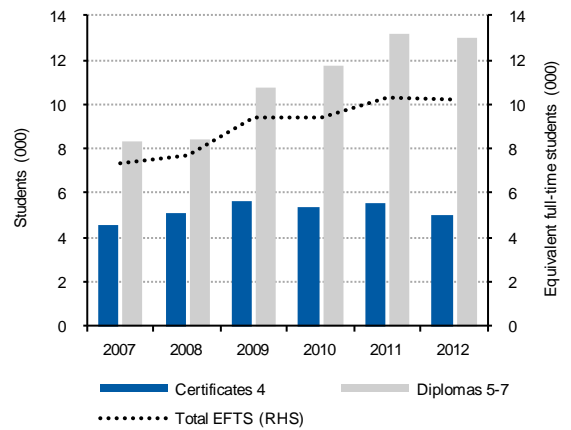
In 2012, international students made up 15 percent of all students studying level 4 to 7 non-degree qualifications, essentially unchanged from 2011.

From 2011 to 2012, international enrolments in level 5 to 7 diplomas declined for the first time in five years, but equivalent full-time student numbers increased slightly. Enrolments by international students in level 4 certificates fell by 10 percent, with a smaller decline in the number of equivalent full-time student units. This means that the study load per person, for both qualification levels, increased slightly in 2012.

**International students in level 4 to 7 non-degree study in 2012**

	Students	% change from 2011	Equivalent full-time student units	% change from 2011
Total	17,600	-3.6%	10,200	-1.2%
Certificates 4	4,990	-10%	2,290	-7.3%
Diplomas 5-7	13,000	-1.5%	7,930	+0.7%

**Figure 8.11** Participation in level 4 to 7 non-degree qualification by international students



## 9 PROVIDER-BASED STUDENTS IN BACHELORS AND POSTGRADUATE QUALIFICATIONS

This chapter includes:

- ▲ trends in bachelors and postgraduate qualifications
- ▲ qualification achievement of bachelors and postgraduate students, and
- ▲ international students in bachelors and postgraduate qualifications.

The number of students enrolled in bachelors and higher qualifications increased from 2011 to 2012, following a decrease from 2010 to 2011. Numbers increased for bachelors, masters and doctoral programmes, while graduate certificates and diplomas, bachelors degrees with honours and postgraduate certificates and diplomas decreased in number. The same patterns were seen for equivalent full-time student units.

The percentage increase from 2011 to 2012 in bachelors and postgraduate qualifications was stronger for international students than domestic students.

While most students in bachelors or higher qualifications study at a university, the largest increase in these enrolments from 2011 to 2012 was at polytechnics.

### Domestic students

From 2011 to 2012, an increase in domestic bachelors-degree enrolments was partially offset by a decrease in postgraduate qualifications and graduate certificates and diplomas. In 2012, there were 180,000 domestic students enrolled in bachelors and postgraduate qualifications.

In 2012, society and culture was the largest broad field of study for domestic students in bachelors and higher qualifications, and the study load in this field was unchanged from 2011. Study in the fields of health and information technology increased the most in 2012, with lesser increases in engineering and education.

The number of domestic enrolments by Pasifika students increased substantially, while enrolments by Asian students fell. However, the Asian ethnic group continued to have the highest rate of participation, on a population basis, in bachelors or higher qualifications.

Domestic enrolments by those aged 25 years and over declined, while they increased for people aged between 18 and 24 years. Enrolments by women in bachelors and postgraduate qualifications increased slightly more than for men.

The number of students completing bachelors and higher qualifications increased again in 2012. The increase was primarily driven by increases in the number of students with bachelor degrees, while the number of students completing graduate certificates and diplomas, masters and doctorates declined.

While there continues to be a large difference in the five-year completion rates for bachelors and higher qualifications between full-time and part-time students, this year the rates for part-time students increased for all of these qualification levels, while for full-time students there was no consistent pattern.

### International students

International students enrolled in bachelors and higher qualifications increased from 2011 to 2012 at all levels other than honours, which remained unchanged. Overall, international student numbers have increased by about 1,000 students a year since 2008. In 2012, there were 28,100 international students enrolled in bachelors and postgraduate qualifications.

**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 with honours degrees.
- ▲ 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'.

## ENROLMENTS IN BACHELORS AND HIGHER QUALIFICATIONS

The numbers of domestic and international students in bachelors and higher qualifications increased by 1.2 percent from 2011 to 2012, compared to a slight fall from 2010 to 2011.

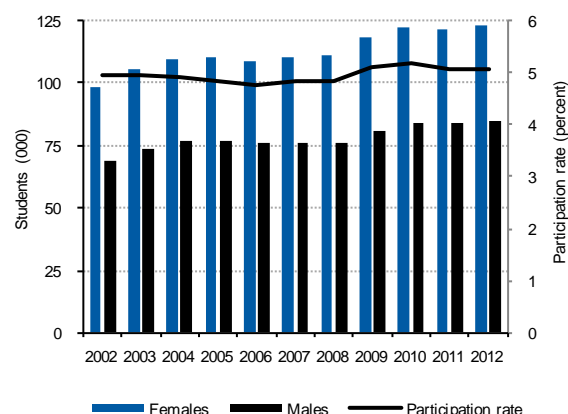
Equivalent full-time student numbers rose by 2.1 percent to 159,000.

From 2002 to 2012, the participation rate in bachelors and postgraduate qualifications averaged 4.9 percent. From 2011 to 2012, this rate remained unchanged at 5.1 percent.

### Students in bachelors and higher qualifications in 2012 by gender

Total	208,000	(up 1.2% on 2011)
Females	123,000	(up 1.3% on 2011)
Males	84,400	(up 1.0% on 2011)

**Figure 9.1** Participation in bachelors and higher qualifications by gender



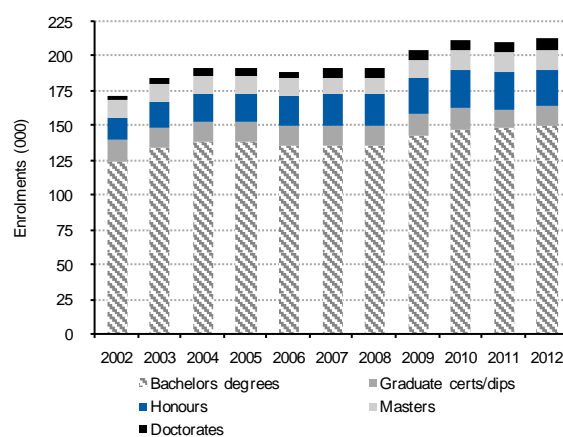
## ENROLMENTS BY LEVEL OF STUDY

Three out of every four students in these levels of study are enrolled in bachelors degrees, with these enrolments increasing in 2012. The number of masters and doctoral students was also up on 2011, while the number of students in graduate certificates/diplomas and honours declined. From 2002 to 2012, bachelors and postgraduate enrolments increased by 24 percent. Doctoral enrolments have more than doubled since 2002, and, in part, this was due to increased enrolments by international students who became funded on the same basis as domestic students in 2006. At honours level the increase from 2002 to 2012 was 58 percent.

### Students in bachelors and higher qualifications in 2012 by level of study

	Students	% change from 2011	Equivalent full-time student units	% change from 2011
Total	208,000	+1.2%	159,000	+2.1%
Bachelors degrees	149,000	+1.7%	121,000	+2.7%
Graduate certs/dips	13,700	-2.2%	6,750	-1.8%
Honours <sup>1</sup>	26,100	-1.1%	16,800	-1.2%
Masters	14,300	+1.5%	8,290	+5.1%
Doctorates	8,470	+2.4%	6,560	+1.3%

**Figure 9.2** Participation in bachelors and higher qualifications by level of study



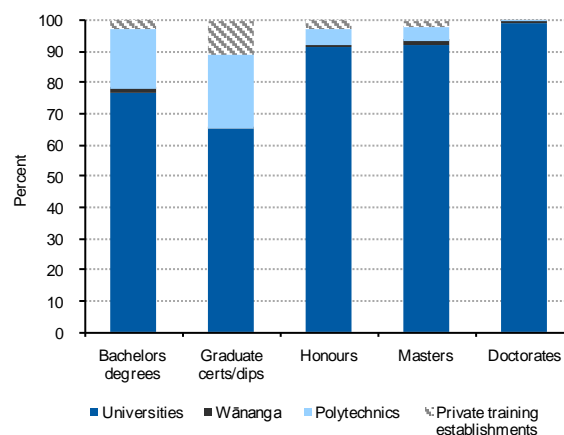
## TYPE OF PROVIDER

Domestic student numbers in bachelors and higher qualifications rose by 0.9 percent in 2012, driven by rises in enrolments at polytechnics of 5.1 percent and at private training establishments of 8.0 percent. Enrolments at wānanga decreased from 2011 to 2012 by 5.6 percent, but this was only a fall of 181 students.

### Domestic students in bachelors and higher qualifications in 2012 by sub-sector

Total	180,000	(up 0.9% on 2011)
Universities	142,000	(down 0.1% on 2011)
Polytechnics	29,400	(up 5.1% on 2011)
Wānanga	3,080	(down 5.6% on 2011)
Private training establishments	6,360	(up 8.0% on 2011)

**Figure 9.3** Domestic students in bachelors and higher qualifications by sub-sector



<sup>1</sup> 'Honours' refers to bachelors with honours degrees and postgraduate certificates/diplomas.

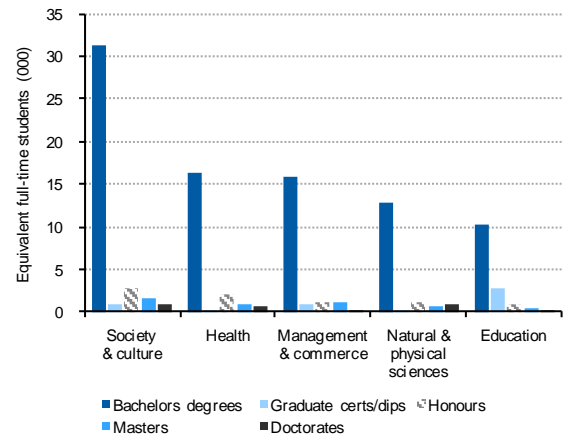
**FIELD OF STUDY**

The average study load across all fields of study increased by 1.7 percent for domestic students. In 2012, society and culture remained the largest field of study for students in bachelors and higher qualifications in terms of study load. Information technology and health showed the largest increases over 2011, while study of education fell from 2011 to 2012.

**Domestic equivalent full-time student units in bachelors and higher qualifications in 2012 by selected broad fields of study**

Society and culture	37,700	(no change on 2011)
Health	20,200	(up 6.2% on 2011)
Management and commerce	19,100	(down 1.3% on 2011)
Natural and physical sciences	15,600	(up 1.4% on 2011)
Education	14,600	(up 3.8% on 2011)
Creative arts	13,200	(up 0.4% on 2011)
Engineering and related technologies	7,430	(up 3.8% on 2011)
Information technology	5,950	(up 7.3% on 2011)
Architecture and building	2,930	(down 1.5% on 2011)

**Figure 9.4** Domestic students in bachelors and higher qualifications for the most common fields of study in 2012



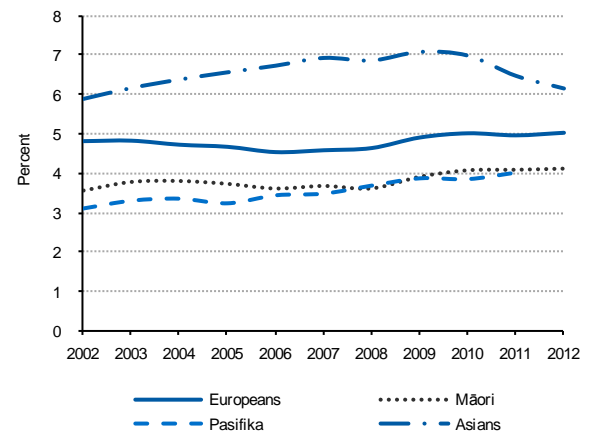
**ETHNIC GROUP**

Numbers of domestic students enrolled in bachelors and higher qualifications increased substantially for Pasifika students, and slightly for Māori and European students. Asian student numbers declined. Asian students continue to have the highest participation rate at these levels, although this has been falling since 2010.

**Domestic students enrolled in bachelors and higher qualifications in 2012 by ethnic group**

Europeans	125,000	(up 1.4% on 2011)
Māori	21,900	(up 2.4% on 2011)
Pasifika	11,800	(up 7.1% on 2011)
Asians	30,900	(down 2.2% on 2011)
Other	10,400	(up 0.4% on 2011)

**Figure 9.5** Participation rates in bachelors and higher qualifications by ethnic group



**AGE AND GENDER**

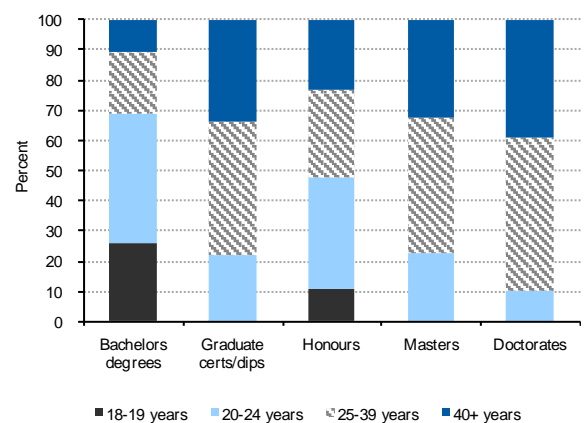
Enrolments by domestic students aged 25 years and over were generally lower in 2012, while enrolments by younger students were generally up, apart from enrolments by students under 18 years of age.

Women made up 61 percent of domestic enrolments in bachelors and higher qualifications in 2012. The number of men enrolled at these levels of study increased by 0.4 percent from 2011 to 2012. The comparable increase for women was higher at 1.2 percent.

**Domestic students in bachelors and higher qualifications in 2012 by age group**

Under 18 years	877	(down 5.0% on 2011)
18-19 years	35,900	(up 3.4% on 2011)
20-24 years	68,800	(up 2.1% on 2011)
25-39 years	45,400	(down 2.0% on 2011)
40 years and over	28,500	(down 0.4% on 2011)

**Figure 9.6** Domestic students in bachelors and higher qualifications by age group



### FIRST-YEAR RETENTION

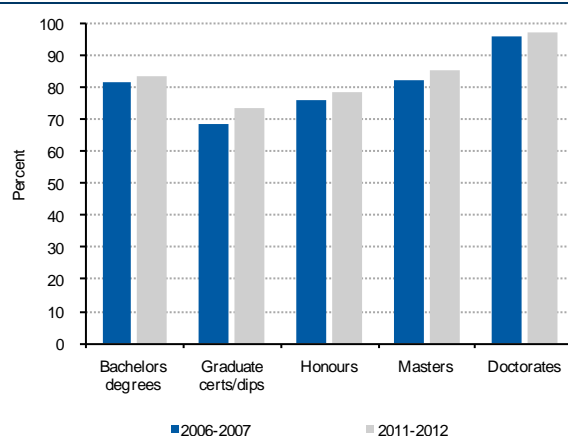
The first-year retention rates of students in bachelors and higher qualifications are generally higher than those for lower-level qualifications, although there is some variation in the first-year retention rate across higher-level qualifications.

While the rate at which students continued to study in the following year was similar in 2012 and 2011, there have been slight increases in the first-year retention rates over the period from 2007 to 2011.

First-year retention rates of domestic students

	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012
Bachelors degrees	81%	83%	83%	81%	84%
Graduate certs/dips	69%	71%	70%	71%	73%
Honours	77%	77%	78%	77%	78%
Masters	84%	85%	85%	87%	86%
Doctorates	97%	97%	98%	97%	97%

Figure 9.7 First-year retention rates for domestic students by level of study



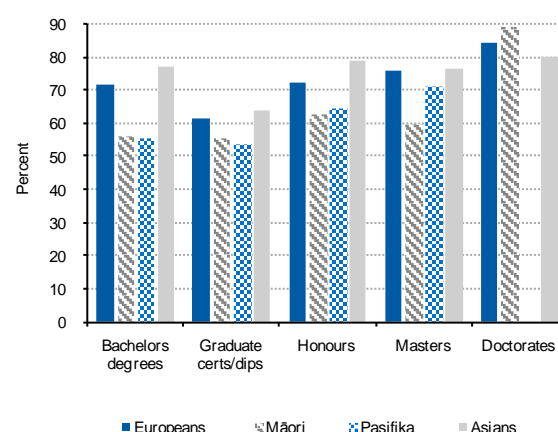
### FIVE-YEAR RETENTION

The five-year retention rates have improved in recent years. Comparing people who started bachelors-degree study in 2007 with those who started study in 2002, shows that there was an improvement of about 7 percentage points for all ethnic groups.

Five-year retention rates of domestic students in bachelors or higher study

	2002-2007	2003-2008	2004-2009	2005-2010	2006-2011	2007-2012
Total	62%	65%	66%	67%	68%	70%
Asians	69%	72%	75%	74%	73%	76%
Europeans	63%	66%	67%	68%	70%	71%
Māori	51%	51%	53%	53%	55%	57%
Pasifika	50%	52%	53%	55%	57%	57%

Figure 9.8 Five-year retention rates for domestic students who started a bachelors or higher qualification (2007-2012) by ethnic group and level



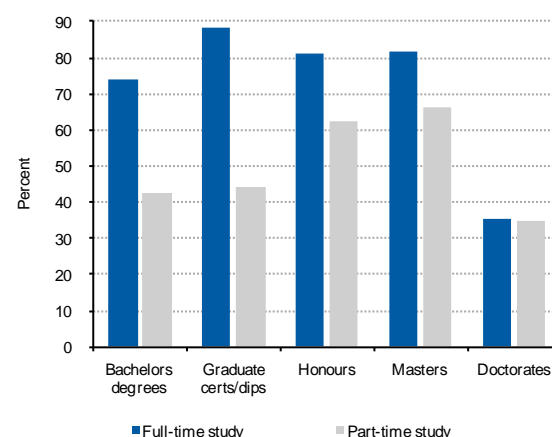
### FIVE-YEAR QUALIFICATION COMPLETION

The five-year rates of part-time students who completed a qualification in 2012 were slightly higher than for part-time students who completed in 2011, while there was no consistent pattern for full-time students. While the five-year completion rates vary with the level of study, the largest differences are between full-time and part-time students. The variation by level is, in part, due to variation in the length of qualifications, for example, doctoral rates are lower as many students take longer than 5 years to complete this qualification.

Five-year qualification completion rates for domestic students

	Full-time		Part-time	
	2007-2011	2008-2012	2007-2011	2008-2012
Bachelors degrees	73%	74%	42%	43%
Graduate certificates/diplomas	89%	88%	42%	44%
Honours	83%	81%	59%	62%
Masters	81%	82%	63%	67%
Doctorates	41%	35%	34%	35%

Figure 9.9 Five-year qualification completion rates of domestic students who started a bachelors or higher qualification (2008-2012) by level



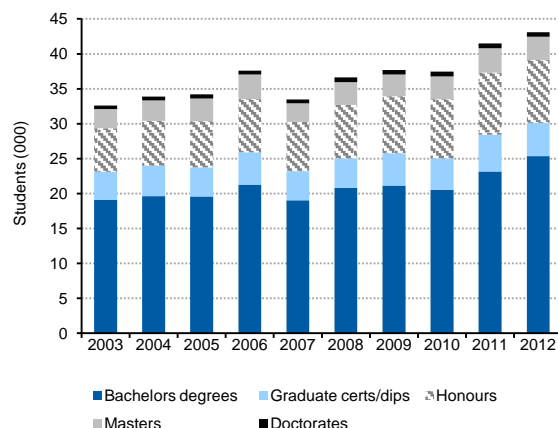
### COMPLETING QUALIFICATIONS

The number of domestic students completing bachelors and higher qualifications increased from 2011 to 2012, driven primarily by increases in the number of students completing bachelor degrees. Students completing honours degrees also increased slightly, but fewer students completed graduate certificates and diplomas, masters and doctorates.

#### Domestic student completing bachelors and higher qualifications in 2012

Total	43,100	(up 4.3% on 2011)
Bachelors degrees	25,400	(up 9.5% on 2011)
Graduate certificates/diplomas	4,780	(down 9.1% on 2011)
Honours	8,960	(up 0.6% on 2011)
Masters	3,370	(down 2.9% on 2011)
Doctorates	636	(down 8.9% on 2011)

**Figure 9.10** Domestic students completing bachelors and higher qualifications by level of study



### INTERNATIONAL STUDENTS

In 2012, international students made up 13.5 percent of all students studying bachelors and higher qualifications, up 0.3 percentage points on 2011, continuing an upward trend since 2008.

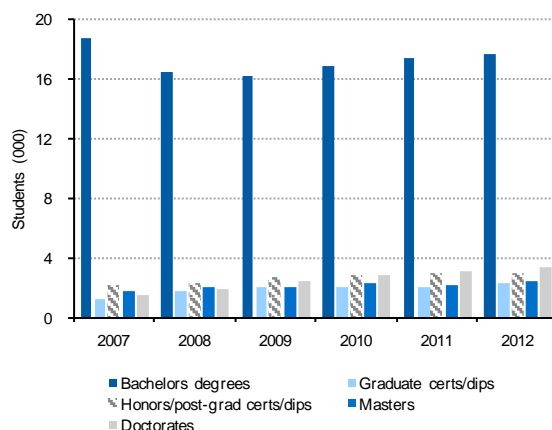
International student numbers increased in 2012, continuing year-on-year increases since 2008. However international student numbers are not near the historical highs reached in 2004 and 2005.

The growth in the number of doctoral enrolments by international students was not as strong as in previous years, but the number of masters students, and students in graduate certificates and diplomas increased substantially from 2011 to 2012. The increase in bachelors-degree enrolments from 2011 to 2012 was smaller than in recent years, but overall, international enrolments in bachelors and postgraduate qualifications increased at a similar rate to last year.

#### International students in bachelors and higher qualifications in 2012

Total	28,100	(up 3.4% on 2011)
Bachelors degrees	17,600	(up 1.4% on 2011)
Graduate certificates/diplomas	2,270	(up 10% on 2011)
Honours	2,870	(no change on 2011)
Masters	2,490	(up 15% on 2011)
Doctorates	3,350	(up 6.9% on 2011)

**Figure 9.11** Enrolments by international students in bachelors or higher qualification by level of study



In terms of equivalent full-time student units, total international enrolments in these levels of study was 20,900, up 4.8 percent on 2011.



# 10 NON-FORMAL TERTIARY EDUCATION

## ACE in tertiary education institutions

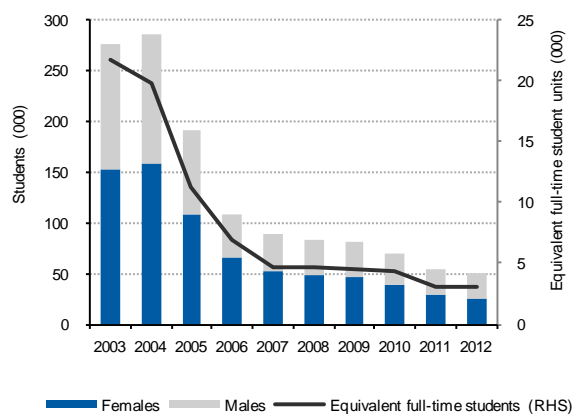
In 2012, 49,900 students enrolled in adult and community education programmes at tertiary education institutions. Of these students, 3,130 were international students, representing 6.3 percent of total ACE enrolments at public providers.

The enrolments represented 3,110 equivalent full-time student units, up by 0.9 percent from 2011 to 2012. This compared to a 6.9 percent decrease in the student headcount. The number of students enrolled in community education at tertiary education institutions has decreased since 2004 due to a shift from demand-led funding to capped funding.

Sixty-four percent of ACE students were enrolled at polytechnics, 29 percent at universities and 5.3 percent at wānanga. The enrolments in community education by international students were split between universities (43 percent) and polytechnics (57 percent).

Women made up 52 percent of students and three out of four students were aged 25 years and over.

**Figure 10.1** Non-formal students in tertiary education institutions



At polytechnics, the most common fields of study for women were management and commerce; mixed field programmes;

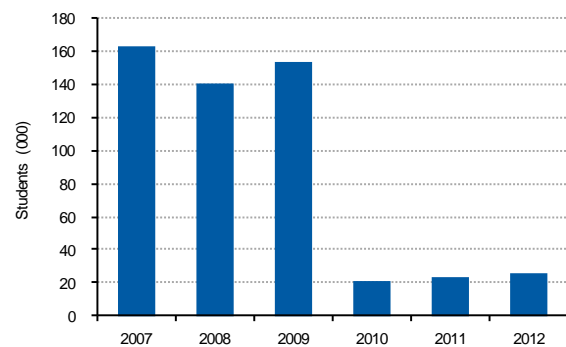
society and culture; and food, hospitality and personal services. At universities, the most common fields of study for women were society and culture; education; and creative arts. For men, the most common fields of study at polytechnics were mixed field programmes; engineering; management and commerce; and society and culture. At universities, the most common fields of study for men were society and culture; education; mixed field programmes; and natural and physical sciences.

## ACE in schools

Secondary schools provide community education programme for adults in addition to their regular daytime curriculum.

In 2012, there were 26,100 enrolments in funded school community education programmes, up 13 percent on enrolments in 2011.

**Figure 10.2** Students in community education in schools.



**Note:** In 2009, the government announced significant cuts in funding for this provision to take effect in 2010. The remaining funding became allocated through a contestable funding round targeting priority areas of provision (English language, literacy and numeracy, New Zealand Sign Language and Te Reo Māori.)

## ACE in communities

In 2012, 32 organisations provided ACE courses in communities for 38,400 learners with a government subsidy of \$13.3 million. In 2011, 36 organisations provided ACE courses in communities for 35,000 learners with a government subsidy of \$11.2 million.

# 11 FINANCIAL SUPPORT FOR STUDENTS

This chapter includes:

- ▲ characteristics of student allowance recipients and student loan borrowers, and
- ▲ trends in student allowances and loan expenditure and average annual allowances and borrowings.

The number of allowances recipients decreased from 2011 to 2012. Before this, the number of recipients in most age groups had been increasing from a low point in 2006 when access to student allowances was widened.

From 2011 to 2012, the decrease in the number of allowances recipients was spread across all age groups. Changes made by government to keep the parental income threshold constant from 1 April 2012 to 31 March 2016 and the expansion of 'income' in terms of student allowances entitlement, were the largest contributors to the decrease in the number of recipients from 2011 to 2012. As parental-income testing for student allowances eligibility applies to students aged under 24 years, the decrease in the number of recipients in this group accounted for over half of the overall decrease.

The total number of loan borrowers fell from 2011 to 2012 and from 2010 to 2011. These were the first decreases in the number of borrowers since the introduction of interest-free loans for New Zealand-based borrowers in 2006. In 2012, there were 20 percent more borrowers than in 2006.

First-time borrowers decreased in number from 2011 to 2012, a trend which started in 2010. This movement aligns with the population bulge gradually moving out of tertiary education following the completion of qualifications by many of these younger students. The recent decreases in the number of first-time loan borrowers have been moderated by the continued weak employment conditions for younger people. This has led to more them continuing study at higher levels and some young people entering tertiary education as an alternative to employment.

## 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 over 201,000 in 2012. 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.

All other borrowers decreased in number in 2012 for the first time since the scheme began in 1992. Fewer enrolments in 2012, especially by students aged 25 years and over, will have contributed to the decrease in the number of borrowers. Almost two-thirds of the decrease from 2011 to 2012 was due to fewer borrowers among students aged 24 years and older. The decrease was strongest among students aged 30 years and over. Changes made by government to remove the eligibility of part-time, full-year students to borrow for course-related costs from 2012 onwards will have contributed to the decrease in the number of all other borrowers from 2011 to 2012.

The latest information on the patterns in student loan repayments and loan balances will come available later this year in the 2013 Student Loan Scheme Annual Report.

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

The number of student allowances recipients totalled 96,900 in 2012. This compares to 99,300 recipients in 2011 and 62,500 in 2007.

There were 2,360 fewer student allowances recipients in 2012 than in 2011 – the first decrease since 2005. The largest contributors to this decrease were government changes to keep the parental income threshold\* constant from 1 April 2012 to 31 March 2016 and the expansion of ‘income’ in terms of student allowances entitlement.

In 2012, 54 percent of allowances recipients were females. In comparison, 51 percent of allowances recipients were females in 2002.

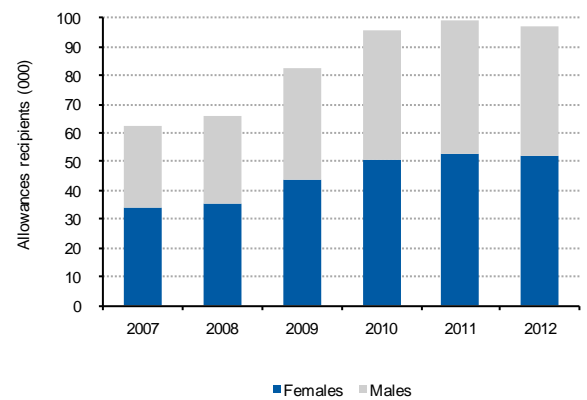
### Number of student allowances recipients by gender in 2012

Females	52,000	(down 1.6% on 2011)
Males	44,900	(down 3.3% on 2011)
Total	96,900	(down 2.4% on 2011)

\*Applies to students under 24 years without children.

Source: Ministry of Social Development.

Figure 11.1 Student allowances recipients by gender



## MOST ALLOWANCES HOLDERS AGED UNDER 24 YEARS

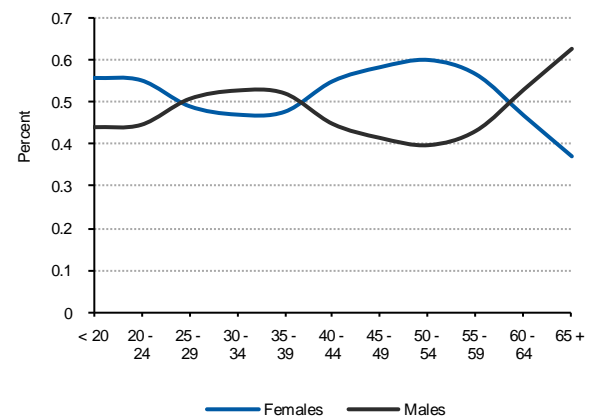
In 2012, there were 61,500 student allowances recipients under 24 years of age, comprising 63 percent of the total. The majority of students under 24 years are subject to parental income testing. The exceptions are those under-24-year-old students who have a dependent child, or children, or those who are awarded an Independent Circumstances Allowance because of exceptional family circumstances. The average age of allowances recipients in 2012 was 25.7 years.

### Distribution of student allowances recipients by age group in 2012

Under 20 years	21%	(21% in 2011)
20-24 years	43%	(42% in 2011)
25-29 years	16%	(16% in 2011)
30-39 years	10%	(11% in 2011)
40-49 years	5.8%	(6.0% in 2011)
50-59 years	3.1%	(3.1% in 2011)
60 years and over	0.8%	(0.9% in 2011)

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 2011 and 2012. Fifty-six percent of student allowances recipients were under 24 years of age and received a parental-income-tested allowance. This group decreased by 1.9 percent from 2011 to 2012 to 54,300 recipients. Single allowances recipients aged 24 years and over comprised 29 percent of the total in 2012. Students with an earning spouse were the only group of allowance recipients to increase in number from 2011 to 2012 – up 2.2 percent.

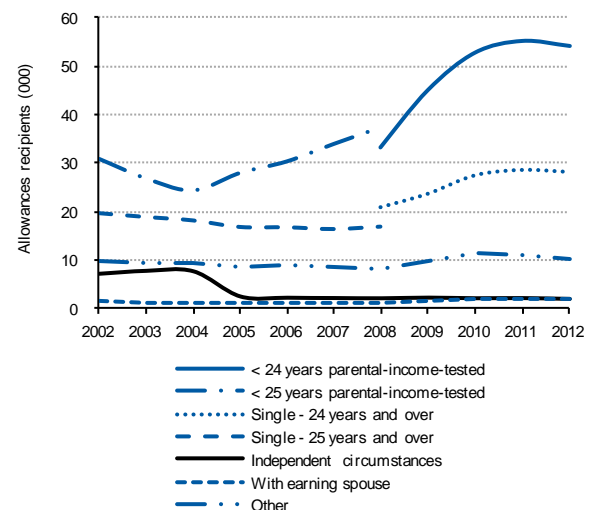
### Number of student allowances recipients in 2012

Under 24 years parental-income-tested	54,300	(down 1.9% on 2011)
Single – 24 years and over	28,100	(down 1.5% on 2011)
Independent circumstances	1,940	(down 8.0% on 2011)
Student with earning spouse	2,120	(up 2.2% on 2011)
Other	10,400	(down 6.9% on 2011)

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 2012, 50 percent of student allowances recipients were studying at a university, 29 percent at polytechnics, 15 percent at private training establishments, 3.9 percent at wānanga and 2.0 percent at schools.

From 2011 to 2012, the number of allowances recipients decreased for each tertiary education provider type, except polytechnics which had a slight increase.

#### Number of student allowances recipients by sub-sector in 2012

Universities	49,100	(down 2.9% on 2011)
Polytechnics	28,700	(up 0.6% on 2011)
Wānanga	3,840	(down 3.3% on 2011)
Private training establishments	14,800	(down 5.7% on 2011)

Source: Ministry of Social Development.

### ALLOWANCES RECIPIENTS BY ETHNIC GROUP

In 2012, 57 percent of allowances recipients who provided their ethnic group were Europeans. Māori comprised 18 percent, Pasifika 10 percent, Asians 21 percent and the Other ethnic group 4.0 percent. Less than 2 percent of recipients did not provide their ethnic group. From 2011 to 2012, the number of allowances recipients increased among Pasifika students and, to a lesser extent, among Māori students, while the numbers decreased among the other ethnic groups.

#### Student allowances recipients by ethnic group

	2010	2011	2012	% change 2011-12
Europeans	55,200	57,400	55,300	-3.8
Māori	15,900	17,500	17,700	+0.8
Pasifika	8,400	9,450	9,910	+4.9
Asians	21,000	21,200	20,400	-3.7
Other	3,680	3,910	3,870	-1.2

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.

### ACCOMMODATION BENEFIT UPTAKE RATE

In 2012, 70 percent of student allowances recipients also received an accommodation benefit, compared to 74 percent in 2007 and 78 percent in 2002.

In 2012, the parental-income-tested allowances holders had the lowest accommodation benefit uptake at 59 percent and among single parent allowances holders the rate was the highest, at 92 percent. Sixty-nine percent of allowances recipients at polytechnics had an accommodation benefit and 78 percent of the recipients at wānanga.

#### Uptake of accommodation benefit by student allowances recipients

2008	2009	2010	2011	2012
70.2%	70.2%	70.7%	70.2%	69.7

Source: Ministry of Social Development.

Figure 11.4 Student allowances recipients by sub-sector

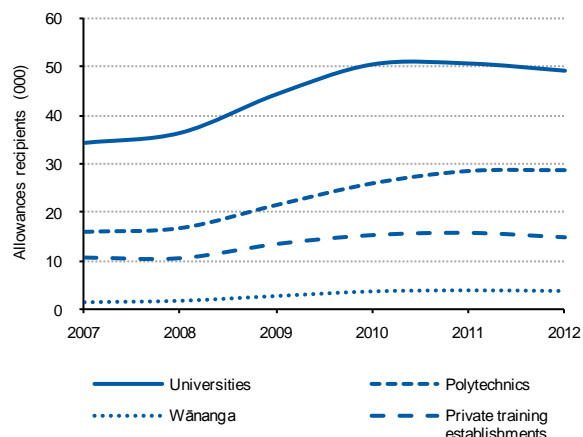


Figure 11.5 Student allowances recipients by ethnic group

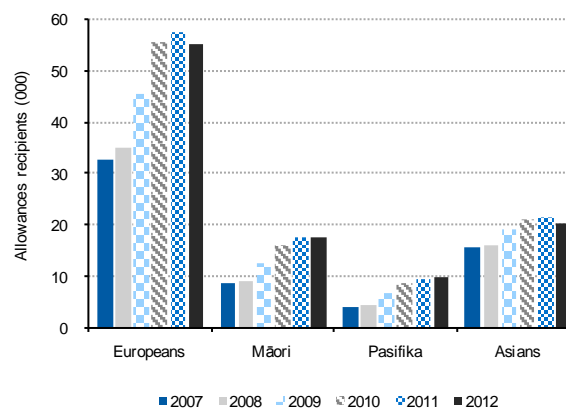
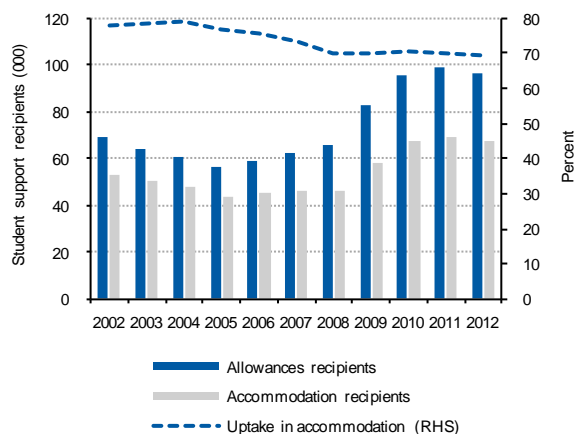


Figure 11.6 Uptake in accommodation benefit



## EXPENDITURE ON ALLOWANCES

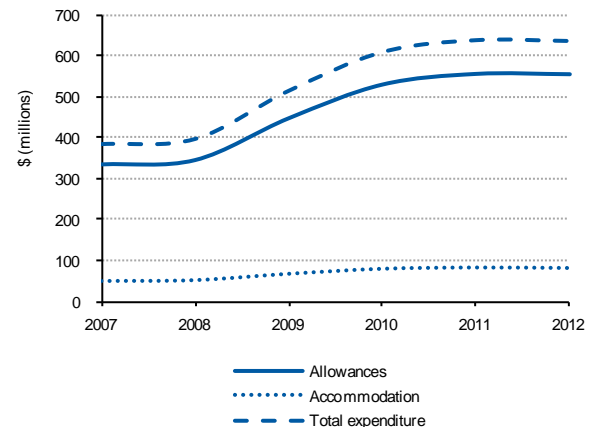
In 2012, the total expenditure on student allowances and accommodation benefits decreased by 0.3 percent. The total average allowance increased from 2011 to 2012 by 2.1 percent. The average main allowance increased by 2.3 percent and the average accommodation benefit increased by 1.7 percent.

### Student allowances expenditure and average allowances by component in 2012

Expenditures		
Total	\$636 million	(down 0.3% on 2011)
Main student allowances	\$556 million	(down 0.1% on 2011)
Accommodation benefits	\$81 million	(down 1.5% on 2011)
Average annual allowances		
Total allowance	\$6,570	(up 2.1% on 2011)
Main allowances	\$5,740	(up 2.3% on 2011)
Accommodation benefit	\$1,190	(up 1.7% on 2011)

Source: Ministry of Social Development.

Figure 11.7 Student allowances and accommodation benefit payments



## FEWER STUDENTS BORROWED

The total number of borrowers fell from 2011 to 2012 and from 2010 to 2011. Before this, the number had increased since the introduction of interest-free loans in 2006. In 2012, there were 20 percent more borrowers than in 2006.

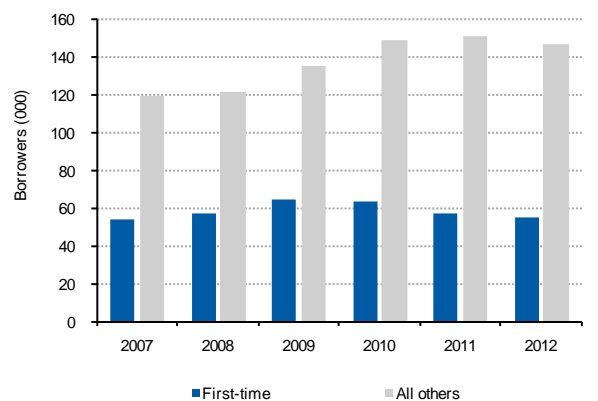
The number of first-time borrowers decreased from 2011 to 2012, a trend which started in 2010. All other borrowers also decreased in number in 2012 – the first decrease since the scheme began in 1992. Fewer enrolments in 2012, especially by students aged 25 years and over, contributed to the decrease in the number of borrowers. Also, the inability of part-time, full-year students to borrow for course-related costs from 2012 onwards is likely, in part, to have contributed to the decrease in the number of borrowers.

### Number of student loan borrowers in 2012

First-time	54,800	(down 3.8% on 2011)
All others	146,000	(down 2.6% on 2011)
Total	201,000	(down 3.0% on 2011)

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



## DECREASE IN STUDENT LOANS UPTAKE

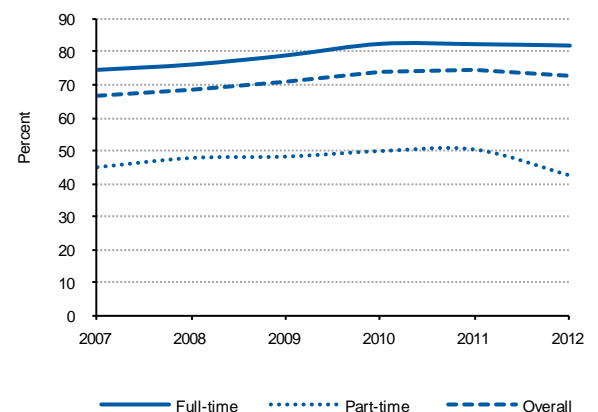
The student loan uptake rate decreased overall from 74 percent in 2011 to 73 percent in 2012. For full-time students the uptake rate remained stable at 82 percent of eligible students and for part-time students it decreased by 7.5 percentage points to 43 percent of eligible students.

### Proportion of eligible students who borrowed in 2012

Full-time	82%	(75% in 2007)
Part-time	43%	(45% in 2007)
Overall	73%	(67% in 2007)

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**

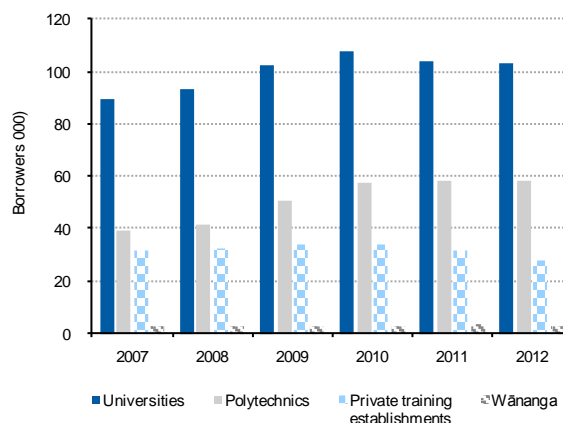
From 2011 to 2012, the number of students borrowing to cover the cost of their tuition fees decreased by 2.4 percent overall. Almost 80 percent of the decrease was attributable to students at private training establishments.

**Number of students borrowing their fees by sub-sector in 2012**

Universities	103,000	(down 0.4% on 2011)	98% of total borrowers
Polytechnics	58,100	(down 0.8% on 2011)	97% of total borrowers
Private training establishments	27,900	(down 12% on 2011)	92% of total borrowers
Wānanga	2,880	(down 13% on 2011)	57% of total borrowers
Total	189,000	(down 2.4% on 2011)	94% of total borrowers

Source: Ministry of Social Development.

**Figure 11.10** Student fee borrowers by sub-sector



**DECLINE IN BORROWERS AGED 24 YEARS AND OVER**

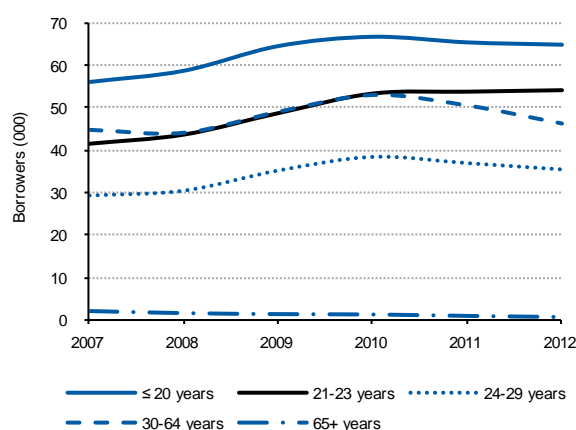
The age distribution of borrowers shifted from 2011 to 2012 toward those aged 23 years and under. In 2012, the proportion of borrowers aged under 24 years increased by 1.7 percentage points to 59 percent. There were 4,200 fewer borrowers aged 30 to 64 years in 2012 than in 2011. The number of borrowers among students aged 24 to 29 years also declined from 2011 to 2012 – down by 1,460. Students aged 21 to 23 years were the only age group with an increase the number of borrowers from 2011 to 2012. Enrolments by students aged 22 to 24 increased from 2011 to 2012, reflecting the growing number of people in the population in this age group.

**Borrowers by age group**

	2011	2012	% change 2011-12
≤ 20 years	65,300	64,700	-0.8%
21-23 years	53,800	54,200	+0.7%
24-29 years	36,900	35,400	-4.0%
30-64 years	50,600	46,400	-8.3%
65 years and over	739	443	-40%

Source: Ministry of Social Development.

**Figure 11.11** Borrowers by age group



**MORE BORROWERS IN EACH ETHNIC GROUP**

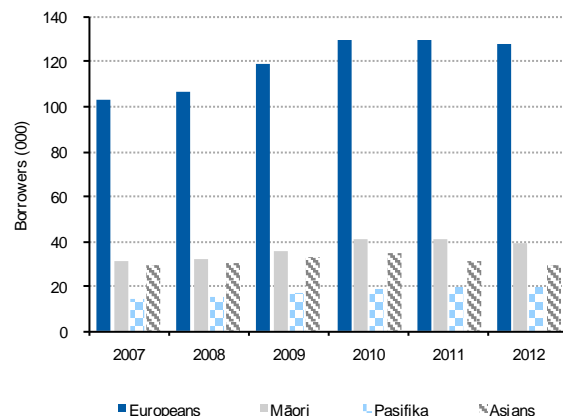
Since 2007, the number of borrowers has increased for all ethnic groups except the Asian group.<sup>1</sup> From 2011 to 2012, the number of borrowers in each ethnic group decreased except for a small increase in the Pasifika group. The latest decreases were: Maori down by 2,400, or 5.8 percent, Asians down by 1,690, or 5.5 percent, and Europeans down by 1,850, or 1.4 percent. These decreases were, in part, due to eligibility changes – part-time, full-year students are no longer able to borrow for course-related costs from 1 January 2012. The decreases in non-degree study, especially by students aged 25 years and over, continued in 2012 and this is also likely to have contributed to the latest decrease in the number of borrowers.

**Borrowers by ethnic group**

	2007	2012	% change 2007-12	Proportions – students in 2007	Proportions – borrowers in 2012
Europeans	103,000	128,000	+24%	59%	64%
Māori	31,300	39,000	+25%	18%	19%
Pasifika	13,700	19,200	+40%	7.9%	9.5%
Asians	29,30	28,900	-1.1%	17%	14%

Source: Ministry of Social Development.

**Figure 11.12** Borrowers by ethnic group



<sup>1</sup> This decrease was due to a change in student support eligibility from 2007 – students in qualifications that did not receive student-component funding became ineligible for student loans and allowances.

### MORE WOMEN THAN MEN BORROWED

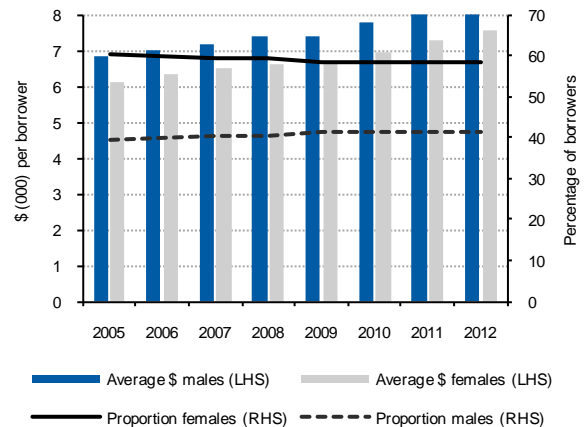
In 2012, 59 percent of loan scheme borrowers were women, consistent with the higher proportion of women enrolled in tertiary education. In 2012, male students borrowed \$619 more, on average, than female students.

#### Average amount borrowed by gender in 2012

Females	\$7,570	(up 3.8% on 2011)
Males	\$8,190	(up 0.8% on 2011)

Source: Ministry of Social Development.

Figure 11.13 Average amount borrowed and borrowers by gender



### TOTAL AMOUNT BORROWED DECREASED

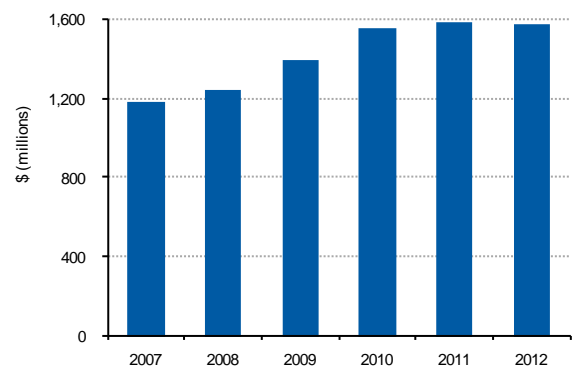
At \$1.57 billion, the amount borrowed under the Student Loan Scheme was \$8.8 million, or 0.6 percent, less in 2012 than in 2011. The small decrease in the amount borrowed was due to a decrease in borrowing caused by fewer borrowers in 2012 than in 2011, largely off-set by an increase in borrowing associated with higher tuition fees and study costs attributable to higher average study loads.

#### Amounts borrowed in 2012 by loan component

Total amount borrowed	\$1,570 million	(down 0.6% on 2011)
Course fees	\$1,050 million	(down 0.1% on 2011)
Course-related costs	\$127 million	(down 9.9% on 2011)
Living costs	\$381 million	(up 1.8% on 2011)

Source: Ministry of Social Development.

Figure 11.14 Annual amount borrowed



### AVERAGE AMOUNT BORROWED INCREASES

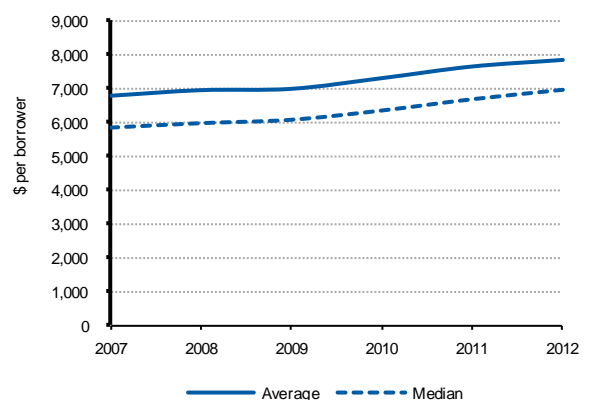
From 2011 to 2012, the median amount borrowed increased by \$279, and the average amount increased by \$189.

#### Average and median amount borrowed in 2012

Average	\$7,820	(up 2.5% on 2011)
Median	\$6,990	(up 4.2% on 2011)

Source: Ministry of Social Development.

Figure 11.15 Average and median amount borrowed



### INCREASE IN AMOUNT BORROWED

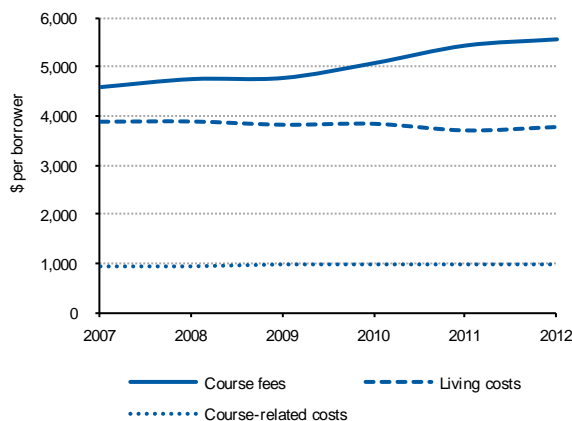
The average amounts borrowed for course fees and living costs increased from 2011 to 2012, while course-related costs decreased slightly. The inability of part-time, full-year students to borrow for course-related costs from 1 January 2012 will have contributed to the decrease in average course-related costs.

#### Average amount drawn from loan accounts by loan component in 2012

Course fees	\$5,570	(up 2.4% on 2011)
Living costs	\$3,770	(up 1.7% on 2011)
Course-related costs	\$988	(down 0.2% on 2011)

Source: Ministry of Social Development and Ministry of Education.

Figure 11.16 Average amount borrowed by loan component



### ALLOWANCES AND LOAN COMBINATIONS

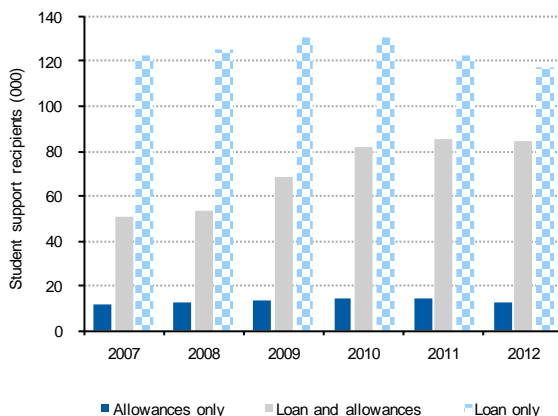
In 2012, 87 percent of student allowances recipients also received a loan for course fees and/or their living costs. The number of people with both a loan and an allowance decreased slightly from 2011 to 2012. Before this, the number of people with both a loan and an allowance had been increasing. Student loans continue to be the most common support for people in tertiary study.

#### Number of student loan borrowers and student allowances recipients

	2010	2011	2012	% change 2011-12
Allowances only	14,000	14,300	12,900	-9.7
Allowances and living costs loans	81,900	85,000	84,000	-1.1
Loan only	131,000	122,000	117,000	-4.2

Source: Ministry of Social Development.

Figure 11.17 Student allowances recipients and student loan borrowers



### ALLOWANCES AND LOAN COMBINATIONS

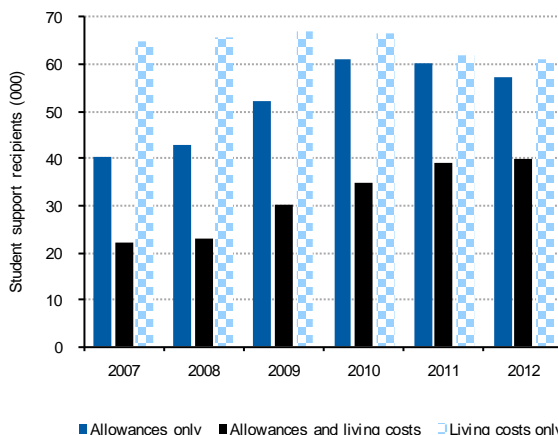
In 2012, 41 percent of student allowances recipients also borrowed for their living costs through the Student Loan Scheme. This compares with 39 percent in 2011.

#### Student allowances recipients and students who borrowed for living costs

	2010	2011	2012	% change 2011-12
Allowances only	61,200	60,300	57,100	-5.3
Living costs loans and allowances	34,800	39,000	39,800	+2.1
Living costs loans without allowances	66,800	62,000	61,300	-1.2

Source: Ministry of Social Development.

Figure 11.18 Recipients of student allowances and living costs loans





# 12 TERTIARY EDUCATION RESEARCH

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This chapter includes:

- ▲ the trend in doctoral enrolments
- ▲ characteristics of doctoral students
- ▲ research outputs and income, and
- ▲ the impact of research by New Zealand's tertiary education institutions.

The research performance of the tertiary sector improved in several areas in 2012. 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 40 percent of total doctoral students in 2012, compared to 14 percent in 2005. The number of Māori enrolled in doctoral degrees remained constant in 2012 for the second year in a row. The rate of growth in Pasifika doctoral enrolments slowed from 2011 to 2012.

As a result of the increased doctoral enrolments, the supervisory load placed on academics has continued to rise, with the number of doctoral students per academic staff member at universities around 50 percent higher in 2012 than in 2007.

The surge in enrolments at doctoral level has begun to be reflected in doctoral degree completions. There has been significant growth in the number of doctoral degrees completed by international students since 2008.

Total research output increased at one of the four universities that reported research output in 2012.

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.

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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>**

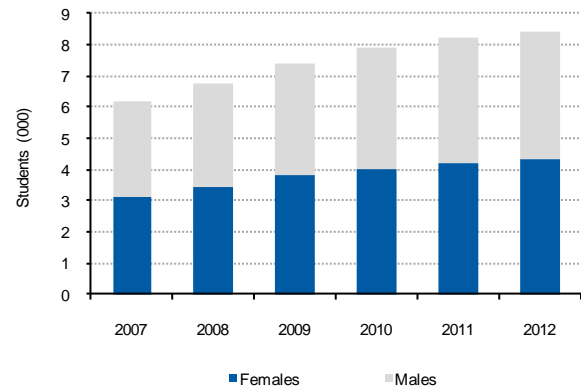
The number of doctoral enrolments increased by 2.5 percent from 2011 to 2012. This was a smaller increase than in the previous four years. Total doctoral enrolments are now 37 percent above the 2007 level.

Fifty-one percent of doctoral enrolments were by women in 2012, a figure that has remained stable since 2007.

**Doctoral enrolments in 2012**

		% change 2007-12	% change 2011-12
Total	8,450	37	2.5
Females	4,310	37	2.6
Males	4,130	36	2.3

**Figure 12.1** Doctoral enrolments by gender



**DOCTORAL ENROLMENTS BY RESIDENCY STATUS**

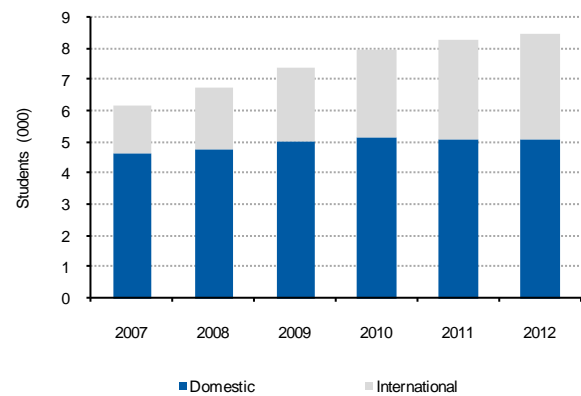
The number of domestic doctoral enrolments fell slightly from 2011 to 2012, while the number of international doctoral students increased by 6.9 percent. This pattern continued a higher growth rate in the number of international doctoral students in recent years. In 2012, international doctoral students made up 40 percent of total doctoral students, compared to just 14 percent in 2005.

The differences in growth are a legacy of a change in the funding regime for international students introduced in 2006, which treats them as domestic students.

**Doctoral enrolments in 2012**

		% change 2007-12	% change 2011-12
Total	8,450	37	2.5
Domestic	5,090	9.3	-0.3
International	3,350	120	6.9

**Figure 12.2** Doctoral enrolments by residency status



**DOCTORAL ENROLMENTS BY SELECTED GROUPS**

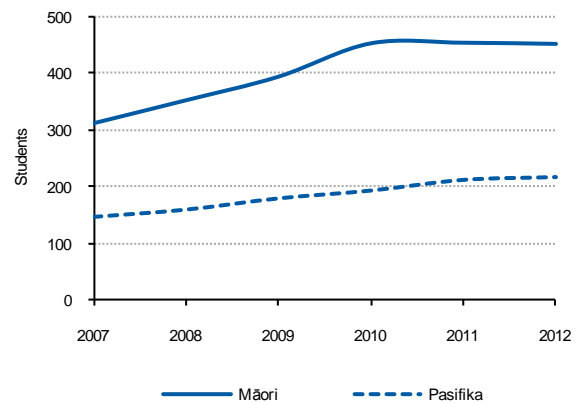
There was little change in the number of Māori and Pasifika students enrolled in doctorates in 2012. For both ethnic groups, enrolments remain around historically high levels, although the number of doctoral enrolments by Māori students has been stable since 2010.

**Doctoral enrolments in 2012**

		% change 2007-12	% change 2011-12
Māori	450	44	-0.4
Pasifika	216	49	2.4

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.

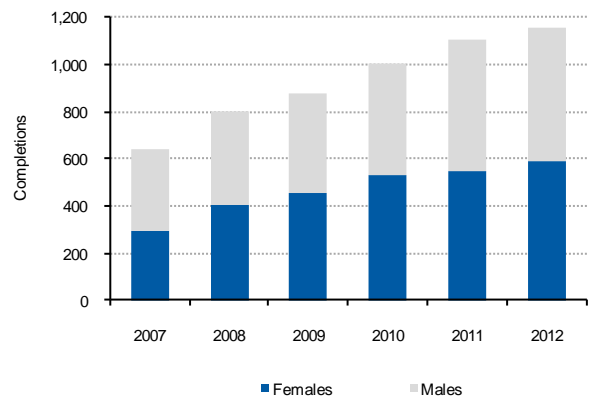
### DOCTORAL COMPLETIONS BY GENDER

The number of students completing a doctoral degree increased in 2012. The increase in the number of doctoral completions in 2012 was higher for women than men. In 2012, 51 percent of doctoral completions were by women, compared to 46 percent in 2007.

#### Doctoral completions in 2012

		% change 2007-12	% change 2011-12
Total	1,160	80	5.2
Females	587	97	7.1
Males	571	65	3.3

Figure 12.4 Doctoral completions by gender



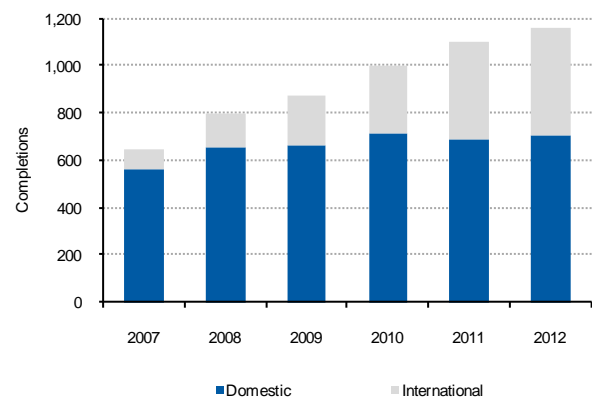
### DOCTORAL COMPLETIONS BY RESIDENCY STATUS

The strong growth in the number of international students completing a doctoral degree continued in 2012, reflecting the high growth in doctoral enrolments by international students since 2005. In 2012, doctoral completions by international students comprised 39 percent of all completions. This compared to just 13 percent in 2007.

#### Doctoral completions in 2012

		% change 2007-12	% change 2011-12
Total	1,160	80	5.2
Domestic	702	25	2.3
International	456	443	9.9

Figure 12.5 Doctoral completions by residency status



### DOCTORAL COMPLETIONS BY SELECTED GROUPS

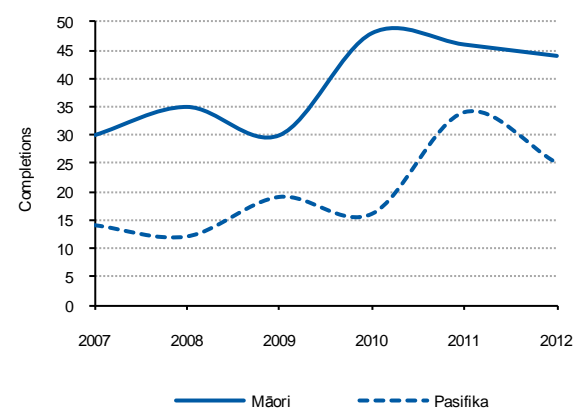
The number of doctoral completions by Māori and Pasifika students fell in 2012. However, the long-term trend shows an increase in Māori and Pasifika doctoral graduates. The centre of research excellence Ngā Pae o te Māramatanga has contributed to the increases in doctoral completions by Māori through its active support of Māori researchers.

#### Doctoral completions in 2012

		% change 2007-12	% change 2011-12
Māori	44	47	-4.3
Pasifika	25	79	-26

Note: Students who indicate more than one ethnic group are counted in each group.

Figure 12.6 Doctoral completions by selected groups



**DOCTORAL COMPLETIONS BY FIELD OF STUDY**

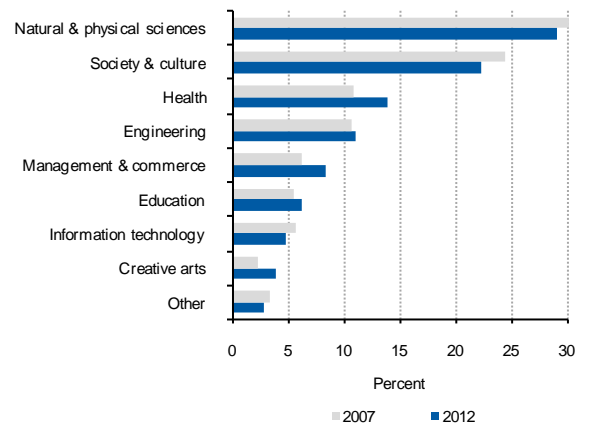
The largest proportion of students completing doctorates in 2012 studied in the areas of the natural and physical sciences and society and culture. Since 2007, there has been an increase in the proportion of doctoral graduates studying in the areas of health and management and commerce, while the proportion of graduates in the natural and physical sciences and society and culture fell.

**Proportions of doctoral completions by subject area**

	2007	2012
Society & culture	31%	29%
Natural & physical sciences	24%	22%
Health	11%	14%
Engineering & related technologies	11%	11%
Management & commerce	6.2%	8.3%
Education	5.4%	6.2%
Information technology	5.7%	4.8%
Creative arts	2.3%	3.9%
Other	3.4%	2.8%

**Note:** The total percentage may add to more than 100 percent as doctoral graduates may appear in more than one subject area.

**Figure 12.7** Doctoral completions by field of study



**UNIVERSITY DOCTORAL ENROLMENTS AND COMPLETIONS PER ACADEMIC STAFF MEMBER**

The number of doctoral enrolments and completions per academic staff member continued to rise in 2011. There were 1.04 enrolments per full-time academic staff member in 2011, compared with 0.70 in 2006.

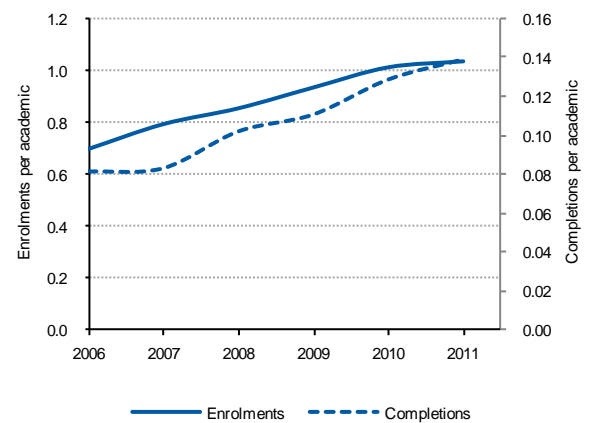
The rise in enrolments has flowed through to the number of completions per full-time academic staff member. This increased from 0.08 in 2006 to 0.14 in 2011.

**University doctoral enrolments and completions per academic staff member**

	2006	2007	2008	2009	2010	2011
Enrolments	0.70	0.79	0.86	0.94	1.01	1.04
Completions	0.08	0.08	0.10	0.11	0.13	0.14

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

**Figure 12.8** University doctoral enrolments and completions per academic staff member



**UNIVERSITY RESEARCH OUTPUT**

Of the four universities that reported their total research outputs, one had an increase in output between 2011 and 2012. At three of the four universities, research output was significantly higher in 2012 than in 2009.

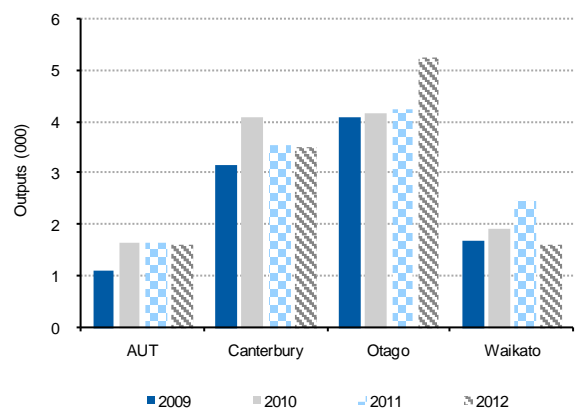
**Number of research outputs reported in 2012**

	2009	% change 2009-12	2011	% change 2011-12
Auckland University of Technology	1,610	46	-	-0.7
University of Canterbury	3,490	11	-	-1.4
University of Otago	5,230	28	-	23
University of Waikato	1,600	-4.0	-	-34

**Notes:**  
 1. Care should be used when comparing the research output of the universities, because of the differences in the way they count research outputs.  
 2. Not all universities publish counts of research outputs.

**Source:** Annual reports and research reports of the universities.

**Figure 12.9** University research outputs



**UNIVERSITY RESEARCH PRODUCTIVITY**

Between 2011 and 2012, the number of research outputs per academic staff member increased at two of the four universities that reported total research outputs. In 2012, all but one of the four universities had a ratio higher than in 2009.

**Ratio of reported research outputs per academic staff**

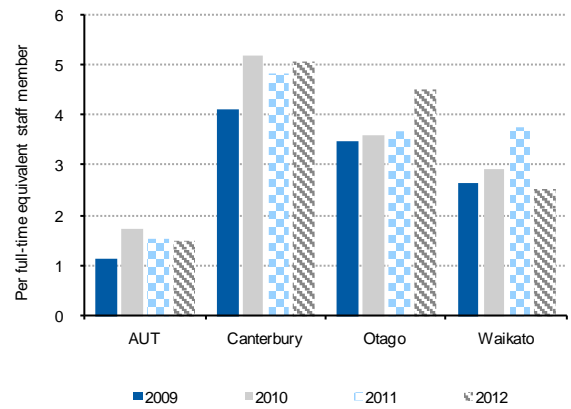
	2009	2011	2012
Auckland University of Technology	1.1	1.5	1.5
University of Canterbury	4.1	4.8	5.1
University of Otago	3.5	3.6	4.5
University of Waikato	2.6	3.8	2.5

**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 and research reports of the universities and Ministry of Education.

**Figure 12.10** Reported research outputs per academic



**SHARE OF WORLD INDEXED PUBLICATIONS AND CITATIONS**

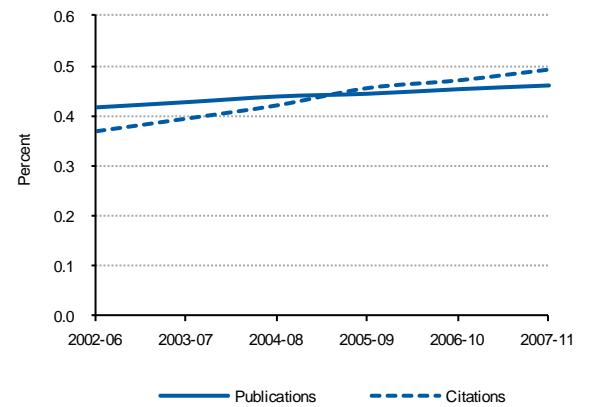
New Zealand’s tertiary education institutions are producing a greater share of the world’s indexed publications and citations over time. The proportion of world-indexed publications produced by New Zealand’s tertiary education institutions increased from 0.42 percent in the period from 2002 to 2006 to 0.46 percent in the period from 2007 to 2011. The proportion of world citations produced by New Zealand’s tertiary education institutions increased from 0.37 percent in the period from 2002 to 2006 to 0.49 percent in the period from 2007 to 2011.

**Share of world indexed publications and citations by New Zealand tertiary education institutions**

	2002-06	2007-11
Publications	0.42%	0.46%
Citations	0.37%	0.49%

**Source:** Thomson Reuters.

**Figure 12.11** Share of world indexed publications and citations by New Zealand’s tertiary education institutions



**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 2007 to 2011, 60 percent of subject areas had a relative academic impact equal to or above the world average. This compares to 47 percent in the period from 2002 to 2006.

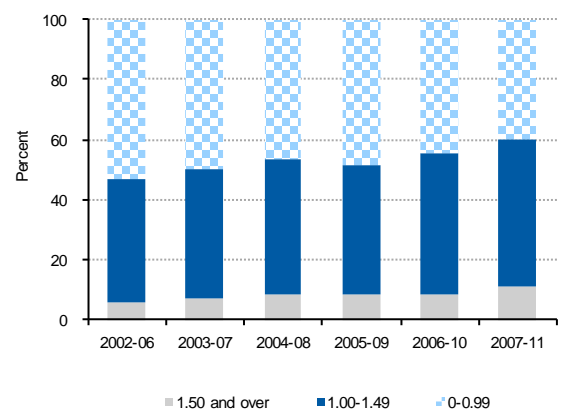
**Distribution of relative academic impact of research across subject areas by New Zealand’s tertiary education institutions**

Relative academic impact	2002-06	2007-11
1.50 and over	5.8%	11%
1.00 to 1.49	41%	49%
0 to 0.99	53%	40%

**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 12.12** 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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This chapter includes:

- ▲ research funding of tertiary education organisations
- ▲ research contract income in universities
- ▲ Vote Research, Science and Technology funding, and
- ▲ university research expenditure.

Government funding of research via Vote Tertiary Education was unchanged in 2012.

External research contract income earned by the universities increased, reaching \$449 million in 2011. The largest source of research contract income for the universities was the government, with 74 percent of income coming from this source. Businesses contributed 7.3 percent of the universities' research income.

Estimated university expenditure on research and development increased by 4.2 percent from 2009 to 2011. The largest proportion of university research expenditure was estimated to be on basic research. The largest category of university research expenditure was in health.

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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 TERTIARY EDUCATION**

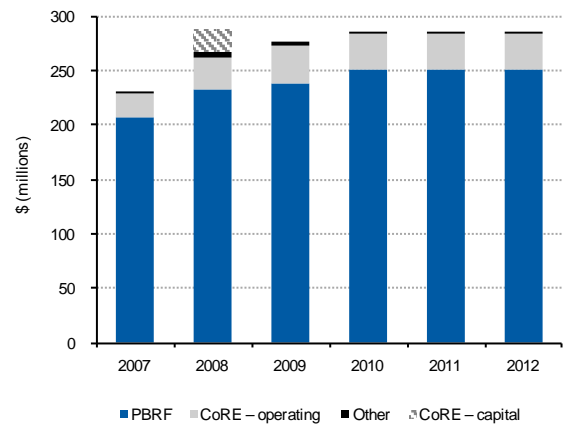
The total research funding via Vote Tertiary Education remained unchanged in 2012, but was 24 percent above the 2007 level. The size of the Performance-Based Research Fund (PBRF) has remained at \$250 million between 2010 and 2012.

**Vote Tertiary Education research funding in tertiary education organisations in 2012**

	\$ (millions)	% change 2007-12	% change 2011-12
Performance-Based Research Fund	250	21	0.0
Centres of research excellence (CoREs) – operating	33	53	-0.9
Other	1.9	16	24
<b>Total</b>	<b>285</b>	<b>24</b>	<b>0.0</b>

Source: Tertiary Education Commission.

**Figure 13.1** Vote Tertiary Education research funding in tertiary education organisations



**DISTRIBUTION OF RESEARCH FUNDING VIA VOTE TERTIARY EDUCATION**

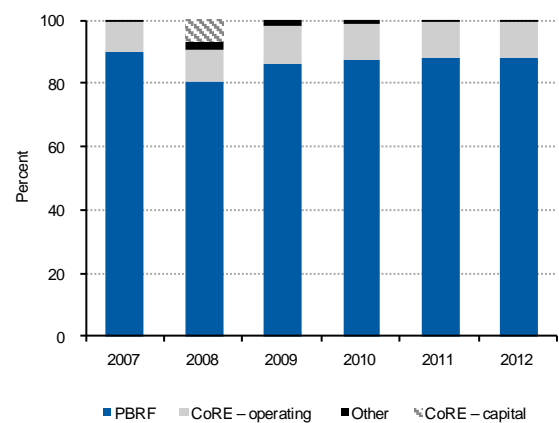
The distribution of research funding via Vote Tertiary Education has remained relatively unchanged since 2009. In 2012, the largest single source of research funding to tertiary education organisations via Vote Tertiary Education was the Performance-Based Research Fund.

**Distribution of Vote Tertiary Education research funding in tertiary education organisations**

	2007	2011	2012
Performance-Based Research Fund	90%	88%	88%
Centres of research excellence – operating	9.4%	12%	12%
Other	0.7%	0.5%	0.7%

Note: Figures may not add to 100 due to rounding.  
Source: Tertiary Education Commission.

**Figure 13.2** Distribution of Vote Tertiary Education research funding in tertiary education organisations



**RESEARCH CONTRACT INCOME IN UNIVERSITIES**

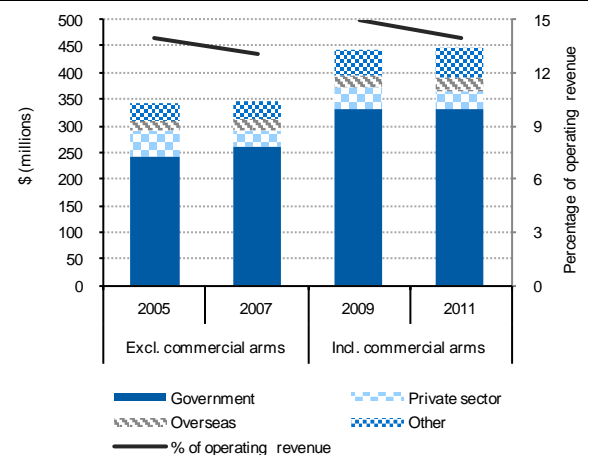
Research contract income in universities grew by 1.6 percent between 2009 and 2011. The fastest growth was in research contracts from overseas, which grew by 21 percent, while contracts from the private sector fell by 20 percent. As a percentage of their total operating revenue, the value of research contracts was 14 percent in 2011, down slightly from 15 percent in 2009.

**University research contract income by source in 2011**

	\$ (millions)	% change 2009-11
Government	311	0.3
Private sector	33	-20
Overseas	29	21
Other	56	19
<b>Total</b>	<b>449</b>	<b>1.6</b>

Notes: 1. Government includes government agencies, Crown research institutes 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. 5. Prior to 2009, the data for university commercial arms was not included in the university data so care should be taken in comparing between these time periods.

**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 2011, the government was the largest source of research contract funding for the universities. The government funding recorded here includes funding through Vote Science and Innovation administered by Ministry of Business, Innovation and Employment, the Health Research Council and the Royal Society of New Zealand. Research contract funding from private business in New Zealand was the next largest single source of research contract funding.

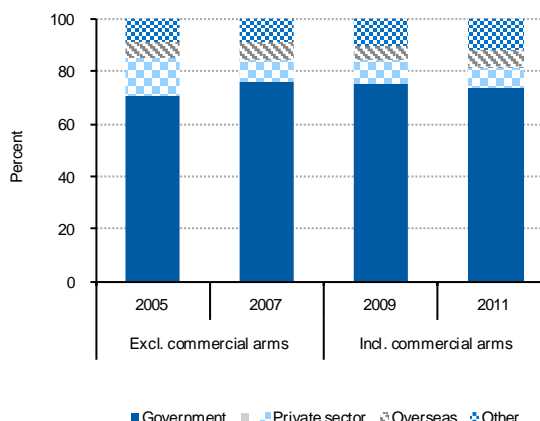
**Percentage of university research contract income by source**

	2009	2011
Government	75%	74%
Private sector	9.3%	7.3%
Overseas	5.4%	6.5%
Other	11%	12%

**Notes:** 1. Government includes government agencies, Crown research institutes 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. 5. Prior to 2009, the data for university commercial arms was not included in the university data so care should be taken in comparing between these time periods. 6. Figures may not add to 100 due to rounding.

**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 2011, the amount of inflation-adjusted Performance-Based Research Fund external research income fell in the universities for the second year in a row. However, it remains well above 2006 levels (up 19 percent).

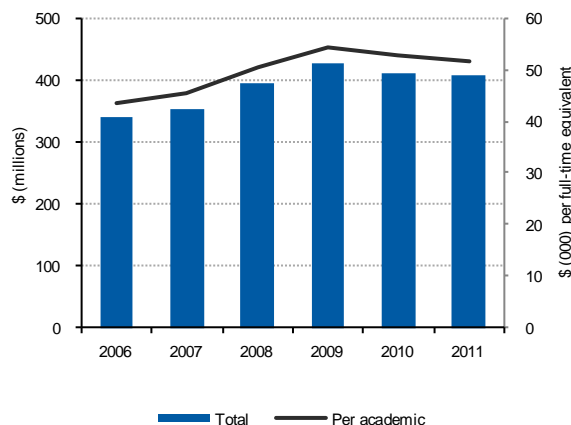
**Inflation-adjusted external research income per academic staff in 2011**

	Total \$(millions)	% change 2006-11	% change 2010-11
Total \$(millions)	407	19	-0.7
Per full-time equivalent academic staff \$(000)	52	19	-2.1

**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 2011 dollars.

**Source:** Tertiary Education Commission and annual reports of the universities

**Figure 13.5** University inflation-adjusted external research income per academic



**UNIVERSITY RESEARCH EXPENDITURE**

The value of the expenditure on research and development by universities increased by just over 4 percent between 2009 and 2011. As a percentage of gross domestic product, this represented 0.41 in 2011, compared to 0.42 in 2009.

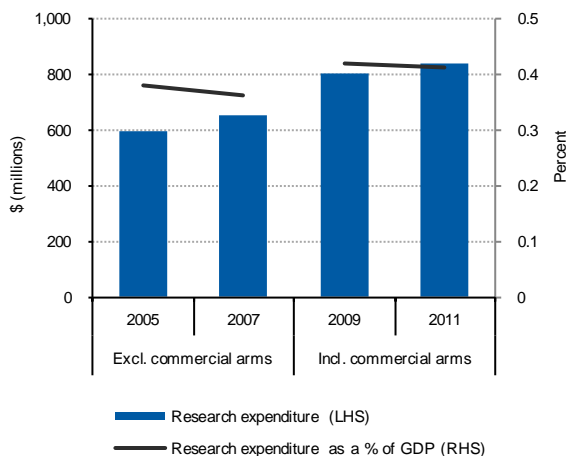
**University research and development expenditure in 2011**

	\$ (millions)	% change 2009-11
Total	836	4.2
As a % of gross domestic product	0.42	0.41

**Notes:** 1. The Research and Development Survey is held biennially. 2. Prior to 2009, the data for university commercial arms was not included in the university data so care should be taken in comparing between these time periods.

**Source:** Statistics New Zealand, *Research and Development Survey*.

**Figure 13.6** University research and development expenditure





**UNIVERSITY RESEARCH EXPENDITURE BY TYPE**

In 2011, the largest type of expenditure on research and development in universities was on basic research. As a proportion of total research expenditure, it was relatively unchanged from 2009. However, the proportion of expenditure on applied research increased from 2009, while the expenditure on experimental development research decreased.

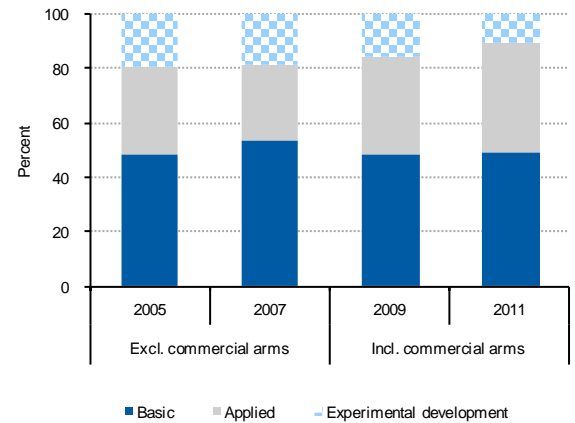
**Distribution of university research and development expenditure by type**

	2009	2011
Basic	48	49
Applied	36	40
Experimental development	16	11

**Notes:** 1. The Research and Development Survey is held biennially. 2. Prior to 2009, the data for university commercial arms was not included in the university data so care should be taken in comparing between these time periods.

**Source:** Statistics New Zealand, *Research and Development Survey*.

**Figure 13.7** University research and development expenditure by type



**UNIVERSITY RESEARCH EXPENDITURE BY PURPOSE**

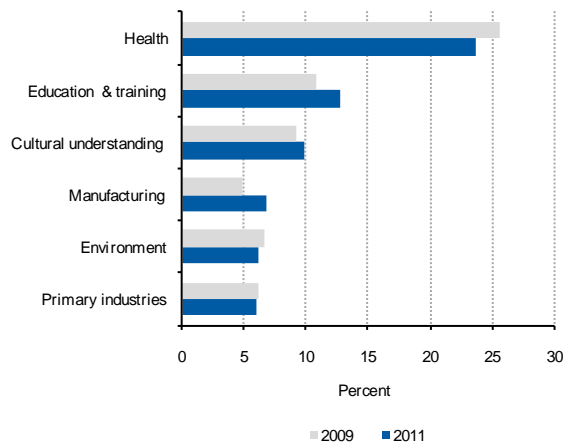
In 2011, the largest area of university research and development expenditure was health, followed by education and training. Manufacturing and education and training were two areas to increase as a proportion of expenditure between 2009 and 2011.

**Distribution of university research and development expenditure**

	2009	2011
Health	26	24
Education and training	11	13
Cultural understanding	9.2	9.9
Manufacturing	4.9	6.8
Environment	6.6	6.1
Primary industries	6.2	6.0

**Source:** Statistics New Zealand, *Research and Development Survey*.

**Figure 13.8** University research and development expenditure by purpose



# 14 FINANCIAL PERFORMANCE OF TERTIARY EDUCATION INSTITUTIONS

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This chapter includes the:

- ▲ summary financial position of tertiary education institutions by sector, and
- ▲ trends in revenue, expenditures and cash cover.

The financial performance of tertiary education institutions weakened from 2011 to 2012, however, the financial position of polytechnics and wānanga is stronger now than in 2007.

In 2012, the financial measures reported on here were well above the low-risk threshold recommended by the Tertiary Education Commission. Compared to 2007, the overall size of the operating surplus of tertiary education institutions (before abnormals) has increased slightly.

In 2012, 19 of the 29 institutions had an operating surplus (before abnormals) above 3 percent of operating revenue – the low-risk threshold recommended by the Tertiary Education Commission. This compared to 25 out of 31 institutions in 2011 and 14 out of 31 institutions in 2007.

Revenue and expenditure both increased in tertiary education institutions from 2011 to 2012. However, universities and polytechnics had a decrease in surplus as a percentage of operating revenue, as expenditure increased more strongly than revenue.

Cash cover – a measure of immediate viability – decreased from 2011 to 2012 for universities and polytechnics. Cash cover was markedly stronger in 2012 than 2007 for wānanga.

The debt-to-debt plus equity ratio, which measures the leverage of an institution, improved for wānanga and polytechnics from 2011 to 2012. Compared to 2007, wānanga and polytechnics have improved their position significantly on this measure.

Capital expenditure fell in 2012 after rising significantly in 2011. However, net capital expenditure was still 46 percent above the level in 2007.

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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

Figure 14.1 Summary financial position of tertiary education institutions

While the overall financial performance of tertiary education institutions weakened from 2011 to 2012, all measures were well above the low-risk threshold recommended by the Tertiary Education Commission. Compared to 2007, the financial performance has improved for all measures except net cash flow.

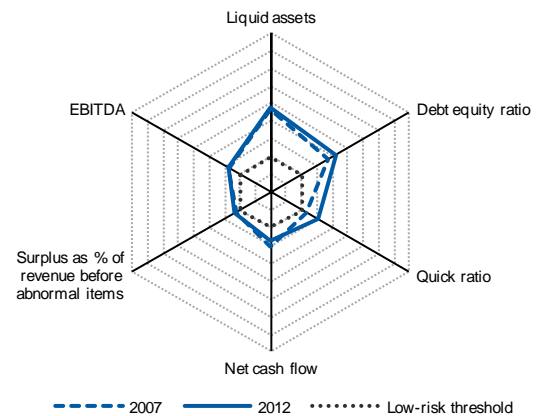
### Summary financial position of tertiary education institutions

	2007	2011	2012
Liquid assets	232	290	241
Debt equity ratio	189	230	210
Quick ratio	116	187	151
Net cash flow	154	143	136
Surplus as % of operating revenue before abnormal items	112	130	119
Earnings before interest, tax, depreciation, amortisation and one-off abnormal items (EBITDA)	135	136	137

#### Notes:

1. The performance data has been scaled to form an index.
2. The Tertiary Education Commission low-risk threshold has been scaled to 100.

Source: Ministry of Education and Tertiary Education Commission.



## SUMMARY FINANCIAL POSITION OF UNIVERSITIES

Figure 14.2 Summary financial position of universities

The summary financial position of universities weakened from 2011 to 2012. The operating surplus (before abnormal items), the quick ratio, liquid assets and the debt-to-debt plus equity ratio were lower in 2012 than in 2011. All six measures were below the level in 2007.

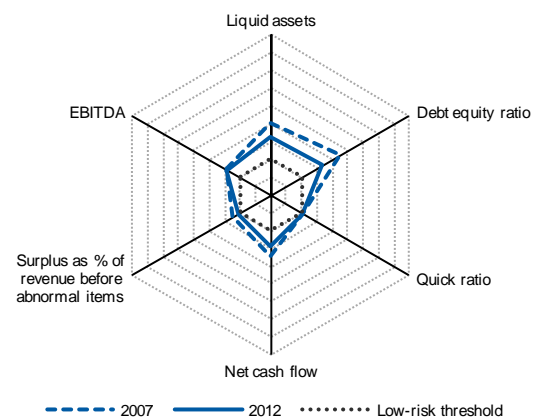
### Summary financial position of universities

	2007	2011	2012
Liquid assets	202	203	161
Debt equity ratio	224	200	169
Quick ratio	105	138	104
Net cash flow	170	145	143
Surplus as % of operating revenue before abnormal items	124	114	107
EBITDA	147	141	143

#### 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.



## SUMMARY FINANCIAL POSITION OF POLYTECHNICS

Figure 14.3 Summary financial position of polytechnics

The overall financial position of polytechnics weakened from 2011 to 2012, while it has improved markedly since 2007. Although all measures apart from the debt-to-debt plus equity ratio decreased from 2011 to 2012 these measures are now well above the low-risk threshold recommended by the Tertiary Education Commission.

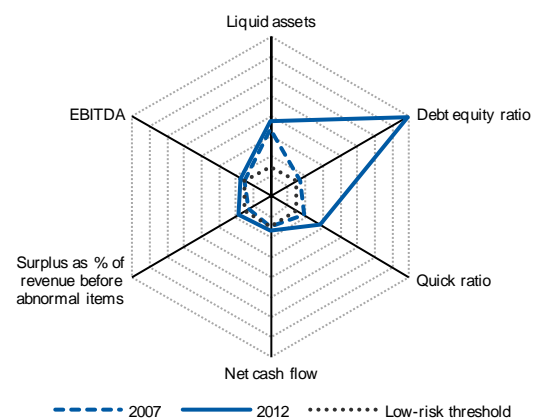
### Summary financial position of polytechnics

	2007	2011	2012
Liquid assets	287	427	329
Debt equity ratio	114	374	743
Quick ratio	138	267	230
Net cash flow	103	138	119
Surplus as % of operating revenue before abnormal items	78	172	139
EBITDA	105	130	124

#### Notes:

1. The performance data has been scaled to form an index. The axis value on Figure 14.3 is 750 compared to 450 on Figures 14.1 and 14.2.
2. The Tertiary Education Commission benchmark for prudent operation has been scaled to 100.

Source: Ministry of Education and Tertiary Education Commission.



### REVENUE AND EXPENDITURE IN TERTIARY EDUCATION INSTITUTIONS

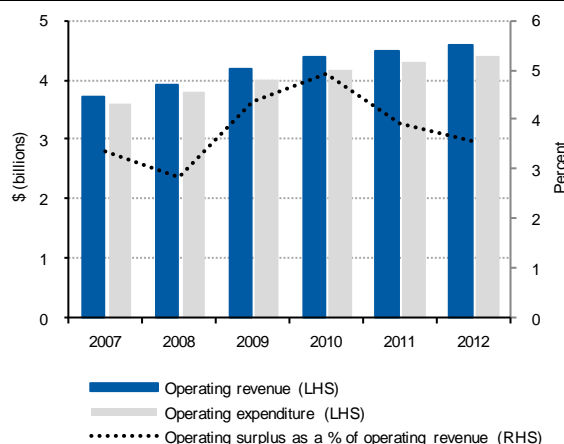
Revenue and expenditure both increased in tertiary education institutions from 2011 to 2012. As the operating expenditure increased slightly more than operating revenue, the operating surplus decreased as a percentage of operating revenue.

#### Operating revenue and expenditure of tertiary education institutions in 2012

	\$ (billions)	% change 2007-12	% change 2011-12
Operating revenue	4.57	23	2.1
Operating expenditure	4.41	22	2.4
	2007	2011	2012
Operating surplus as a % of operating revenue before abnormal items	3.4	3.9	3.6

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

All tertiary education institution sub-sectors had an operating surplus in 2011 (before abnormal items). However, universities and polytechnics reported a decrease from 2011 to 2012 in surplus as a percentage of operating revenue. The largest surplus, as a percentage of operating revenue, was reported by wānanga, followed by polytechnics and universities.

#### Operating surplus (before abnormal items) in tertiary education institutions as a percentage of operating revenue

	2007	2011	2012
Total	3.4	3.9	3.6
Universities	3.7	3.4	3.2
Polytechnics	2.4	5.2	4.2
Wānanga	3.0	5.0	6.4

Source: Ministry of Education and Tertiary Education Commission.

Figure 14.5 Operating surplus (before abnormal items) of tertiary education institutions

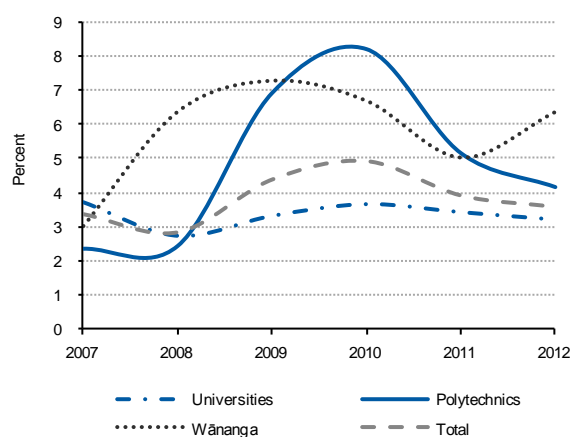
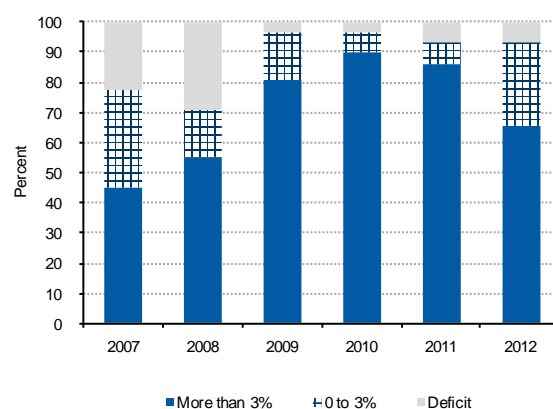


Figure 14.6 Distribution of tertiary education institutions' operating surplus (before abnormal items) as a percentage of income



### FINANCIAL HEALTH OF TERTIARY EDUCATION INSTITUTIONS

In 2012, 19 of the 29 institutions had an operating surplus (before abnormal items) that exceeded the low-risk threshold recommended by the Tertiary Education Commission of 3 percent of revenue. This compares to 29 out of 31 institutions in 2011 and 14 out of 31 in 2007. In 2012, as in 2011, there were two institutions with an operating deficit.

#### Distribution of tertiary education institutions' operating surplus (before abnormal items) as a percentage of total revenue

	2007	2011	2012
More than 3%	45	86	66
0 to 3%	32	6.9	28
Less than 0% (deficit)	23	6.9	6.9

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

Four universities, three wānanga and 12 out of the 18 polytechnics reported surpluses, before abnormal items, in 2012 above the low-risk threshold recommended by the Tertiary Education Commission of 3 percent.

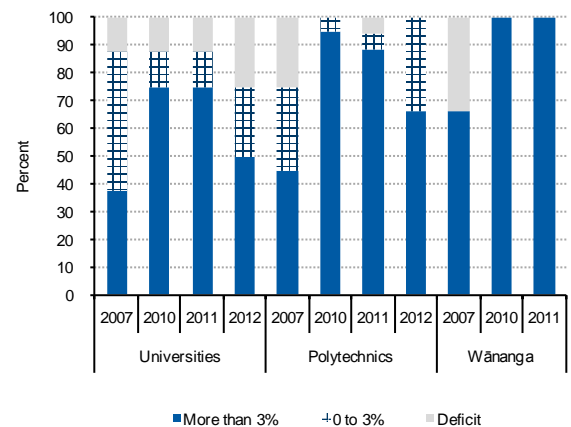
### Distribution of operating surplus (before abnormal items) as a percentage of total revenue by sub-sector

	Universities			Polytechnics			Wānanga		
	2007	2011	2012	2007	2011	2012	2007	2011	2012
More than 3%	38	75	50	45	89	67	67	100	100
0 to 3%	50	13	25	30	5.6	33	0	0	0
Less than 0% (deficit)	13	13	25	25	5.6	0	33	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. 3. There were 8 universities and 3 wānanga in each of the years in this table. There were 20 polytechnics in 2007 and 18 in 2012.

**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



**Figure 14.8** Distribution of tertiary education institutions' income by source

## SOURCE OF TERTIARY EDUCATION INSTITUTION REVENUE

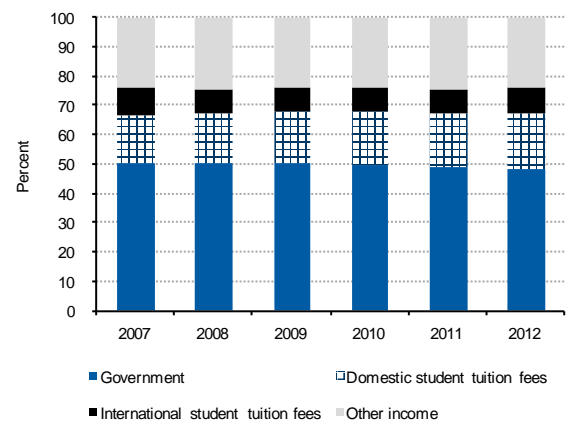
The largest revenue source of tertiary education institutions is government funding via Vote Tertiary Education. At \$2.23 billion, this represented 49 percent of all revenue in 2012, down slightly from 51 percent in 2009. Funding sourced from domestic student tuition fees and international student tuition fees rose slightly to 19 percent and 8.8 percent of total revenue, respectively.

### Distribution of tertiary education institutions' revenue by source

	2007	2011	2012
Government	50%	49%	49%
Domestic student tuition fees	17%	18%	19%
International student tuition fees	8.8%	8.5%	8.8%
Other income	24%	24%	24%

**Notes:** 1. Figures may not add to 100 percent due to rounding. 2. Government funding in this analysis refers to Vote Tertiary Education funding for tuition and research.

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



## REVENUE PER STUDENT IN TERTIARY EDUCATION INSTITUTIONS

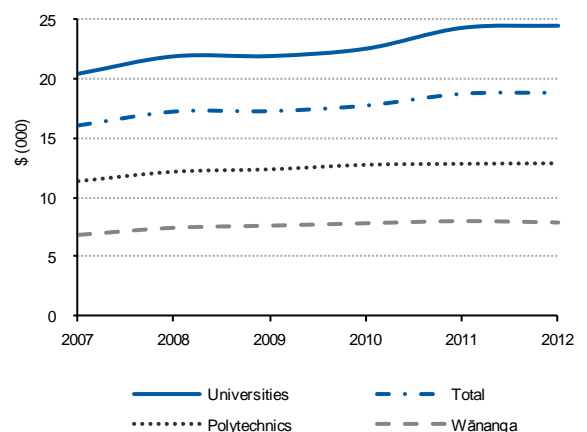
The operating revenue per student increased in universities and polytechnics from 2011 to 2012. In 2009, revenue per student was constrained by institutions taking on greater numbers of unfunded student places.

### Operating revenue per equivalent full-time student in 2012

	\$ (000)	% change 2007-12	% change 2011-12
Total	18.7	17	0.5
Universities	24.4	20	0.7
Polytechnics	12.9	14	0.4
Wānanga	7.87	14	-1.3

**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**

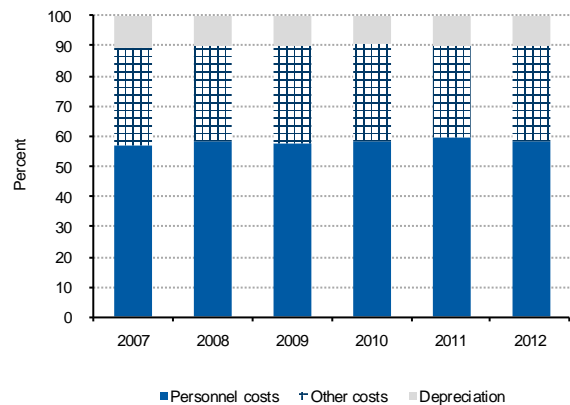
Tertiary education institutions spent \$4.41 billion in 2012. At 59 percent, personnel costs represent the largest component of expenditure of tertiary education institutions, reflecting the fact that tertiary education is a service industry.

**Distribution of expenditure by tertiary education institutions by component**

	2007	2011	2012
Personnel costs	57%	60%	59%
Other costs	32%	31%	32%
Depreciation	11%	9.6%	9.8%

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**

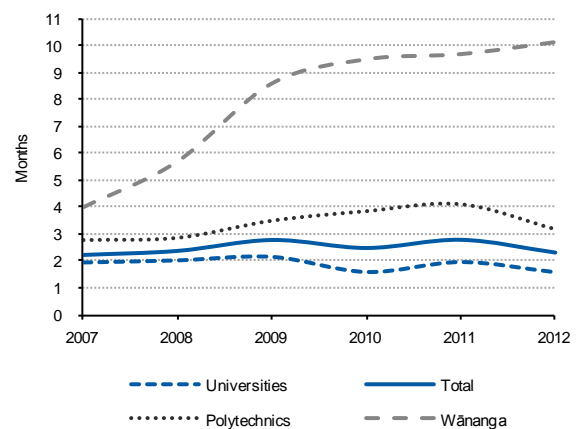
One important indicator of the financial viability of an institution is cash cover, which is measured by the months of operating cash disbursements held by the organisation. In 2012, the cash cover in universities and polytechnics fell. Wānanga have had the greatest improvement in their cash cover since 2007, largely due to settlement of treaty claims and improvements in Te Wānanga o Aotearoa's operating performance.

**Cash cover by sub-sector**

	2007	2011	2012
Cash cover in months			
Total	2.2	2.8	2.3
Universities	1.9	2.0	1.5
Polytechnics	2.8	4.1	3.2
Wānanga	4.0	9.7	10.1

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.

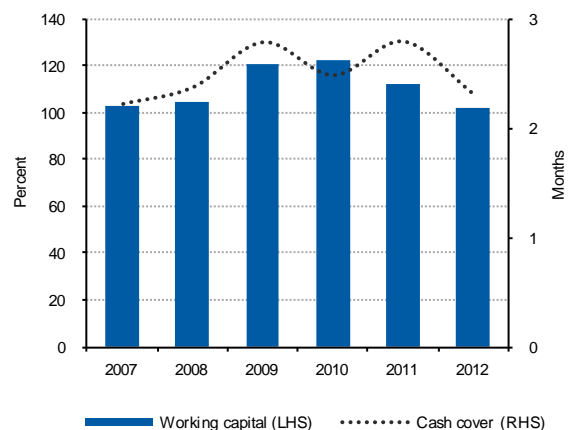
In 2012, the working capital ratio was 102 percent, down on the 112 percent reported in 2011.

**Working capital ratio and cash cover in tertiary education institutions**

	2007	2011	2012
Working capital (%)	103	112	102
Cash cover in months	2.2	2.8	2.3

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 2012, the value of fixed assets per equivalent full-time student increased in polytechnics and wānanga.

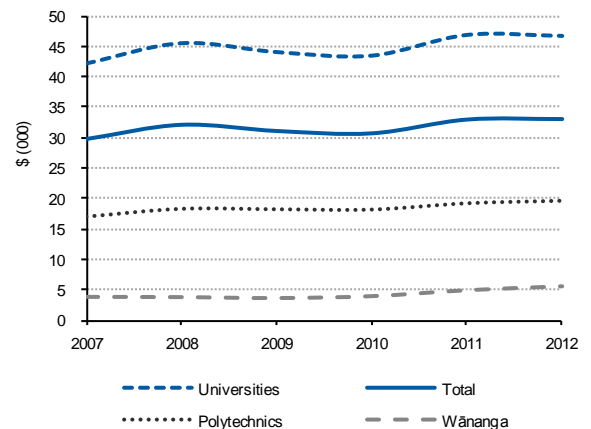
The universities have the highest level of assets per student, in part reflecting the research infrastructure they manage. The assets of the three wānanga remained lower than for other types of institutions.

#### Fixed assets per equivalent full-time student by sub-sector in 2012

	\$ (000s)	% change 2007-12	% change 2011-12
Total	33.0	+11	+0.2
Universities	46.6	+11	-0.4
Polytechnics	19.5	+16	+2.2
Wānanga	5.49	+40	+12

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

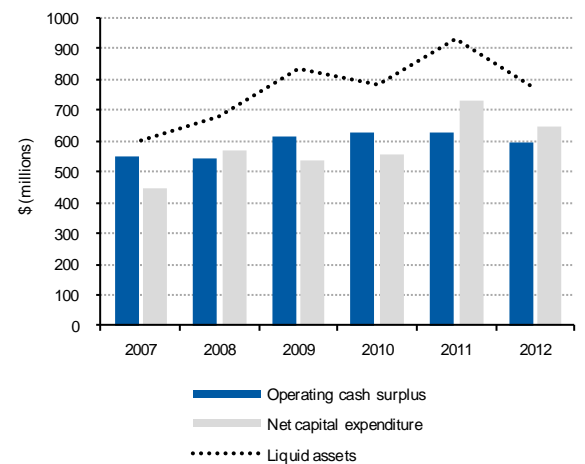
In 2012, net capital expenditure was higher than the operating cash surplus. This means that within 2012, institutions had a decrease in their financial reserves and spent operational cash flow on improving their fixed assets.

#### Operating cash surplus, net capital expenditure and liquid assets of tertiary education institutions in 2012

	\$ (millions)	% change 2007-12	% change 2011-12
Operating cash surplus	597	+9.2	-5.2
Net capital expenditure	648	+46	-11
Liquid assets	767	+28	-17

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 recommended low-risk threshold is 7.5 percent or less.

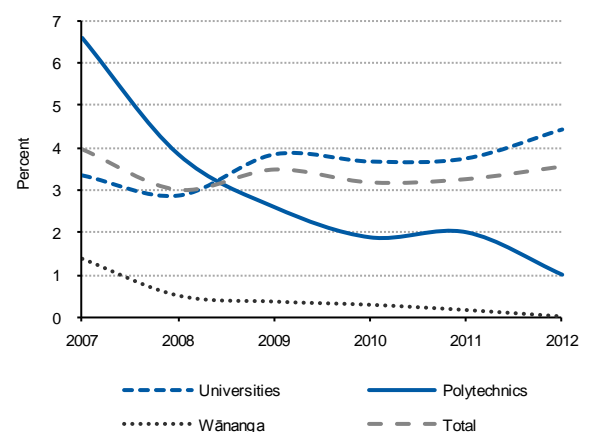
In 2012, wānanga improved their debt-to-debt plus equity position. Wānanga and polytechnics have improved their position significantly since 2007.

#### Debt-to-debt plus equity ratio by sub-sector

	2007	2011	2012
Total	4.0%	3.3%	3.6%
Universities	3.3%	3.8%	4.4%
Polytechnics	6.6%	2.0%	1.0%
Wānanga	1.4%	0.2%	0.0%

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. The Tertiary Education Commission recommended low-risk threshold is 1.5.

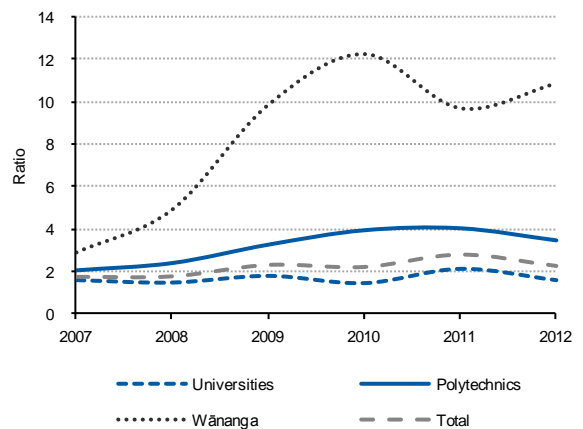
In 2012, the quick ratio declined in universities and polytechnics.

**Quick ratio by sub-sector**

	2007	2011	2012
Total	1.7	2.8	2.3
Universities	1.6	2.1	1.6
Polytechnics	2.1	4.0	3.4
Wānanga	2.9	9.7	10.9

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 as a percentage of total operating revenue. This gives a sense of their core earnings. The Tertiary Education Commission recommended low-risk threshold is a surplus of 9.0 percent.

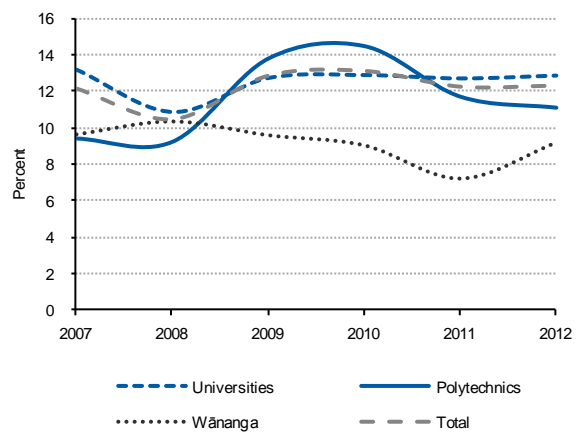
In 2012, all sub-sectors reported an EBITDA above the Tertiary Education Commission benchmark, with universities exhibiting the strongest performance.

**EBITDA by sub-sector**

	2007	2011	2012
Total	12%	12%	12%
Universities	13%	13%	13%
Polytechnics	9.4%	12%	11%
Wānanga	9.6%	7.2%	9.2%

Source: Ministry of Education and Tertiary Education Commission.

**Figure 14.17** EBITDA by sub-sector





# 15 TERTIARY EDUCATION WORKFORCE

This chapter includes:

- ▲ academic and non-academic staffing trends
- ▲ student-to-staff ratios
- ▲ gender differences in the tertiary education workforce, and
- ▲ personnel expenditure in tertiary education institutions.

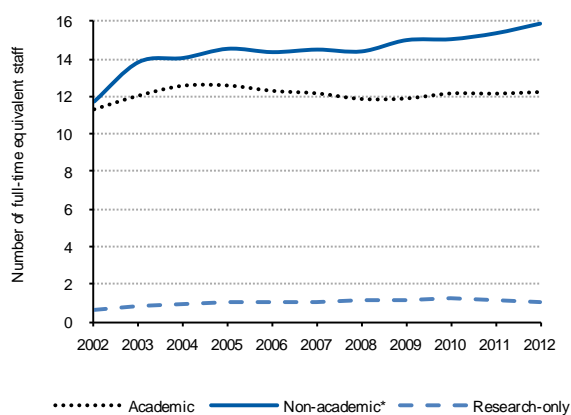
## Full-time equivalent staff

The upward trend in the number of non-academic full-time equivalents at public tertiary education institutions continued in 2012, while the number of academic full-time equivalents remained stable.<sup>1</sup> This diverging pattern began in 2008.

The main reason for the latest increase in the non-academic staff was the employment of more teacher support staff at universities and polytechnics, partially offset by a decrease in the number of teacher support staff at wānanga.

The number of academic full-time equivalents increased slightly in 2012, due to an increase in the number of tutors at polytechnics, partially offset by fewer lecturers at universities and wānanga, as well as, fewer 'other' academic staff at universities.

**Figure 15.1** Trend in the full-time equivalent staff at public tertiary education institutions



\*Non-academic includes research support staff.

<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.

## Number of staff

The number of non-academic staff at public tertiary education institutions has increased steadily since 2008. The increase in 2012 was due to the employment of more support staff at universities and polytechnics.

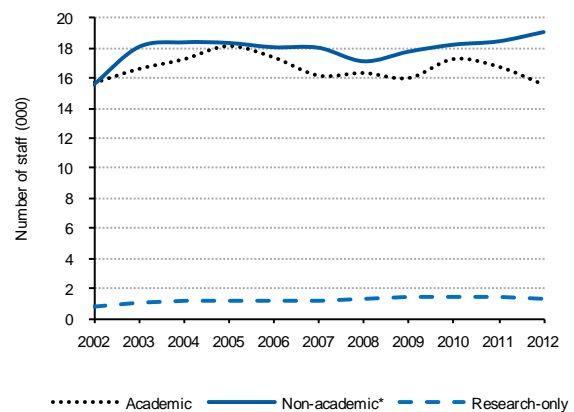
In contrast, the academic staff has decreased in number for most years since 2005. In 2012, the academic staff decreased in number for each sub-sector.

At universities, the downward trend in the number of lecturers continued and, in 2012, there also was a substantial drop in the other teaching and combined teaching and research staff. Before 2012, the trend in the number of 'other' teaching staff had been moving upwards. Professors, including associate professors, also continued to increase in number from 2011 to 2012, a trend that started over 10 years ago.

At polytechnics, the decrease in the number of academic staff from 2011 to 2012 was caused by a substantial drop in the number of other teaching staff, while staff in all other academic designations increased in number.

At wānanga, the number of tutors continued to decrease in 2012, from a high point in 2004. The number of lecturers at wānanga also declined in 2012.

**Figure 15.2** Trend in the number of staff employed at public tertiary education institutions



\*Non-academic includes research support staff.

## Personnel costs

Expenditure on the workforce increased from 58 percent of all expenditure in public tertiary education institutions in 2010 to 60 percent in 2011. In 2011, personnel expenditure was \$2.57 billion, up 5.6 percent on 2010.

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)

### TERTIARY EDUCATION WORKFORCE<sup>1</sup>

The number of full-time equivalents has increased slowly in recent years in line with increases in the total student study load. The full-time equivalent staff in public tertiary education institutions increased in number from 2011 to 2012 by 1.8 percent, while the number of staff employed decreased by a similar percentage. The number of full-time equivalent staff at private training establishments remained stable from 2011 to 2012.

#### Full-time equivalent staff

	2011	2012	% change from 2011
Tertiary education institutions	28700	29,200	+1.8
Private training establishments	6,100	6,090	-0.2
Universities	19,100	19,400	+1.4
Polytechnics	8,090	8,410	+4.0
Wānanga	1,500	1,430	-4.7

Note: In 2012, tertiary education institutions comprised 8 universities, 18 institutes of technology and polytechnics, and 3 wānanga.

### ACADEMIC AND NON-ACADEMIC STAFFING

At tertiary education institutions, the upward trend in the number of non-academic full-time equivalents has continued, while the number of academic full-time equivalents remained stable. In terms of the number of staff, the non-academic staff continued to increase in 2012, while the academic staff has tracked downwards in most years since 2005.

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

	Academic			Non-academic		
	2011	2012	% change	2011	2012	% change
Tertiary education institutions	12,200	12,200	+0.7	16,500	17,000	+2.6
Private training establishments	3,430	3,370	-1.7	2,672	2,720	+1.8
Universities	7,160	7,060	-1.4	11,900	12,300	+3.1
Polytechnics	4,240	4,440	+4.6	3,840	3,970	+3.3
Wānanga	762	751	-1.4	734	674	-8.2

Note: Research-only staff and research support staff are included in non-academic staff here.

### STUDENT-TO-STAFF RATIOS

The student-to-staff ratio has increased at tertiary education institutions. Over the last 10 years, the academic workforce at public tertiary education institutions has not increased as strongly, in terms of full-time equivalents, as the number of domestic and international equivalent full-time student units. At wānanga a lower student-to-staff ratio has coincided with an increase in longer and higher-level study.

#### Students to academic staff ratios

	2007	2011	2012
Tertiary education institutions	18.5	19.4	19.5
Universities	17.8	18.6	19.0
Polytechnics	17.	18.5	18.1
Wānanga	41.2	32.4	32.9

Notes: 1. These ratios have been calculated using the equivalent full-time student measure and the full-time equivalent academic staff count, excluding research-only staff. 2. The ratio at wānanga is significantly higher than at other types of tertiary education institutions because of the delivery of distance programmes.

Figure 15.3 Full-time equivalent staff and equivalent full-time student units in tertiary education institutions

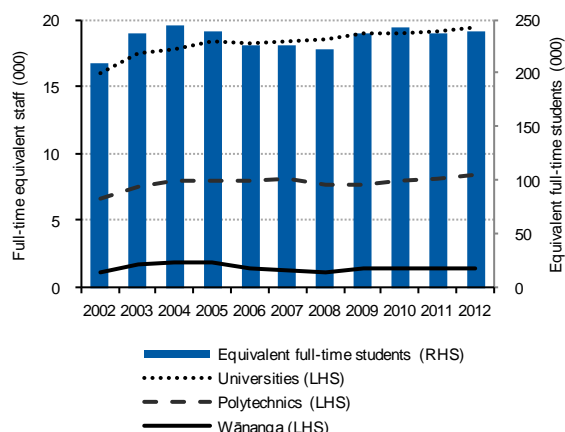


Figure 15.4 Annual change in the number of full-time equivalent staff in tertiary education institutions

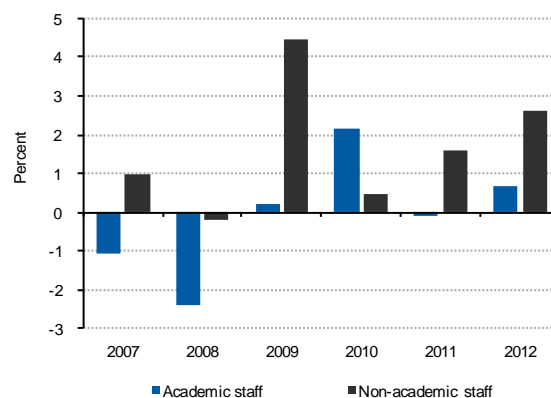
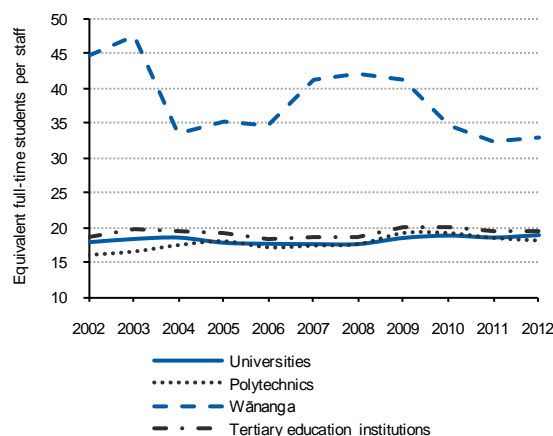


Figure 15.5 Average number of students per academic staff member



Note: Broken axis.

<sup>1</sup> The workforce statistics in this chapter are a snapshot of staff employed in the last week of July or the first week of August. This information is provided to the Ministry of Education by tertiary education providers. Private training establishments include non-government funded providers. As non-government funded providers are not required to provide information on their students and staff this data is not strictly comparable from year to year.

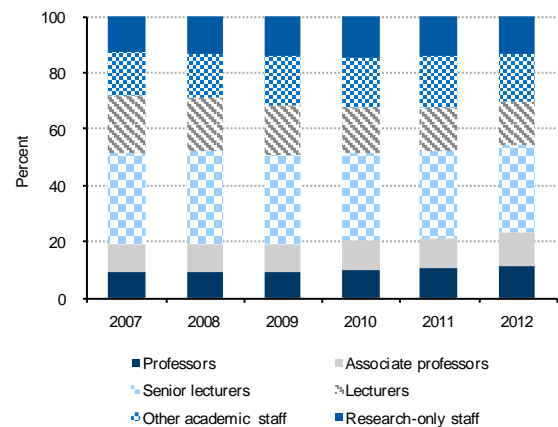
## UNIVERSITY ACADEMIC AND RESEARCH STAFF

Over the last 10 years, there was a reduction in the number of lecturers, steady growth in the number of professors and the number of research-only staff almost doubled. This reflects both the ageing of the workforce with lecturers staying on to become senior lecturers or professors, as well as, a strategic decision by universities to employ academics with a greater research profile. The number of 'other' academic staff has been increasing more strongly than the associated number of full-time equivalents, causing a decrease in the average full-time equivalent value per part-timer.

### Proportion of university academic staff by designation in 2012 (based on full-time equivalent staff)

Professors	12%	(9.6% in 2007)
Associate professors	11%	(9.4% in 2007)
Senior lecturers	32%	(32% in 2007)
Lecturers	15%	(20% in 2007)
Other academic staff	17%	(16% in 2007)
Research-only staff	13%	(12% in 2007)

**Figure 15.6** Distribution of university academic full-time equivalents by designation



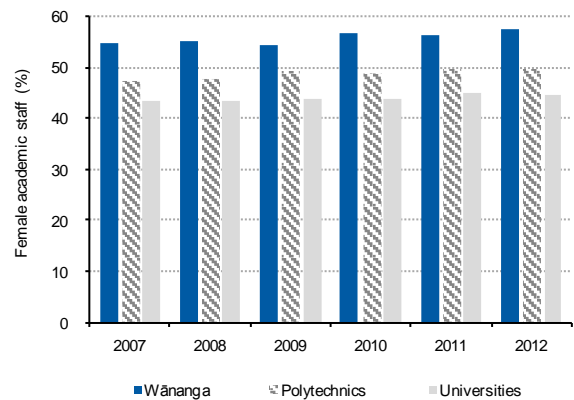
**Figure 15.7** Proportion of female academic full-time equivalents by provider type

## GENDER DIFFERENCES

From 2011 to 2012, the proportion of female academic full-time equivalents remained stable at universities and polytechnics, while it increased at wānanga. The proportion of female academic full-time equivalents at polytechnics has ranged from 47 percent to 50 percent, while at universities and wānanga the gender balance has shifted in favour of women over the last decade.

### Proportion of female academic staff by provider type in 2012 (based on full-time equivalent staff)

Tertiary education institutions	47%	(45% in 2007)
Universities	44%	(43% in 2007)
Polytechnics	49%	(47% in 2007)
Wānanga	58%	(55% in 2007)



**Note:** Based on the number of staff, the proportion of the female academic workforce was 50 percent overall at public tertiary education institutions in 2012, compared to 60 percent at wānanga, 52 percent at polytechnics and 47 percent at universities.

## GENDER DIFFERENCES AT UNIVERSITIES

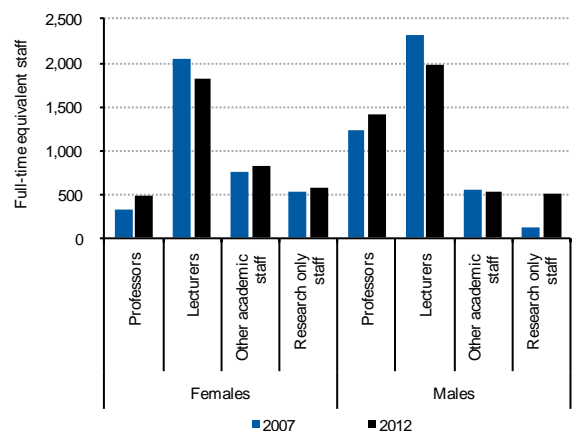
In terms of full-time equivalents, the female academic staff at universities increased over the last 10 years, while the male academic staff declined. The proportion of female university professors continued to increase in 2012. While the female research-only full-time equivalent staff has decreased, proportionately, since a high point in 2004, it doubled in number from 2002 to 2012. In comparison, the male research-only full-time equivalent staff increased by one third from 2002 to 2012 and they now comprise 22 percent of the total research-only staff.

In 2012, there were 3,920 male academic full-time equivalents, compared to 3,140 female academic full-time equivalents.

### Proportion of female university academic staff in 2012 (based on full-time equivalent staff)

Professors/associate professors	26%	(21% in 2007)
Senior lecturers/lecturers	48%	(47% in 2007)
Other academic staff	61%	(58% in 2007)
Research-only staff	78%	(81% in 2007)

**Figure 15.8** University academic full-time equivalents by gender



**PERSONNEL COSTS**

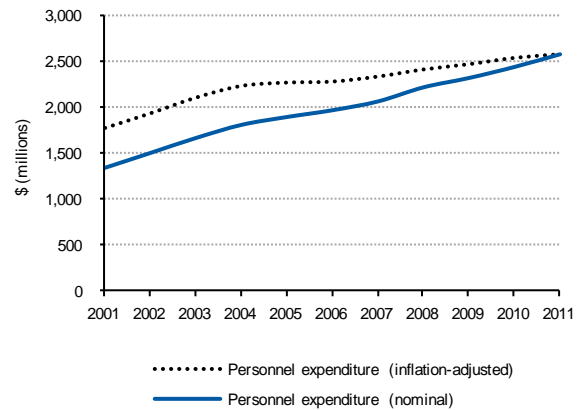
The personnel cost at public tertiary education institutions in 2011 was \$2.57 billion overall. Personnel expenditure was 5.6 percent higher in 2011 than in 2010, when it totalled \$2.43 billion.

After adjusting for inflation, personnel costs have increased from 2001 to 2011 by 2.8 percent per year.

Personnel expenditure represented 60 percent of all expenditure in tertiary education institutions in 2011, compared to 58 percent in 2010.

Source: Annual reports of tertiary education institutions.

**Figure 15.9** Personnel expenditure in tertiary education institutions



**PERSONNEL COSTS PER STAFF MEMBER**

The personnel cost per staff member at public tertiary education institutions increased by 5.0 percent from 2010 to 2011, due to costs rising by 5.6 percent and the full-time equivalent staff increasing by 0.6 percent.

From 2010 to 2011, the personnel cost per staff member rose at universities by 6.3 percent. This was due to an increase in costs of 6.5 percent and an increase in staff numbers of 0.2 percent. At polytechnics and wānanga, the personnel costs per staff member rose less strongly than in the universities. After adjusting for inflation, the personnel costs per staff member rose for the university sector, while it fell for polytechnics and wānanga.

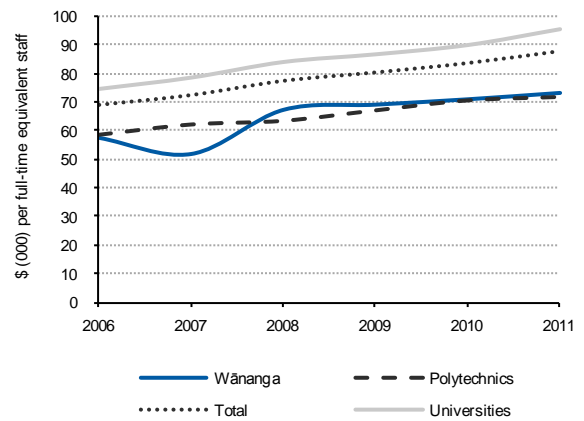
**Personnel costs per full-time equivalent staff member**

	\$ (000) nominal				Inflation-adjusted		
	2006	2010	2011	% change 2006-11	% change 2010-11	% change 2006-11	% change 2010-11
Total	69.0	83.	87.8	+27.3	+5.0	+13.1	+0.9
Universities	74.3	89.9	95.6	+28.7	+6.3	+11.3	+2.2
Polytechnics	58.7	70.5	71.8	+22.3	+1.7	+5.7	-2.2
Wānanga	57.5	70.8	73.	+26.8	+3.1	+9.6	-0.9

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 2011.

Source: Annual reports of tertiary education institutions.

**Figure 15.10** Personnel expenditure per staff member



# 16 FUNDING OF TERTIARY EDUCATION

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This chapter includes:

- ▲ government expenditure on tertiary education
- ▲ average tuition subsidy and the characteristics of government-funded students
- ▲ delivery and funding of tertiary education, and
- ▲ fees and the affordability of tertiary education.

Total government spending on tertiary education in the year ended June 2012 decreased by 1.2 percent on the previous year to \$5.32 billion.<sup>1</sup> In inflation-adjusted terms, this represented a decrease of 3.1 percent. When new lending on student loans is excluded, total government expenditure on tertiary education decreased by 2.2 percent and when adjusted for inflation the decrease was 4.0 percent.

In 2011/12, government funding of tertiary education accounted for 2.6 percent of gross domestic product. When new lending on student loans is excluded, it represented 1.8 percent of gross domestic product.

Tertiary education expenditure decreased for 2011/12 on industry training. Government research spending fell as a result of changes in the contestable research funds managed through Vote Science and Innovation, while Vote Tertiary Education research funding was stable. Expenditure on student allowances and student loans increased.

There was a slight decrease from 2011 to 2012 in the number of equivalent full-time student places funded by the Tertiary Education Commission through the student achievement component. However, government spending via the student achievement component increased as a result of an increase in the base funding rates exceeding the impact of the decrease in the number of student places.

Student achievement component-funded provision of public tertiary education institutions was slightly below the level funded by government in 2012, while over-delivery by private training establishments has fallen significantly from a peak in 2009.

The average domestic tuition fee per equivalent full-time student increased by 7.9 percent at public tertiary education institutions in 2011. Around half of the increase came from decisions by institutions to increase their fees. A little more than 1 percentage point came from the increase in goods and services tax from 12.5 percent to 15 percent. The remainder of the increase – around 3 percentage points – is attributable to a shift in enrolment patterns away from low-cost courses and towards courses with higher fees.

The contribution by government towards industry training fell, while the contribution by industry rose in 2011. 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.

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Analytical tables: Data on the funding of tertiary education is available at: [www.educationcounts.govt.nz/statistics/tertiary\\_education/resources](http://www.educationcounts.govt.nz/statistics/tertiary_education/resources).

<sup>1</sup> Including spending on student loans and allowances.

## GOVERNMENT EXPENDITURE

Total government expenditure on tertiary education was \$5.3 billion in 2011/12. This represented a decrease of 1.2 percent from the previous year in nominal terms and a decrease of 3.1 percent in real terms. When new lending on student loans and allowances is excluded, expenditure on tertiary education decreased by 3.4 percent in nominal terms and 5.0 percent in real terms.

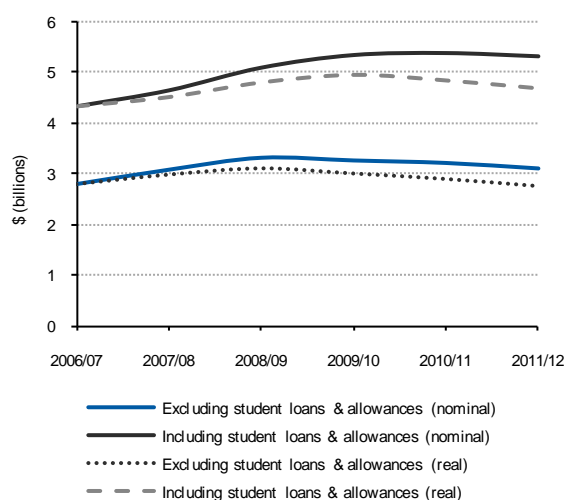
### Government expenditure on tertiary education for the year ended June 2012

	\$ (billions)	% change 2007-12		% change 2011-12	
		Nominal	Real	Nominal	Real
Incl. student loans/allowances	5.32	+23	+7.8	-1.2	-3.1
Excl. student loans/allowances	3.09	+11	-1.5	-3.4	-5.0

**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 Business, Innovation and Employment, Health Research Council and Royal Society.

**Figure 16.1** Government spending (June years) on tertiary education



## EXPENDITURE AS A PERCENTAGE OF GROSS DOMESTIC PRODUCT

As a percentage of gross domestic product, total government expenditure on tertiary education in 2011/12 fell from the previous year. However, expenditure remains around the level of 2006/07.

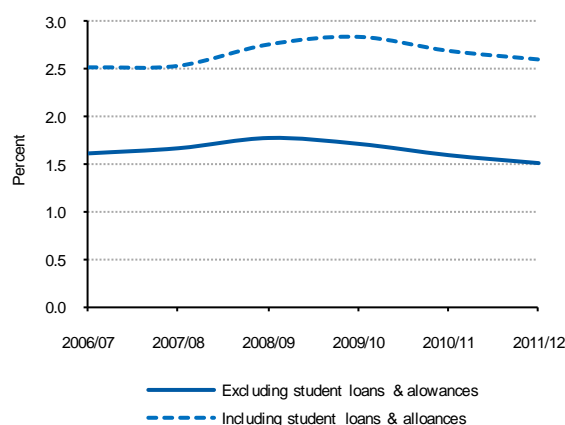
### Government expenditure on tertiary education as a percentage of gross domestic product

	2006/07	2010/11	2011/12
Incl. student loans/allowances	2.5%	2.7%	2.6%
Excl. student loans/allowances	1.6%	1.6%	1.5%

**Note:** Student loan expenditure is the new lending in each year.

**Source:** Ministry of Education, Tertiary Education Commission, Ministry of Social Development, Ministry of Business, Innovation and Employment, Health Research Council and Royal Society.

**Figure 16.2** Government spending on tertiary education (June year) as a percentage of gross domestic product



## EXPENDITURE BY COMPONENT

Government spending on tuition subsidies decreased by 1.1 percent in 2011/12 as enrolments were lower. When Youth Guarantee spending is included, the total increased. Expenditure on research also fell by 3.2 percent due to changes in the contestable research funds managed through Vote Science and Innovation. This compared with increases of 3.9 percent on student allowances and 1.4 percent on student loans.

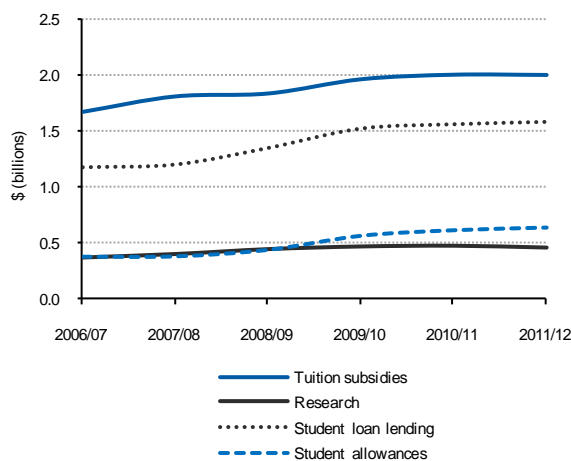
### Government expenditure on tertiary education by selected components for the year ended June 2012

	\$ (millions)	% change 2007-12	% change 2011-12
Tuition subsidies	1,990	+20	-0.1
Research	454	+21	-3.2
Student allowances	644	+68	+3.9
Student loans	1,590	+35	+1.4

**Notes:**

1. Tuition subsidies include student achievement component funding and the Public Provider Base Grant.
  2. The main funding for tertiary education research comes through the Performance-Based Research Fund, the centres of research excellence and contestable research funds from Vote Science and Innovation.
  3. Student loan expenditure is the new lending in each year.
- Source:** Ministry of Education, Tertiary Education Commission, Ministry of Social Development, Ministry of Business, Innovation and Employment, Health Research Council and Royal Society.

**Figure 16.3** Government spending (June year) on tertiary education by component



**EXPENDITURE ON INDUSTRY AND TARGETED TRAINING BY COMPONENT**

While expenditure on Youth Guarantee increased in 2012, expenditure on the Industry Training Fund 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 which led to a greater focus on value for money.

**Government expenditure on industry training and Youth Guarantee for the year ended June 2012**

	\$ (millions)	% change 2007-12	% change 2011-12
Industry training	147	-16	-21
Youth Guarantee	87.1	+51	+31

**Notes:**

1. Industry Training includes expenditure on the Industry Training Fund and Modern Apprenticeships.
2. In 2012, Youth Training was discontinued and funding transferred to Youth Guarantee fees-free places. Youth Training providers were able to deliver these places.

Source: Ministry of Education and Tertiary Education Commission.

**Figure 16.4** Government spending (June year) on industry and targeted training by component



**STUDENT ACHIEVEMENT COMPONENT-FUNDED PLACES**

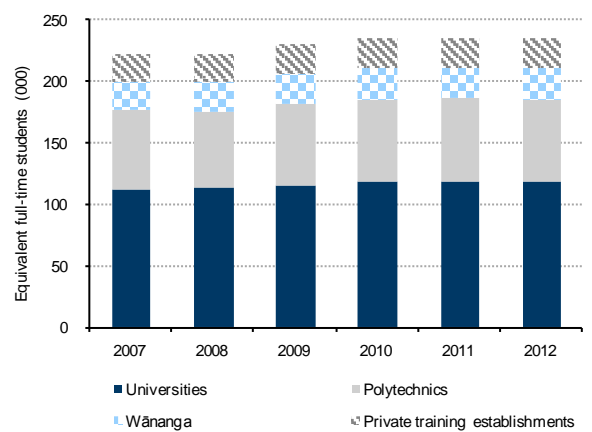
The number of government-funded student achievement component places fell slightly from 2011 to 2012 to 235,000. Polytechnics and private training establishments had small increases in funded places, while the universities and wānanga had small decreases in funded places in 2012. Compared with 2007, total funded places were 5.5 percent higher in 2012.

**Student achievement component-funded equivalent full-time students 2012**

	Equivalent full-time students	% change 2007-12	% change 2011-12
Total	235,000	+5.5	-0.1
Universities	119,000	+6.1	-0.6
Polytechnics	67,200	+2.4	+0.8
Wānanga	24,800	+12.4	-0.4
Private training establishments	24,100	+4.7	+0.3

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. Total expenditure on the student achievement component increased by 2.1 percent in 2012 to reach just over \$2 billion, due to an increase in funding rates which offset a small decrease in funded places. Wānanga had the smallest increase in tuition subsidies, which partly reflected a small decrease in funded places.

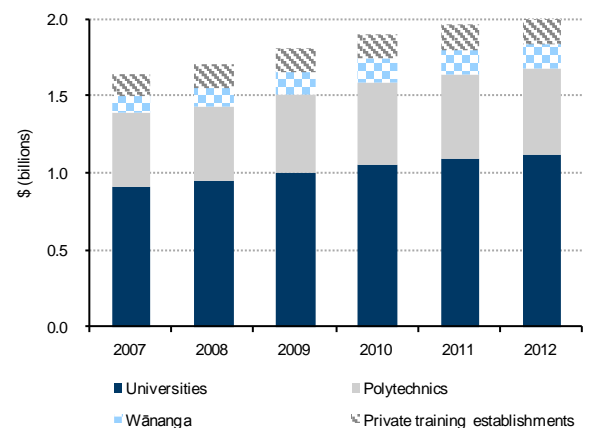
**Student achievement component funding by sub-sector 2012**

	Tuition subsidies \$ (millions)	% change 2007-12	% change 2011-12
Total	2,010	22	2.1
Universities	1,120	23	2.3
Polytechnics	561	18	2.2
Wānanga	161	30	0.1
Private training establishments	169	18	1.6

Note: Tuition subsidies include funding allocated via the student achievement component and the Public Provider Base Grant.

Source: Tertiary Education Commission.

**Figure 16.6** Student achievement component funding by sub-sector



### AVERAGE TUITION SUBSIDY

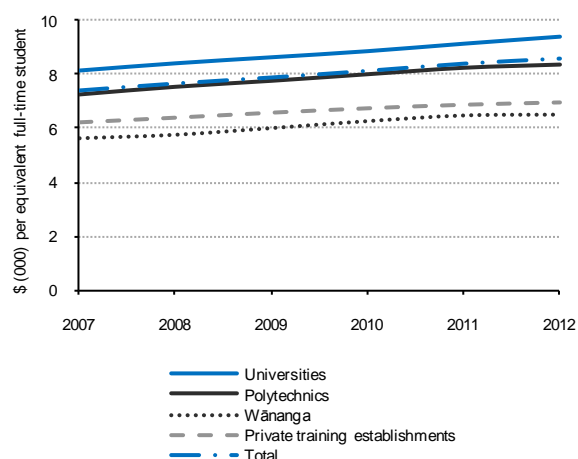
On a per funded equivalent full-time student basis, student achievement component funding increased by 2.1 percent in 2012. Increases in funding rates in 2012 were restricted to degree-level provision or higher, so sub-sectors with a lower proportion of provision in that level of study (polytechnics, wānanga and private training establishments) had lower rates of growth in average funding per student.

#### Student achievement component funding per funded equivalent full-time student in 2012

	Average subsidy \$	% change 2007-12	% change 2011-12
Total	8,560	15	2.1
Universities	9,440	16	2.9
Polytechnics	8,340	15	1.4
Wānanga	6,510	15	0.5
Private training establishments	7,000	13	1.3

**Note:** Tuition subsidies include funding allocated via the student achievement component and the Public Provider Base Grant. **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

The average tuition subsidy per equivalent full-time student unit, increased in 2012 for universities and private training establishments, while at wānanga there was no change and at polytechnics there was a decrease. The scale of increase in private training establishments is due partly to a reduction in the number of unfunded student places in 2012.

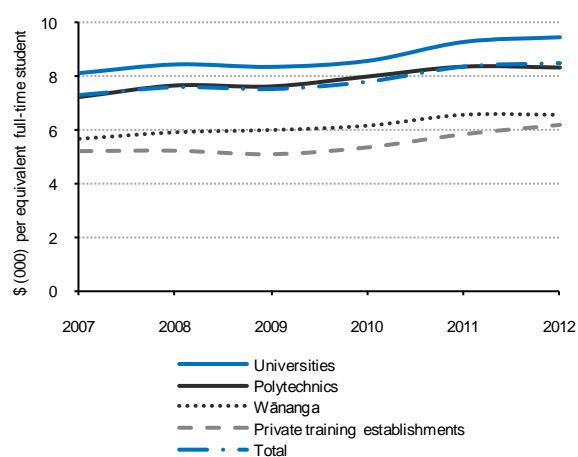
#### Student achievement component funding per actual delivered equivalent full-time student in 2012

	Average subsidy \$	% change 2007-11	% change 2011-12
Total	8,470	+16	+1.5
Universities	9,450	+16	+1.9
Polytechnics	8,370	+16	-0.4
Wānanga	6,560	+16	No change
Private training establishments	6,170	+18	+5.7

**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 and the Public Provider Base Grant.

**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 higher proportion of student achievement component-funded provision in medium/high cost funding categories continued in 2012.

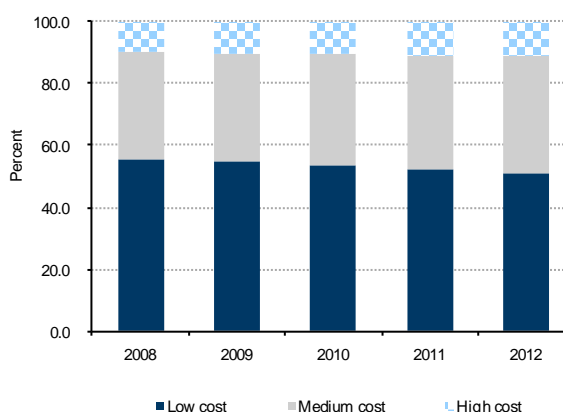
#### Distribution of government-funded equivalent full-time students in tertiary education institutions by cost category

	2008	2011	2012
Low cost (Categories A & J)	56%	52%	51%
Medium cost (B, I, L & P)	35%	37%	38%
High cost (C, G, H, M, N, O, Q, R, S, T & U)	9.7%	11%	11%

**Note:** Figures may not add to 100 percent due to rounding.

**Source:** Tertiary Education Commission.

**Figure 16.9** Government-funded places in tertiary education institutions by category





**GOVERNMENT-FUNDED PLACES BY LEVEL**

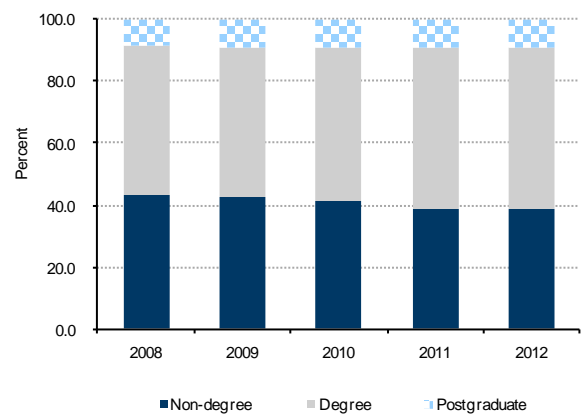
The distribution of government-funded student achievement component equivalent full-time students by level remained relatively unchanged in 2012. Since 2007, there has been a shift from non-degree courses to degree-level or higher courses.

**Distribution of government-funded equivalent full-time students in tertiary education institutions by level**

	2008	2011	2012
Non-degree	43%	39%	39%
Degree	48%	52%	52%
Postgraduate	8.5%	9.0%	9.2%

**Note:** 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 GOVERNMENT FUNDING OF TERTIARY EDUCATION**

In 2012, equivalent full-time student places delivered overall exceeded those funded by the government by 1.1 percent. This compared to 0.5 percent in 2011 and 1.3 percent in 2008.

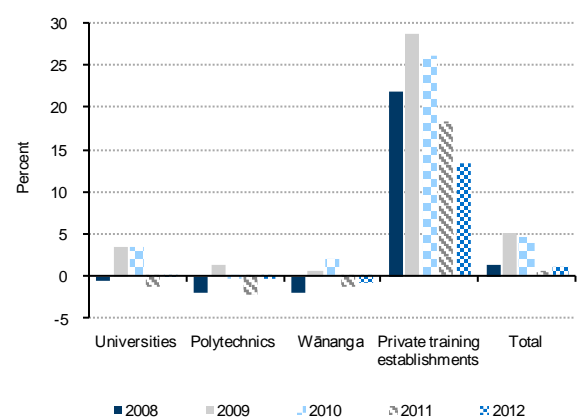
Only private training establishments had over-delivery in 2012. However, the amount of over-delivery in private training establishments has dropped significantly from 29 percent in 2009 to 13 percent in 2012.

**Difference between equivalent full-time students delivered and those funded by government through the student achievement component**

	2008	2011	2012
	Percentages		
Total	+1.3%	+0.5%	+1.1%
Universities	-0.5%	-1.2%	-0.2%
Polytechnics	-2.0%	-2.2%	-0.4%
Wānanga	-2.1%	-1.4%	-0.9%
Private training establishments	+22%	+18%	+13%

**Source:** Tertiary Education Commission.

**Figure 16.11** Difference between equivalent full-time students delivered and those funded through the student achievement component



**AVERAGE DOMESTIC FEES**

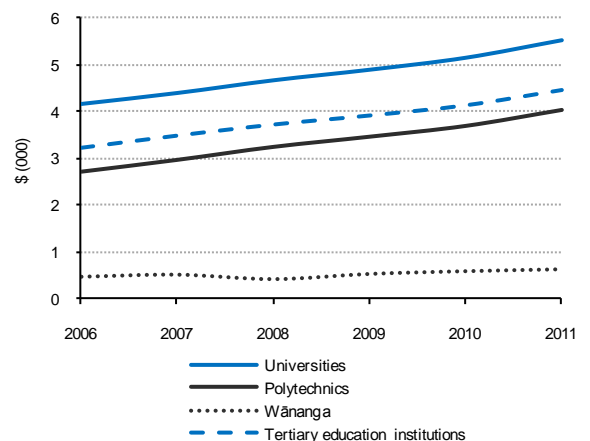
The average tuition fee at tertiary education institutions increased in 2011. A shift in the proportion of enrolments to higher-cost courses was a factor in the increase, along with the increase in the rate of goods and services tax. Universities continue to charge the highest tuition fees (on average).

**Average domestic fees per equivalent full-time domestic student in 2011**

	Average fee	% change	% change
	\$	2006-11	2010-11
Tertiary education institutions	4,460	38	7.9
Universities	5,530	33	7.3
Polytechnics	4,050	50	9.5
Wānanga	623	34	7.0

**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 2011. This was due to average tuition fees rising faster than the average weekly income of employed persons. 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.

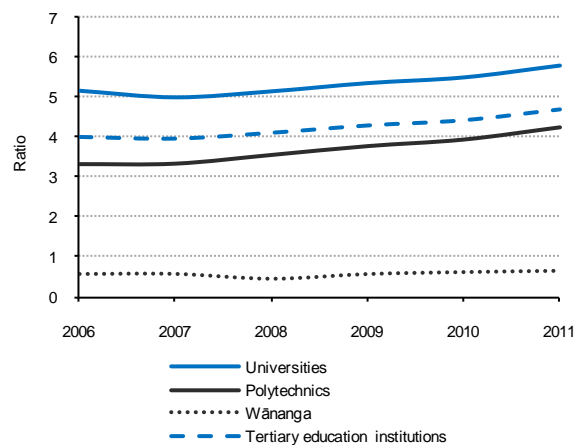
#### Average domestic fees as a ratio of average weekly income for employed persons

	2006	2010	2011
Tertiary education institutions	4.0	4.4	4.7
Universities	5.1	5.5	5.8
Polytechnics	3.3	3.9	4.2
Wānanga	0.6	0.6	0.7

**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

Data from Statistics New Zealand shows that the price of tertiary education for consumers increased in 2013 at a faster rate than overall inflation for the fifth year in a row.

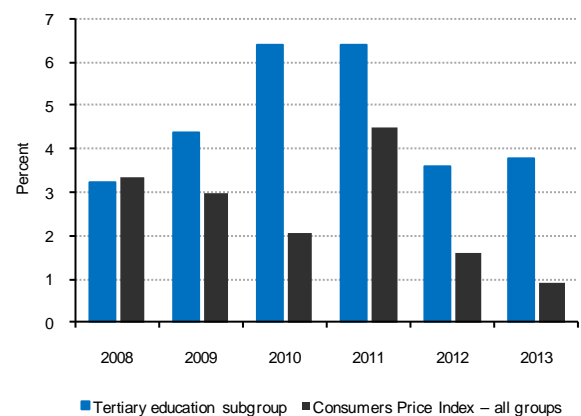
#### Annual percentage change in costs to consumers of tertiary education

	2008	2012	2013
Tertiary education subgroup	3.2%	3.6%	3.8%
Consumers Price Index – all groups	3.4%	1.6%	0.9%

**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 in 2011. A decrease in government funding was partially offset by an increase in the reported cash contribution of industry. This resulted in government's share of industry training funding dropping from 66 percent in 2010 to 55 percent in 2011.

#### Contributions of government and industry to industry training 2011

	\$ (millions)	% change 2006-11	% change 2010-11
Total	219	+8.1	-15
Government	121	-18	-28
Industry	98	+80	+11

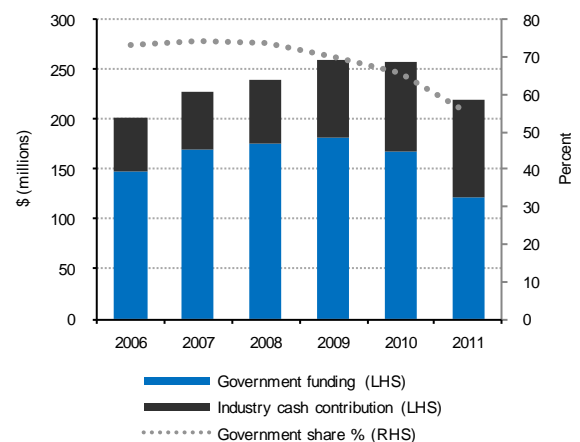
  

	2006	2010	2011
Government's share of contribution (%)	73	66	55

**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

This chapter includes:

- ▲ an overview of sector performance in 2011
- ▲ a description of the key measures of sector performance
- ▲ government-funded tertiary education
- ▲ course and qualification completion rates
- ▲ progression and retention rates, and
- ▲ sector performance and government priorities.

This chapter on the performance of tertiary education providers at sub-sector level has been contributed by the Tertiary Education Commission.<sup>1</sup> The information presented here covers the 2011 year and 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). At the time of writing this report, the 2012 sector performance data was not yet available.

The successful course completion rates were higher in 2011 than in 2010 for each tertiary education sub-sector. While the average course completion rates were highest among universities in 2011, the latest increases in these rates were strongest for courses offered at private training establishments, followed by wānanga and polytechnics.

The average course completion rates for students aged 24 years and under were highest in 2011. The course completion rates for this age group were highest at universities and private training establishments, while the largest increase from 2010 to 2011 was for courses offered at wānanga.

In 2011, the average course completion rate of Māori students was highest at universities, followed by wānanga, private training establishments and polytechnics. The comparable rate for Pasifika students was highest for courses offered at wānanga, followed by private training establishments, universities and polytechnics.

The retention rate of students increased overall from 2010 to 2011. Student retention also increased for all priority groups, including for students aged 24 years and under.

From 2010 to 2011, the increase in the retention rates for all students and the priority groups was highest at private training establishments, while among universities these rates fell.

For Māori students the retention rate decreased at universities and wānanga, while it increased strongly at private training establishments and, to a lesser extent, at polytechnics. For Pasifika students the retention rate also fell at universities, while at wānanga and private training establishments it increased substantially.

These gradual increases in retention and course completion rates suggest that progress is being made towards the goal of having more young New Zealanders achieve qualifications.

## 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.

Weighted qualification completions increased from 2010 to 2011 for each sub-sector. This measure is the number of government-funded students who completed a qualification,<sup>2</sup> irrespective of the starting year of the study, as a proportion of total enrolments. The increase in the weighted qualification completions measure from 2010 to 2011 was due to the number of completed government-funded qualifications increasing and the number of enrolments decreasing. The increases were strongest at polytechnics and universities.

Progression to higher levels of study is another measure of sector performance. Overall, this indicator fell slightly from 2010 to 2011 due to the increase in the number of qualifications completed being stronger than the increase in the number of students who progressed to higher-level study following the completion of a qualification.

Among industry training organisations, the average credit achievement rate in 2011 was 71 percent, while the average programme completion rate was 69 percent. While these rates suggest improvement on previous years, comparing the 2011 industry training data with previous years, requires

<sup>1</sup> Data in this chapter refers only to government-funded domestic students.

<sup>2</sup> The qualification completions are weighted to account for the variations in study load.

caution to be used in interpreting the changes between years. This is due to the removal of inactive trainees from funded training in 2010 and the introduction of a new industry training register in 2011. Another factor was the introduction of performance-linked funding in 2009 and changes to the process of collecting achievement information.

## 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 the following four key educational performance indicators 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.

There are also two indicators used to measure educational performance of industry training organisations – 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.

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.

## 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

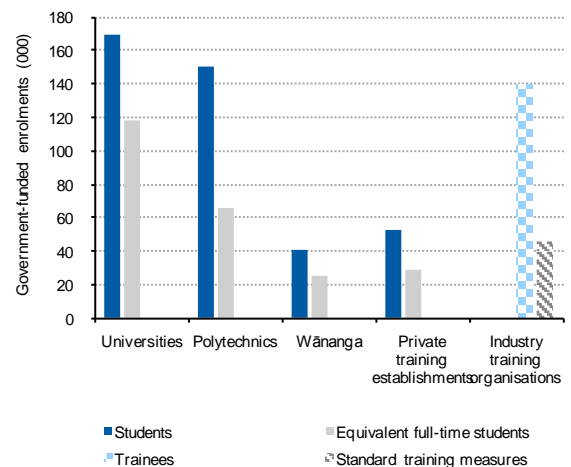
The gap between the number of students and the number of equivalent full-time student units at public tertiary education institutions was smaller in 2011 than in 2010, indicating an increase in the average study load of students. Data on industry trainees and standard training measures is from the new industry training register established in 2011. The 2011 industry training data is not strictly comparable to that collected in previous years.

#### Funded provider and workplace-based enrolments by sub-sector in 2011

	Students/ trainees	% change from 2010	EFTS/STM	% change from 2010
Universities	170,000	-5.0%	118,000	-2.7%
Polytechnics	151,000	-24%	66,500	-5.7%
Wānanga	40,300	-7.9%	25,000	-4.9%
Private training establishments	53,400	-5.4%	28,500	-5.3%
Industry training organisations	140,000	29%	45,100	23%

Notes: 1. EFTS = equivalent full-time student unit and STM = standard training measure 2. Refer to Profile & Trends, chapters 5 to 11, for sub-sector data on all enrolments, including non-government funded enrolments.

Figure 17.1 Funded provider and workplace-based enrolments by sub-sector



Source: Tertiary Education Commission.

### LEVEL 4 AND HIGHER QUALIFICATIONS

From 2010 to 2011, the proportion of funded equivalent full-time students in level 4 or higher qualifications remained stable at universities, while it increased at polytechnics, wānanga, private training establishments and industry training organisations. The increase was strongest at polytechnics.

In 2011, 88 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 all equivalent full-time student units for selected groups

	2007	2008	2009	2010	2011
All students	78%	79%	79%	81%	82%
24 years and under	86%	87%	87%	87%	88%
Māori	63%	64%	65%	68%	70%
Pasifika	73%	72%	73%	75%	74%

Source: Tertiary Education Commission.

Figure 17.2 Percentage of funded enrolments in level 4 and higher qualifications by sub-sector

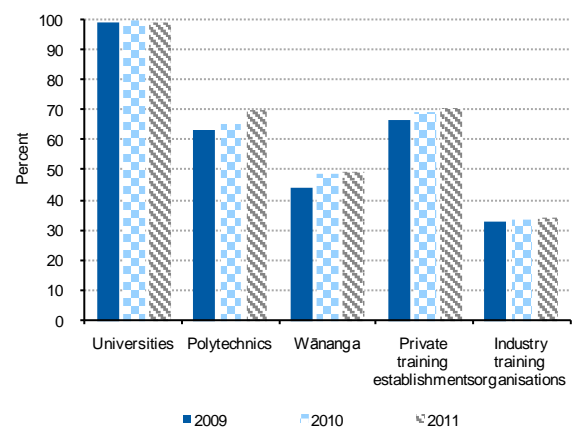


Figure 17.3 Percentage of funded Māori and Pasifika enrolments by sub-sector

### MĀORI AND PASIFIKA PARTICIPATION

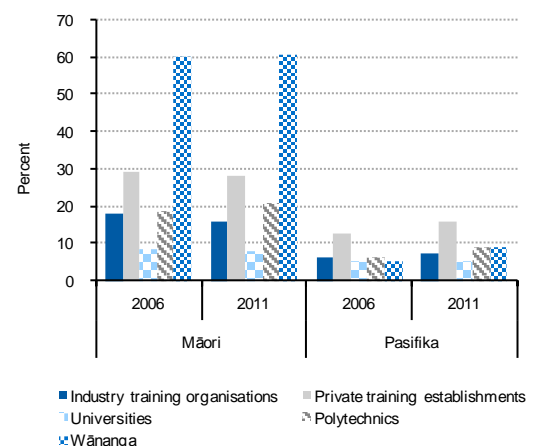
From 2010 to 2011, the number of funded Māori equivalent full-time students remained stable as a percentage of total enrolments, while for the Pasifika ethnic group the percentage increased slightly.

At wānanga, 61 percent of the funded equivalent full-time students were Māori in 2011 and 9.1 percent were Pasifika. The comparable figures were 21 percent and 9.4 percent at polytechnics and 28 percent and 16 percent at private training establishments, respectively. Of the funded 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	2011
Māori	19%	19%	19%	20%	20%
Pasifika	7.3%	7.5%	7.9%	8.2%	8.6%

Source: Tertiary Education Commission.



<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

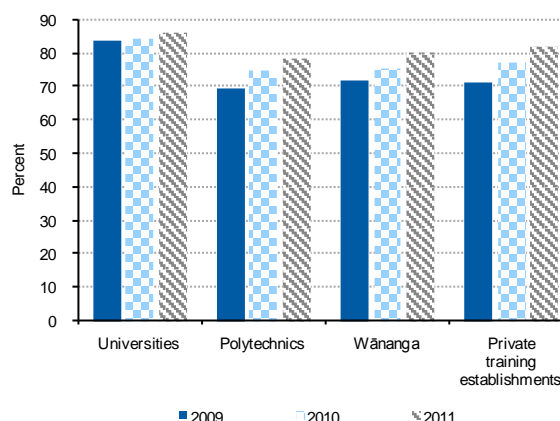
Course completion rates continued to improve from 2010 to 2011 for each sub-sector. Comparing 2011 with 2010, 81 percent of students at private training establishments completed their courses (up 4.6 percentage points), 80 percent at wānanga (up 4.5 percentage points) and 78 percent at polytechnics (up 3.8 percentage points). The course pass rate was highest at universities in 2010 at 86 percent (up 1.6 percentage point from 2010).

#### Successful course completion rates for priority groups

	Māori		Pasifika		Under 25 years		All students	
	2010	2011	2010	2011	2010	2011	2010	2011
Universities	78%	80%	69%	71%	85%	86%	84%	86%
Polytechnics	66%	70%	65%	71%	73%	76%	74%	78%
Wānanga	72%	77%	76%	80%	67%	74%	75%	80%
Private training establishments	68%	74%	73%	80%	78%	82%	77%	81%

Note: These rates are weighted to take account of the different course study loads.

Figure 17.4 Successful course completion rates by sub-sector



Source: Tertiary Education Commission.

### INDUSTRY TRAINEES' CREDIT ACHIEVEMENT

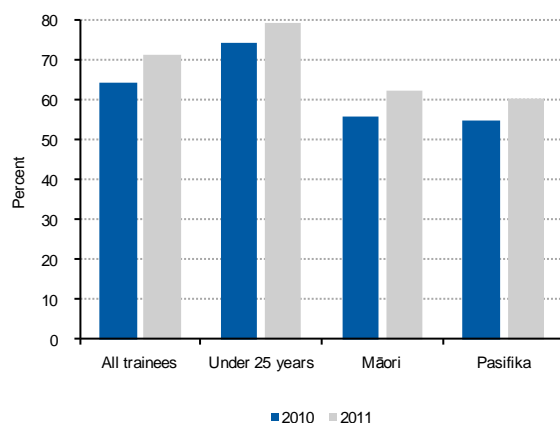
Workplace-based learners achieved 3.83 million credits towards national qualifications in 2011. The data for 2011 is not strictly comparable to that collected in previous years due to the introduction of a new industry training register in 2011. Additionally, the process for collecting achievement information changed in 2011. Another factor influencing the industry training data collection was the removal, in 2010, of inactive trainees from funded training, following a review of industry training.

#### Credits completed by industry trainees and credit completion rates

Total credits completed (in millions)		2011
		3.83
Credit completion rates at level 4 and above:	Under 25 years	86%
	Māori	77%
	Pasifika	74%

Source: Tertiary Education Commission.

Figure 17.5 Credit achievement rates for priority groups of industry trainees



### QUALIFICATION COMPLETION<sup>1</sup>

The qualification completion measure increased from 2010 to 2011 for each sub-sector. This measure is the number of funded students who complete a qualification (irrespective of the starting year of the study) as a proportion of total enrolments. This improvement was due to the number of completed qualifications increasing in 2011 and the number of enrolments decreasing.

The latest improvement in the qualification measure for all students was strongest at polytechnics and universities. For Māori and Pasifika students, the latest improvement was strongest at polytechnics.

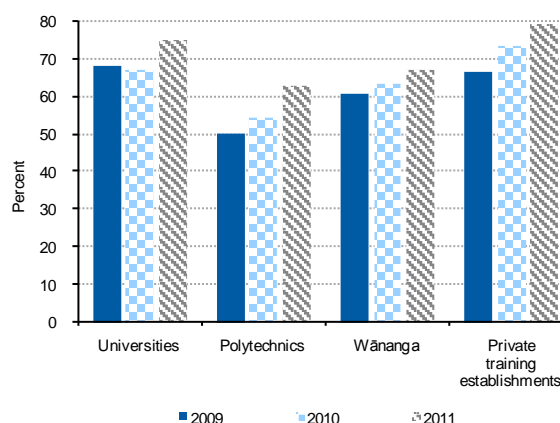
#### Qualification completions for priority groups

	Māori		Pasifika		Under 25		All students	
	2010	2011	2010	2011	2010	2011	2010	2011
Universities	55%	62%	48%	54%	62%	68%	67%	75%
Polytechnics	45%	54%	45%	52%	51%	57%	54%	63%
Wānanga	56%	60%	68%	73%	55%	54%	63%	67%
Private training establishments	61%	67%	69%	73%	74%	78%	73%	79%

Note: This measure of qualification completion differs from the cohort-based rate that may be measured, for example, five or eight years after starting study.

Source: Tertiary Education Commission.

Figure 17.6 Qualification completions by sub-sector

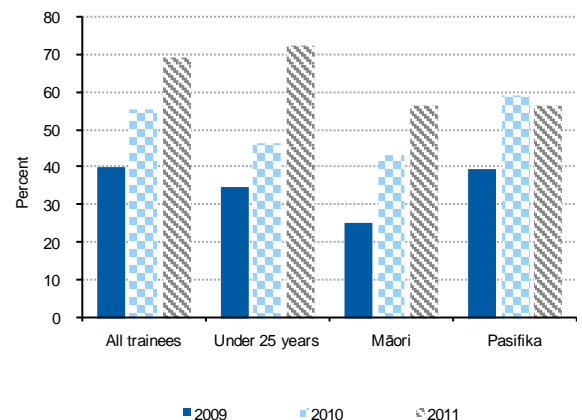


<sup>1</sup> The qualification completions are weighted to account for the variations in study load.

## INDUSTRY TRAINEE PROGRAMME COMPLETION

The overall rate at which industry trainees completed their programmes (irrespective of the starting year of study) was 69 percent. However, when comparing 2011 with previous years, caution needs to be used in interpreting the changes in the programme completion rates. The recent changes affecting industry training achievement include the introduction of performance-based funding in 2009, the removal of inactive trainees from funded training in 2010, a change to the process of collecting achievement information in 2011 and a review of industry training operational policy in 2011 and 2012.

**Figure 17.7** Programme completion rates for priority groups of industry trainees



## STUDENT PROGRESSION TO HIGHER-LEVEL STUDY

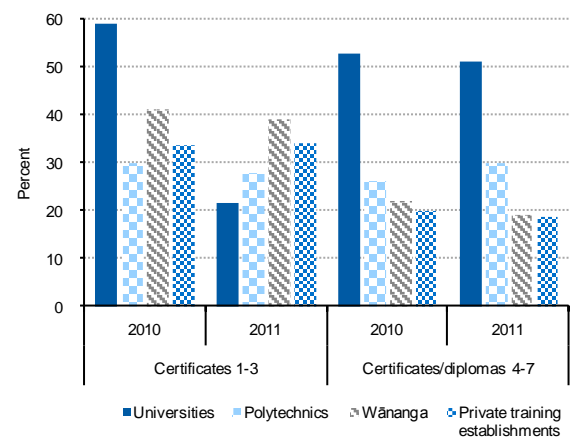
Progression to higher-level study by funded students who completed a qualification decreased overall from 26 percent in 2010 to 25 percent in 2011. This was due to the increase in the number of students completing a qualification being stronger than the increase in the number students who progressed to higher-level study. Progression to higher-level study among students who completed level 1 to 3 certificates decreased from 2010 to 2011 for each sub-sector, except for private training establishments. The progression rate to higher-level study by students who completed a level 4 to 7 certificate or diploma improved at polytechnics from 2010 to 2011, while it remained stable at wānanga and private training establishments. At universities, this rate also decreased.

### Progression rates for students who completed a qualification by level

	Certs 1-3		Cert/dips 4-7		Bachelors		Postgraduate	
	2010	2011	2010	2011	2010	2011	2010	2011
Universities	51%	21%	53%	51%	17%	17%	17%	14%
Polytechnics	30%	27%	26%	30%	16%	16%	5.8%	7.9%
Wānanga	41%	39%	22%	19%	9.7%	7.1%	31%	32%
Private training establishments	33%	34%	20%	19%	4.4%	5.0%	4.9%	3.9%

Note: 'Bachelors' includes graduate certificates and diplomas.

**Figure 17.8** Progression to higher-level study for students who completed a certificate or diploma



Source: Tertiary Education Commission.

## STUDENT RETENTION RATES BY SUB-SECTOR

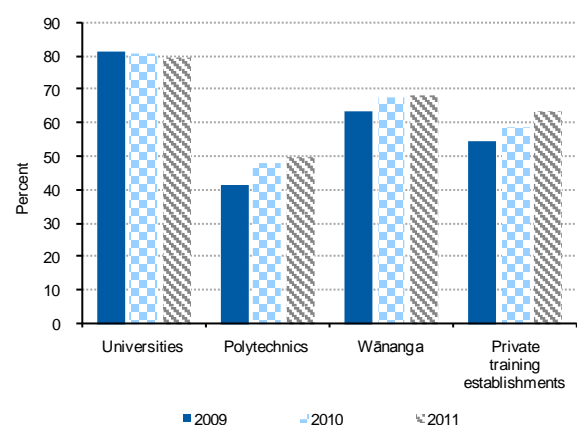
At polytechnics, wānanga and private training establishments, the overall retention rates continued to increase in 2011. The university sector has the highest overall student retention rate and this rate continued to remain stable from 2010 to 2011. The increases in the retention rates are, in part, due to the weaker employment conditions with more students continuing study in order to obtain qualifications to enhance their employment prospects. The higher rates also suggest that more students are now engaged and supported in their study.

### Student retention rates for priority groups in 2011 by sub-sector

	Māori	Pasifika	Under 25 years	All students
Universities	71%	73%	84%	79%
Polytechnics	46%	50%	57%	49%
Wānanga	63%	70%	59%	68%
Private training establishments	56%	67%	70%	63%

Source: Tertiary Education Commission.

**Figure 17.9** Student retention rates by sub-sector



## TERTIARY EDUCATION PERFORMANCE AND GOVERNMENT PRIORITIES

### UNIVERSITIES

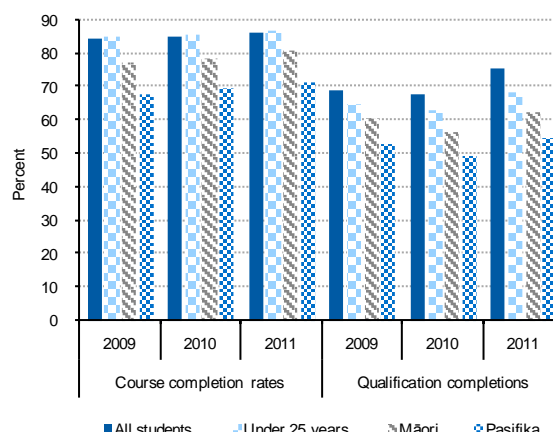
Government’s priority for the university sector in 2011 was to continue to increase educational success for Māori, Pasifika and under-25-year-olds.

Both the course and qualification completion rates for all priority groups continued to increase from 2010 to 2011. The latest increase in the course completion rates was slightly larger for Māori and Pasifika than for all students and those aged under 25 years. In 2011, the course completion rate at universities was 87 percent for students aged under 25 years, 80 percent for Māori and 71 percent for Pasifika.

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.

Source: Tertiary Education Commission.

Figure 17.10 Qualification and course completion rates at bachelors level and higher at universities



### POLYTECHNICS

The key focus for the polytechnic sector in 2011 was to continue to increase provision of qualifications at level 4 and above.

In 2011, the percentage of students studying at this level continued to increase. Polytechnics were also aiming to improve course and qualification pass rates and both the course and qualification completion rates continued to increase from 2010 to 2011 for all students and those aged under 25 years. In 2011, the course completion rate at polytechnics was 80 percent for all students and 78 percent for students aged under 25 years.

**Selected groups studying level 4 and higher qualifications as a percentage of all equivalent full-time student units at polytechnics**

	2007	2008	2009	2010	2011
All students	63%	67%	67%	69%	71%
Under 25 years	34%	32%	33%	35%	37%
Māori	9.1%	9.0%	10%	10%	11%
Pasifika	4.3%	4.1%	4.7%	5.1%	5.6%

Source: Tertiary Education Commission.

Figure 17.11 Qualification and course completion rates at level 4 and higher at polytechnics

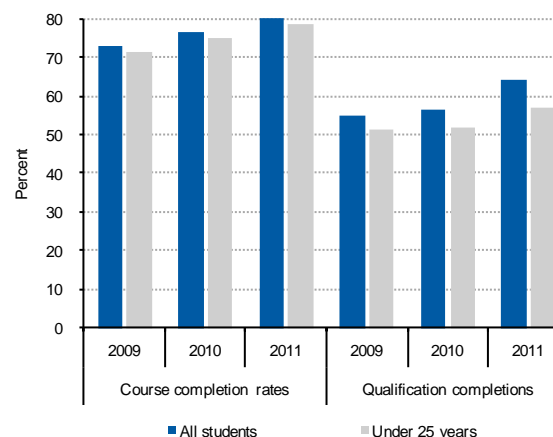


Figure 17.12 Completion and student retention rates at level 4 and higher at wānanga

### WĀNANGA

Government’s focus for wānanga is to continue to provide a wide range of qualifications, with clear study paths to higher levels of learning through a Māori paradigm.

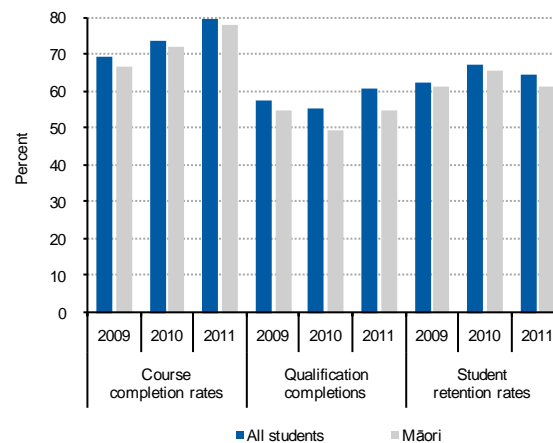
The course and qualification completion rates of Māori and all students increased from 2010 to 2011 by more than 6 percentage points. In 2011, the rate was 78 percent for Māori and 80 percent for all students.

The rate of retention in level 4 and higher qualifications at wānanga decreased in 2011 for both Māori and all students.

**Selected groups studying level 4 and higher qualifications as a percentage of all equivalent full-time student units at wānanga**

	2007	2008	2009	2010	2011
All students	44%	46%	46%	50%	50%
Māori	29%	30%	30%	35%	36%
Under 25 years	5.5%	5.5%	5.9%	7.9%	8.5%

Source: Tertiary Education Commission.





## PRIVATE TRAINING ESTABLISHMENTS

The key focus for private training establishments in 2011 continued to be on Māori, Pasifika and younger students. There were just under 626 NZQA-registered private providers in 2011 and 323 of these received government funding.

The course and qualification completion rates (irrespective of starting year of the qualification) increased from 2010 to 2011. The improvement in the qualification completion measure from 2010 to 2011 was due to the number of completed qualifications increasing and the number of enrolments decreasing.

### 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	2011
All students	56%	58%	62%	62%	64%
Under 25 years	27%	28%	30%	31%	33%
Māori	11%	11%	12%	12%	12%
Pasifika	5.9%	6.5%	7.6%	7.7%	7.2%

Source: Tertiary Education Commission.

## INDUSTRY TRAINING ORGANISATIONS

In 2011, the credit completion rate of all industry trainees was 71 percent and programme completion rate (irrespective of the starting year of the qualification) was 69 percent. 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 between 2011 and previous years. In 2009, performance-based funding was introduced and, in 2010, the removal of inactive trainees from funding led to a reduction in the number of industry trainees and standard training measures. Also, in 2011, the method of collecting industry training achievement information also changed.

### Selected groups of trainees as a percentage of all funded industry trainees in 2011

Females	31%	(29% in 2006)
Māori	16%	(18% in 2006)
Pasifika	7.0%	(6.2% in 2006)

#### Notes:

1. The rates in Figure 17.14 differ from the cohort-based qualification completion rates that may be measured, for example, five or eight years after starting study.
2. The ethnic group information is based on the prioritised method of reporting.

Source: Tertiary Education Commission.

Figure 17.13 Qualification and course completion rates at private training establishments

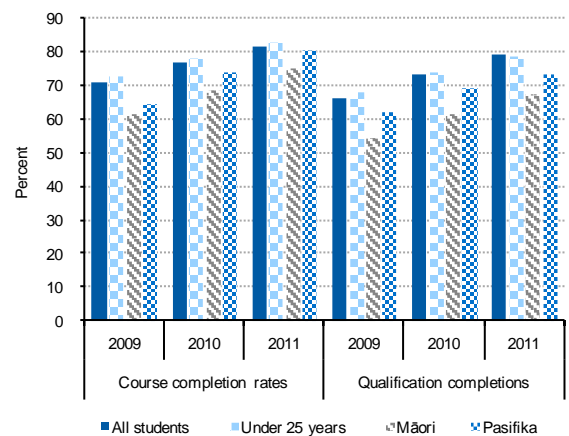
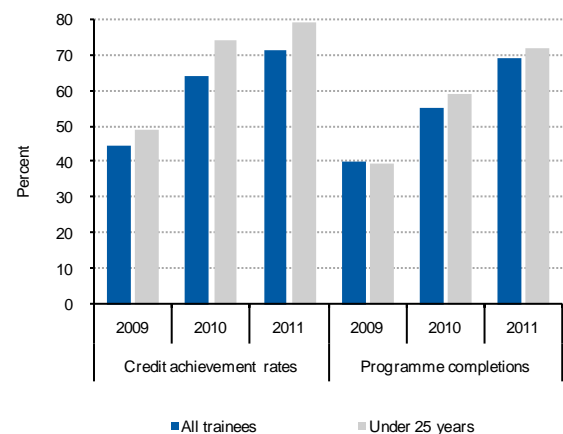


Figure 17.14 Industry training credit achievement and programme completion rates



# 18 POSTSCRIPT

This chapter includes:

- ▲ expenditure on tertiary education in 2013
- ▲ Youth Guarantee vocational pathways
- ▲ centres of research excellence
- ▲ industry training review
- ▲ tertiary education in Christchurch following the earthquakes, and
- ▲ trends in international education.

## OVERVIEW

Budget 2013 continued the government's focus on redirecting savings from lower value expenditure to make significant investments in tertiary education, while improving the overall performance of the sector.

Budget 2013 focused on two key areas:

- ▲ Over \$130 million in extra investment to maintain and strengthen the quality and relevance of tertiary provision by focusing on those areas that are vital for improving New Zealand's economic growth.
- ▲ Further improving the value of student support expenditure, and redirecting savings from lower-value expenditure to our tertiary education priorities.

In 2012, there were 8,920 fees-free Youth Guarantee places and this number will expand further over the next three years by up to 3,000.

As a part of Youth Guarantee, the government is developing a range of vocational pathways linked to the National Certificate of Educational Achievement (NCEA).

In 2012, there were 16 trades academies, which expanded to 22 trades academies in 2013, offering approximately 3,700 learning opportunities to students aged 16 to 18 years.

Following an extensive policy review of industry training, the government announced a suite of changes to further improve the performance of the industry training system. The proposals aim to develop the industry training system so that it is:

- ▲ well connected to industry with high employer buy-in
- ▲ educationally sound
- ▲ coherent with the wider tertiary system, and

- ▲ delivers value for money for employers and the government.

## IMPROVING THE VALUE OF TERTIARY EDUCATION EXPENDITURE

In 2013/14, the government's total expenditure on tertiary education (including student support) is forecast to be \$4,123 million). This compares to an expenditure of \$4,119 million for the 2012/13 year.

Key initiatives announced as part of Budget 2013 include:

### *Increase funding rates for engineering*

This initiative increases tuition subsidy funding rates for priority engineering courses by 2 percent, to continue to bring tuition subsidy relativities for engineering closer in line with international practice and maintain the quality of provision.

### *Increase funding rates for science*

This initiative increases funding rates for science tertiary education by 2 percent to maintain the quality of provision and to continue to bring tuition subsidy relativities for science closer in line with international practice.

### *Equalising private training establishment funding rates*

This initiative advances the government's 2011 election manifesto commitment to eliminate differences in funding policy treatment between public and private providers.

### *Continue 99-105 percent tolerance bands beyond 2013*

This extends 99-105 percent over-delivery tolerance bands beyond 2013 to provide more flexibility in the tertiary system. This will contribute to the Better Public Services target of 55 percent of 25 to 34 year-olds holding a level 4 qualification or above in 2017.

### *Additional flexibility for highly performing private training establishments*

This allows highly performing private training establishments to deliver an additional 1000 equivalent full-time student units that do not attract tuition subsidies in their approved investment plans. This will support achievement of the target of 55 percent of 25 to 34 year-olds achieving a qualification at level 4 or above by 2017.

### *Expanding Māori and Pasifika trades training*

This expands the number of dedicated Māori and Pasifika trades training places available from 600 to 3000 by 2015 and provides additional support for learners. This will improve the achievement levels and employment outcomes of Māori and Pasifika learners in vocational education, and contribute to current and future needs for skilled trades people.

### *Confirmation of new industry training rates*

This introduces new funding rates for trainees and New Zealand Apprenticeships to support the revitalised industry training system. The new funding rates are \$3,200 per standard training measure for trainees and \$5,200 per standard training measure for New Zealand Apprentices.<sup>1</sup>

### *Centres of Research Excellence – funding increase*

Budget 2013 set aside an additional \$3.17 million per annum in contingency (representing a 10 percent increase) to fund increased activity, and/or to reflect increasing costs and research activity in Centres of Research Excellence.

The next centres of research excellence selection round (commencing in August 2013) will determine whether this additional funding is used to support a new centre, or to support additional activity in existing centres, or both. Centres will be selected through a contestable process determined by the Tertiary Education Commission.

### *20 additional medical student places*

This continues the government's manifesto commitment to increase the undergraduate medical cap by 200 places over five years by adding a further 20 places to the cap from 1 January 2014.

The additional funding builds on increases of 120 medical places between 2010 and 2012 and raises the medical cap to 505 places.

### *Increasing the tertiary equity funding pool*

This provides a 4 percent increase to the equity funding pool.

Equity funding is a fixed funding pool. Higher than forecast participation by Māori and Pasifika students at higher levels means that current funding levels are not sufficient to maintain current funding rates per student.

This will maintain current rates per student and ensure that tertiary providers continue to be incentivised to enrol and progress Māori and Pasifika students and students with special educational needs.

### *International education initiatives*

This provides an additional \$10 million per year for Education New Zealand to:

- ▲ grow awareness of New Zealand as an education destination internationally
- ▲ promote New Zealand's education services and products abroad, and

- ▲ support industry-led opportunities for international education growth.

This will support achievement of the Business Growth Agenda's export markets goal of increasing the ratio of exports to gross domestic product to 40 percent by 2025.

### *Develop youth option in the Literacy and Numeracy for Adults Assessment Tool*

This creates a new option for young people within the Literacy and Numeracy for Adults Assessment Tool, in order to better engage younger students and support their participation in the Youth Guarantee.

### *Consolidating funding for literacy and numeracy provision*

Funding of \$5.0 million per annum has been transferred to the Workplace Literacy and Numeracy programme to purchase specialist literacy and numeracy training for individuals. This initiative is funded through a transfer in funds from the Industry Training Fund – ITO Literacy and Numeracy fund (within the Training for Designated Groups appropriation). This funding has been used to help industry training organisations embed literacy and numeracy.

## EXPANSION OF YOUTH GUARANTEE

The Youth Guarantee programme began in 2010 providing fees-free tertiary education places for 16 and 17 year-olds with the aim of raising students' educational achievement to NCEA level 2 or an equivalent qualification.

Now, there are three main arms to Youth Guarantee: the tertiary fees-free places, secondary-tertiary programmes and vocational pathways.

### **Fees-free places**

In September 2013, government announced a further expansion of the fees-free Youth Guarantee programme to include 18 and 19 year-olds. Before this, in Budget 2012, the number of places was increased to 10,000 in 2014.

Government also announced that the provision of level 1 and 2 qualifications for 20 to 24 year-olds will become fees-free. These changes will allow under-25-year-olds to access fees-free foundation-level training from 2014. As part of these changes, the funding of Foundation-Focussed Training Opportunities will be redirected from the beginning of 2014 to other mechanisms better suited to supporting beneficiaries into employment.

Some of the Foundation-Focussed Training Opportunities funding will be moved into intensive literacy and numeracy programmes and English for Speakers of Other Languages, two areas shown to markedly increase a learner's ability of moving into higher education, or, particularly for beneficiaries, into employment.

<sup>1</sup> These rates are exclusive of goods and services tax.

### Secondary-tertiary programmes

Secondary-tertiary programmes began in 2011 with eight trades academies providing students with the opportunity to earn credits from unit and achievement standards towards both NCEA level 2 and tertiary qualifications. In 2012, a further 12 academies began operations and another academy is expected to start operations in 2013. The number of students at trades academies is expected to increase to 3,520 in 2013. Another secondary-tertiary option, New Zealand's first tertiary high school, began operations in 2010. In 2013, the number of students at the tertiary high school is expected to increase to 175, up from 136 in 2012.

### Vocational pathways

The government is now working in partnership with clusters of industry training organisations and employers to develop a range of *vocational pathways*. Vocational pathways focus on the problem, identified by employers, where young New Zealanders trying to make the transition from education to employment often lack the skills base and work readiness required of them. Vocational pathways provide a solution that meets the needs of multiple stakeholders by bridging the gap between school qualifications and skills required for the workplace.

The pathways place a range of complex educational options and activity within a simple framework to help students and their families choose the best options for them; to guide schools and tertiary providers to design programmes that include the skills and outcomes valued by industries; and to provide a simpler way for employers to select the best candidates for their needs.

Vocational pathways meet stakeholders' needs for:

- ▲ clearer pathways to further education and employment
- ▲ informed choices for students and families about senior secondary-school study
- ▲ clearer connections between NCEA education and employment outcomes
- ▲ easier translation of NCEA results for employers, and
- ▲ improved student engagement, retention and achievement.

Vocational pathways provide:

- ▲ young people with a better sense of relevance and purpose for their learning, by understanding the practical application of their subjects and courses

- ▲ schools and tertiary providers with important information to assist them to design programmes that include the skills and outcomes valued by industry
- ▲ employers with a simpler way to select the best candidates for their needs, and
- ▲ government with a tool to raise student achievement and to increase the supply of skilled graduates to the economy.

Five initial pathways have been developed and these were launched in April 2013:

- ▲ construction and infrastructure
- ▲ manufacturing and technology
- ▲ primary industries
- ▲ services industries, and
- ▲ social and community services.

Vocational pathways are designed to work in both secondary-tertiary programmes and tertiary fees-free places. From 2013, schools, tertiary providers and trades academies have started realigning their course offerings with these pathways to assist students to achieve NCEA level 2 and a range of industry qualifications. Students leave with coherent qualifications representing the key skills and competencies valued by employers. These skills and competencies can be combined with higher education options to advance people's career paths.

### INDUSTRY TRAINING REVIEW

In 2011, the Government initiated a wider policy review of industry training to assess whether the current model was fit for purpose and providing the best value for money. The review found that although the system was not broken, there was room for significant improvement.

Following public consultation in 2012, in January 2013 the government announced a package of improvements to industry training that:

- ▲ combines Modern Apprenticeships and other apprenticeship-type training together into New Zealand Apprenticeships to provide quality support for apprentices regardless of age
- ▲ introduces a sustainable funding regime for New Zealand Apprenticeships and other industry training. The funding rate for non-apprentice based industry training will be increased to \$3,200 per standard trainee measure which equates to a 10 percent increase. Overall subsidy

payments for apprenticeships will be increased by around \$12 million in the first year, rising further over time. This equates to an approximately 20 percent increase in overall funding.

- ▲ sets clearer roles and performance expectations of industry training organisations to improve the quality of training and remove the co-ordination issues in the wider vocational education and training system
- ▲ ‘re-boots’ apprenticeships to increase the number of apprentices, particularly for the coming construction boom, and
- ▲ increases competition by allowing employers direct access to industry training funding.

The government has set a target for industry training organisations to enrol 14,000 additional new apprentices over the next five years (2013 to 2017). The target for new enrolments is over and above the 7,000 who enrol every year.

The apprenticeships re-boot commenced in March 2013. The legislative changes and remaining funding changes are scheduled to commence from 1 January in 2014.

Under the revised system, 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
- ▲ 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 (although from January 2014, industry training organisations will no longer have this statutory function)

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.

## 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.

## INTERNATIONAL TERTIARY EDUCATION TRENDS

New Zealand education providers experienced a rapid rise in their international enrolments from 1998 to 2003, driven primarily by interest from Chinese students. New Zealand was one of the first Western countries to permit open access to student visas by Chinese nationals, a measure quickly followed by Australia, the United Kingdom, Canada and the United States of America. This group is generally known as the ‘main English-speaking destination countries’ (MESDC) for international fee-paying students.

Figure 18.1 illustrates the respective market shares of international tertiary students by the MESDC group, including New Zealand (note: this data excludes school students and enrolments with private English language providers).

The world share of international tertiary students MESDC group has remained stable over the last 10 years, while Figure 18.1 shows that New Zealand’s market share rose from 0.4 percent in 2000, to 1.7 percent in 2010. Australia and the United Kingdom also increased their market shares of international tertiary students from 2000 to 2010, while the United States had a fall in market share.

The factors that influence a country’s market share include visibility, perception and the cost of tertiary education. New Zealand has a disadvantage in terms of visibility being distant and small. However, to enhance our position in the international tertiary student market, Education New Zealand was established in 2011.

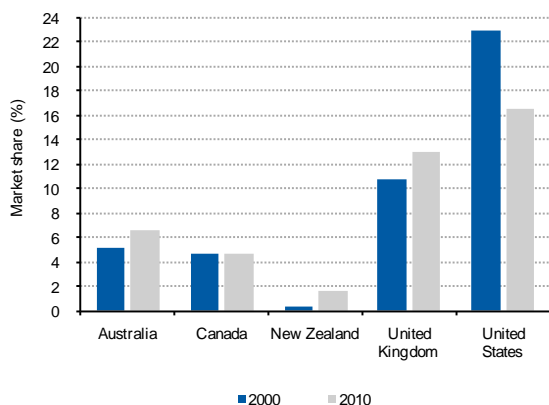
The cost of tertiary education in New Zealand increases for international students as the value of the New Zealand dollar increases. An analysis of the relationship between the New Zealand and the United States dollars showed that there was a statistically significant relationship between tertiary education enrolments in non-government funded private training establishments and the value of the New Zealand dollar. Enrolments of international students in English language providers are reported to share similarities with features of the tourism sector in that enrolments in short courses are often delivered as part of a New Zealand vacation. There is strong international competition for short-term visitors and relative currency values would be expected to affect their decision-making on which countries to visit.

There was no significant relationship between currency and international tertiary students for government-funded private training establishments, polytechnics and secondary schools.

This suggests that for these sectors there are more important factors, other than the value of the New Zealand that influence enrolments by international tertiary students.

Table 18.1 presents the trend in international enrolments from 2006. There have been some marked changes in demand from international students for the qualifications taught by tertiary education providers.

**Figure 18.1** Market shares of international tertiary students by MESDC



**Note:** MESDC = main English-speaking destination countries.

**Table 18.1** Number of international tertiary students by qualification level

	2006	2007	2008	2009	2020	2011	2012	Percentage of total students
Certificates 1-4	8,048	8,380	9,147	9,743	9,496	9,920	9,213	19%
Diplomas 5-7	9,610	8,322	8,438	10,741	11,788	13,173	12,976	27%
Bachelors	22,909	20,000	18,103	18,213	18,830	19,417	19,821	42%
Postgraduate	4,860	5,312	5,995	6,885	7,724	7,998	8,527	18%
<b>Total number of international tertiary students</b>	<b>42,709</b>	<b>39,824</b>	<b>39,522</b>	<b>43,116</b>	<b>45,294</b>	<b>47,771</b>	<b>47,668</b>	

**Notes:**

1. Bachelors includes bachelors degrees and graduate certificates/diplomas. Postgraduate includes bachelors with honours degrees, postgraduate certificates/diplomas, masters degrees and doctoral degrees.
2. Data is for students enrolled at any time during the year with a tertiary education provider in formal learning (that is, contributing towards a recognised qualification) of more than one week's duration.
3. Tertiary education organisations are able to revise data back to 2003 so that data may differ from previously published figures.
4. Students who were enrolled at more than one of the qualification levels shown in the table have been counted in each level. Within each qualification level multiple enrolments are counted only once. Consequently, the sum of students in each level may not add up to the total

From 2007 to 2012, there was a 56 percent increase in international enrolments in diploma qualifications. There has also been a consistent growth in international enrolments in postgraduate qualifications, rising 75 percent from 2006 to 2012. This increase can partly be attributed to the 'domestic fees status for new international doctoral students' policy which was introduced from 2006.

Table 18.2 shows there were substantial variations in the profile of qualifications based on the regional origins of international students. In 2012, the great majority of international tertiary students came from Asia (73 percent), followed by Europe (7.5 percent) and the Middle East (5.5 percent). The largest proportion of Asian students studied at

bachelors level (38 percent), as did most North-American students (72 percent). European students had 29 percent of their number in postgraduate study and 45 percent at bachelors level.

A comparison with New Zealand's domestic tertiary students shows that, overall, international students were more focused on bachelor-level study in 2012 (42 percent compared to 38 percent). Also, the proportion of postgraduate students among them was substantially higher than for domestic students (18 percent compared to 11 percent). In 2012, the 47,700 international tertiary students made up 11 percent of all tertiary students enrolled with New Zealand's government-funded tertiary education providers.

**Table 18.2** International tertiary students in 2012 by region and qualification level, compared with domestic tertiary students

	Africa	Asia Central and South America	Europe	Middle East	Northern America	Pacific	Total international students	Total domestic students	
Certificates 1-4	100	6,342	575	579	990	142	485	9,213	155,306
Diplomas 5-7	120	11,098	211	456	329	56	706	12,976	55,515
Bachelors	145	14,337	125	1,609	929	2,046	630	19,821	142,360
Postgraduate	203	5,552	260	1,028	621	592	271	8,527	39,502
<b>Total students</b>	<b>554</b>	<b>34,956</b>	<b>1,128</b>	<b>3,577</b>	<b>2,611</b>	<b>2,824</b>	<b>2,018</b>	<b>47,668</b>	<b>374,785</b>

**Notes:**

1. Bachelors includes bachelors degrees and graduate certificates/diplomas. Postgraduate includes bachelors with honours degrees, postgraduate certificates/diplomas, masters degrees and doctoral degrees.
2. Data is for students enrolled at any time during the year with a tertiary education provider in formal learning (that is, contributing towards a recognised qualification) of more than one week's duration.
3. Students who were enrolled at more than one of the qualification levels shown in the table have been counted in each level. Within each qualification level multiple enrolments are counted only once. Consequently, the sum of students in each level may not add up to the total.

Table 18.3 shows the trend in the key source countries for international fee-paying students enrolled in universities from 2006 to 2012. The fall in Chinese enrolments from 2006 to 2010 is apparent, as is the subsequent rise in these students from 2010 to 2012. The marked increase in enrolments from

India and Saudi Arabia from 2006 to 2010 has been followed by declines in 2011 and 2012. The number of students from the United States of America has been relatively constant over time, although the number also declined from 2010 to 2012.

**Table 18.3** International tertiary students by country at universities

	2006	2007	2008	2009	2010	2011	2012
China	13,502	9,800	7,246	6,424	6,238	6,633	7,523
United States of America	2,233	2,283	2,266	2,345	2,509	2,408	2,192
Malaysia	1,356	1,721	1,867	1,997	2,134	2,082	1,998
India	699	877	1,093	1,321	1,474	1,357	1,287
Viet Nam	438	435	385	543	718	926	1,045
Saudi Arabia	138	282	520	955	1,125	1,105	987
Republic of (South) Korea	1,060	1,150	1,153	1,198	1,157	1,044	958
All other countries	6,424	6,698	6,957	7,505	7,586	7,500	7,416
<b>Total number of international tertiary students</b>	<b>25,850</b>	<b>23,246</b>	<b>21,487</b>	<b>22,288</b>	<b>22,941</b>	<b>23,055</b>	<b>23,406</b>

**Notes:**

1. Bachelors includes bachelors degrees and graduate certificates/diplomas. Postgraduate includes bachelors with honours degrees, postgraduate certificates/diplomas, masters degrees and doctoral degrees.
2. Data is for students enrolled at any time during the year with a tertiary education provider in formal learning (that is, contributing towards a recognised qualification) of more than one week's duration.
3. Tertiary education organisations are able to revise data back to 2003 so that data may differ from previously published figures.
4. Students who were enrolled at more than one of the qualification levels shown in the table have been counted in each level. Within each qualification level multiple enrolments are counted only once. Consequently, the sum of students in each level may not add up to the total.

Table 18.4 details the trend in the key source countries for international fee-paying students enrolled at institutes of technology and polytechnics from 2006 to 2012. A similar trend to that for the universities is evident in the fall in

Chinese student enrolments from 2006 to 2009, recovering from 2010 to 2012. It is clear that Indian students have grown to be a key market for institutes of technology and polytechnics.



**Table 18.4** International tertiary students by country at institutes of technology and polytechnics

	2006	2007	2008	2009	2020	2011	2012
China	4,946	4,042	3,615	4,269	4,727	4,723	4,541
India	781	1,163	1,972	2,742	2,947	2,949	3,012
Philippines	175	224	281	284	344	469	536
Tonga	341	343	449	452	563	616	536
Saudi Arabia	25	50	98	195	354	507	534
Republic of (South) Korea	473	606	542	504	436	376	427
Japan	494	438	422	365	387	269	366
All other countries	2,446	2,714	2,672	2,499	2,272	2,355	2,524
<b>Total number of international students</b>	<b>9,681</b>	<b>9,580</b>	<b>10,051</b>	<b>11,310</b>	<b>12,030</b>	<b>12,264</b>	<b>12,476</b>

**Notes:**

1. Bachelors includes bachelors degrees and graduate certificates/diplomas.
2. Postgraduate includes bachelors with honours degrees, postgraduate certificates/diplomas, masters degrees and doctoral degrees.
3. Data is for students enrolled at any time during the year with a tertiary education provider in formal learning (that is, contributing towards a recognised qualification) of more than one week's duration.
4. Tertiary education organisations are able to revise data back to 2003 so that data may differ from previously published figures.
5. Students who were enrolled at more than one of the qualification levels shown in the table have been counted in each level. Within each qualification level multiple enrolments are counted only once. Consequently, the sum of students in each level may not add up to the total.

## 19 FINDING OUT MORE ABOUT TERTIARY EDUCATION

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

**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**

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)

**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)

**Campuses:**

City  
 Millennium  
 North Shore  
 Manukau

**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)

**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)

**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)

**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)

**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)

**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)

## INSTITUTES OF TECHNOLOGY AND POLYTECHNICS

- ▲ Aoraki Polytechnic  
www.aoraki.ac.nz
- ▲ Bay of Plenty Polytechnic  
www.boppoly.ac.nz
- ▲ Christchurch Polytechnic Institute of Technology  
www.cpit.ac.nz
- ▲ Eastern Institute of Technology Hawke's Bay  
www.eit.ac.nz
- ▲ Manukau Institute of Technology  
www.manukau.ac.nz
- ▲ Nelson Marlborough Institute of Technology  
www.nmit.ac.nz
- ▲ Northland Polytechnic  
www.northtec.ac.nz
- ▲ Otago Polytechnic  
www.tekotago.ac.nz
- ▲ Southern Institute of Technology  
www.sit.ac.nz
- ▲ Tai Poutini Polytechnic  
www.taipoutini.ac.nz
- ▲ The Open Polytechnic of New Zealand  
www.openpolytechnic.ac.nz
- ▲ Unitec New Zealand  
www.unitec.ac.nz
- ▲ Universal College of Learning  
www.ucol.ac.nz
- ▲ Waiariki Institute of Technology  
www.waiariki.ac.nz
- ▲ Waikato Institute of Technology  
www.wintec.ac.nz
- ▲ Wellington Institute of Technology  
www.weltec.ac.nz
- ▲ Western Institute of Technology at Taranaki  
www.witt.ac.nz
- ▲ Whireia Community Polytechnic  
www.whireia.ac.nz

## WĀNANGA

Links to these organisations can be found at:  
www.tauihu-wananga.maori.nz

- ▲ Te Wānanga o Aotearoa  
www.twoa.ac.nz
- ▲ Te Whare Wānanga o Awanuiārangi  
www.wananga.ac.nz
- ▲ Te Wānanga-o-Raukawa  
www.twor.ac.nz

## INDUSTRY TRAINING ORGANISATIONS

Links to these organisations can be found at: [www.itf.org.nz](http://www.itf.org.nz)

- ▲ Building and Construction Industry Training Organisation
- ▲ Careerforce (Community Support Services Industry Training Organisation)
- ▲ Communications and Media Industry Training Organisation
- ▲ Competenz
- ▲ Electricity Supply Industry Training Organisation
- ▲ EMQUAL (Fire and Rescue Services)
- ▲ Floor NZ and Decorate NZ
- ▲ Funeral Service Training Trust of New Zealand
- ▲ Hairdressing Industry Training Organisation
- ▲ Infratrains New Zealand
- ▲ Joinery Industry Training Organisation
- ▲ Motor Industry Training Organisation
- ▲ New Zealand Industry Training Organisation
- ▲ NZ Marine Industry Training Organisation
- ▲ Pharmacy Industry Training Organisation
- ▲ Plastics and Materials Processing Industry Training Organisation
- ▲ Primary Industry Training Organisation
- ▲ Service IQ
- ▲ Skills Active Industry Training Organisation
- ▲ The Skills Organisation

## SECTOR GROUPS

### AOTEAROA MĀORI PROVIDERS OF TRAINING EDUCATION AND EMPLOYMENT

80 Queens Drive

Lyllall Bay

PO Box 2796

Wellington

phone: 04-387 5640 fax: 04-387 5645

email: [teatahou@xtra.co.nz](mailto: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](mailto: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](http://www.itf.org.nz)

### INDEPENDENT TERTIARY EDUCATION NEW ZEALAND

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](mailto: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@nzaau.ac.nz](mailto:admin@nzaau.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](mailto: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](http://www.besttraining.ac.nz)

### TE TAUHU 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](mailto:info@tauihu-wananga-maori.nz)

## STUDENTS' ASSOCIATIONS

### 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 the National Certificate of Education Achievement (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 New Zealand Qualifications Authority, 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 (EFTS) 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 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. Government training establishments 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, school leavers 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 āhūatanga 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.

## ACRONYMS

ACE	Adult and community education	NSN	National Student Number
AFML	Annual fee movement limit	NZAPEP	New Zealand Association of Private Education Providers
ALAF	Adult Literacy Achievement Framework	NZIS	New Zealand Income Survey
ALL	Adult Literacy and Life Skills Survey	NZQA	New Zealand Qualifications Authority
ALQM	Adult Literacy Quality Mark	NZQF	New Zealand Qualifications Framework
AMPTEE	Association of Māori Providers of Tertiary Education and Employment	NZSCED	New Zealand Standard Classification of Education
APPEL	Association of Private Providers of English Language	NZUAAU	New Zealand Universities Academic Audit Unit
ATEM	Association for Tertiary Education Management	OECD	Organisation for Economic Co-operation and Development
CLANZ	Community Learning Aotearoa New Zealand	OTEP	Other tertiary education provider
COP	Code of Practice for the Pastoral care of International Students	PBRF	Performance-Based Research Fund
CoRE	Centre of research excellence	PITPONZ	Pacific Islands Tertiary Education Providers of New Zealand
CPI	Consumers Price Index	PTE	Private training establishment
CRI	Crown research institute	REAP	Rural Education Activities Programme
CUAP	The Committee on University Academic Programmes	SAC	Student achievement component
EFTS	Equivalent full-time student unit	SLS	Student Loan Scheme
ELSI	Economic Living Standard Index	SNZ	Statistics New Zealand
ERO	Education Review Office	STAR	Secondary-Tertiary Alignment Resource
ESOL	English for speakers of other languages	STM	Standard training measure
FCCM	Fee and Course Costs Maxima	TANZ	Tertiary Accord of New Zealand
FTE	Full-time equivalent	TCS	The Correspondence School
GTE	Government training establishment	TEC	Tertiary Education Commission
HLFS	Household Labour Force Survey	TEI	Tertiary education institution
HRC	Health Research Council	TEO	Tertiary education organisation
IALS	International Adult Literacy Survey	TEP	Tertiary education provider
ALL	Adult Literacy and Life Skills Survey	TES	Tertiary education strategy
IDF	Innovation and Development Fund	TIA	Training Incentive Allowance
IIQABCG	Inter-Institutional Quality Assurance Bodies Consultative Group	TOPNZ	The Open Polytechnic of New Zealand
ISCED	International Standard Classification of Education	TWoA	Te Wānanga o Aotearoa
ITF	Industry Training Federation	UBSH	Unemployment Benefit Student Hardship
ITI	Independent Tertiary Institutions	UNZ	Universities New Zealand
ITO	Industry training organisation	WBSDF	Workbase Basic Skills Development Fund
LLN	Literacy, language and numeracy	WINHEC	World Indigenous Nations Higher Education Consortium
MSD	Ministry of Social Development	WIPCE	World Indigenous Peoples Conference on Education
MSI	Ministry of Science and Innovation		
NCEA	National Certificate of Educational Achievement		

## 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 2012* 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 2012, 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. The following are two examples of a five-year progression rate:

- ▲ 33 percent of students who started a level 1 to 3 certificate in 2008 went on to study at a higher level by 2012, or

- ▲ 20 percent of students who started a bachelors degree in 2008 went on to study at a higher level by 2012.

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). The following are two examples of the one-year graduate progression rate:

- ▲ 27 percent of graduates went on to higher-level study within one year after completing a level 1 to 3 certificate, or
- ▲ 23 percent of graduates went on to higher-level study within one year after completing their bachelors degree.

### Qualifications

'Bachelors or higher qualifications' refers to bachelors degrees, graduate diplomas and certificates, bachelors with honours degrees, 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. The following are two examples of the five-year qualification completion rate:

- ▲ 74 percent of the full-time students who started a bachelors degree in 2008 had completed this qualification by 2012, or
- ▲ 78 percent of full-time students who started a level 1 to 3 certificate had completed this by 2012.

### 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.

### 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. Retention is the complement of attrition, that is, retention = 1 – attrition. The following are two examples of a retention rate:

- ▲ 84 percent of the students who started a bachelors degree in 2011 were still studying in 2012, or
- ▲ only 46 percent of students who started a level 1 to 3 certificate in 2007 were still studying in 2012, compared to 70 percent of students who had started a bachelors degrees in 2007.

### 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

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  
<http://www.itf.org.nz/>

Inland Revenue  
[www.ird.govt.nz](http://www.ird.govt.nz)

Ministry of Business, Innovation and Employment  
[www.mbie.govt.nz](http://www.mbie.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  
<http://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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