

chapter one

INTRODUCTION AND OVERVIEW

INTRODUCTION

New Zealand's Tertiary Education Sector: Profile & Trends 2003 is the sixth annual, comprehensive Ministry of Education survey of the New Zealand tertiary education sector. It provides an overview of the performance and key characteristics of the sector in 2003.

The key focus in the tertiary education sector in 2003 continued to be the development and implementation of the government's tertiary education reforms. The reforms are fundamentally about shifts in ways of thinking and relating, and increasing the influence and role of key stakeholders over the tertiary education system. The ultimate aim of the reforms is to develop a system that is more closely connected to national development goals and to other sectors of society and the economy, so that the tertiary education system makes an effective contribution to New Zealand's national development.

With the enactment of the Education (Tertiary Reform) Amendment Act 2002, some of the key elements of the tertiary education reforms came into being in 2003. The Act introduced the mechanisms that will create a more strategic and coherent system, by:

- providing the statutory basis for the Tertiary Education Strategy (TES) and the Statement of Tertiary Education Priorities (STEP)
- establishing the Tertiary Education Commission (TEC) as a Crown entity, to give effect to the STEP and to be responsible for funding not all tertiary education and training offered by tertiary education institutions, private providers, industry training organisations and providers of adult community education, and
- providing the basis for the key steering instruments to be used by the TEC as it implements the TES – especially charters and profiles.

KEY FINDINGS

STUDENT PARTICIPATION AND ACHIEVEMENT IN TERTIARY EDUCATION

There were some 430,000 domestic and 47,000 international students enrolled in formal qualifications with tertiary education providers during 2003. In addition, nearly 127,000 workers engaged in industry-based training, including over 6,250 Modern Apprentices.

2003 has seen the continuation of a period of renewed growth in the sector that began in 2000. Over 13 percent of the population aged 15 and over were enrolled in formal tertiary education during 2003, the highest participation rate in New Zealand's history. Domestic student numbers rose 11 percent, following similar growth in 2002 and 2001, while international student numbers grew by 21 percent, and industry training numbers grew by 19 percent.

Polytechnics were the largest type of tertiary education provider in terms of the number of domestic students enrolled, with 42 percent of all students in 2003. However, in terms of equivalent full-time students (EFTS), the universities still constitute the largest type of tertiary education provider, with 39 percent of EFTS.

Polytechnic domestic student numbers grew by 29 percent in 2003 to reach 178,000 students. Much of this growth was in shorter community education type courses. Universities had an increase of around 1,000 domestic students (or 1 percent). Wānanga continued to grow sharply, with the number of domestic students increasing by over 20,500 to reach nearly 65,000 in 2003. In terms of head count, wānanga students made up 15 percent of all domestic students in 2003, and outnumbered students at private providers for the first time.

With around 58,500 students in 2003, PTE student numbers were 11 percent lower than in 2002, while college of education student numbers remained fairly similar to 2002 levels at close to 13,500 students.

While participation increased at all levels of tertiary study in 2003, growth was significant at certificate level, with 20 percent more students studying for level 1 to 3 certificates, and 64 percent more students studying for certificates at level 4. Nearly 60 percent of all students studied at these levels in 2003.

Nearly 128,000 students (30 percent) studied at bachelors level in 2003, a rise of 2 percent from 2002. At 4 percent of the population aged 15 and over, the rate of participation at bachelors level has remained relatively constant since 1999. More than 22,600 students gained a bachelors degree in 2003, similar to the number in 2002. Of those who started a bachelors degree in 1999, 43 percent had successfully completed by 2003.


There were nearly 30,000 students studying at postgraduate level in 2003, including 15,200 students at postgraduate certificate, diploma or honours level, 10,900 studying at masters level, and 3,800 at doctorate level. While the number of students studying at these levels rose between 1 and 5 percent, the percentage of the population aged 15 and over studying at these levels has remained relatively constant. A total of 499 students gained a doctorate in 2003, an increase of nearly 7 percent over 2002.

Society and culture-related fields, and management and commerce-related fields were the most popular fields for study in 2003, each with around 86,000 students (or 20 percent each of all domestic students in 2003).

During 2000 and 2001, Māori were the fastest-growing group. In 2003, however, the number of domestic Asian students grew at a faster rate than any other group, by nearly a third (32 percent), to reach nearly 45,000. This group now represents more than one in 10 domestic tertiary students.

There were 91,600 Māori students in 2003, up 240 percent on 1994. Over all levels of study and when adjusted for age differences, more than 20 percent of Māori aged 15 and over participated in tertiary education in 2003, the highest rate of any ethnic group. Consistent with the growth in wānanga at sub-degree level is the higher propensity of Māori to be studying at lower levels on the Register of Quality Assured Qualifications (70 percent).

There were over 25,400 Pasifika domestic students in 2003, up 13 percent from 2002. Despite the number of domestic European students having increased by 91,000 since 1994, their share of all students has fallen from three in four (76 percent) in 1994 to two in three (66 percent) in 2003.



At certificate and diploma levels, Asian and Māori students have the highest rates of completion. However, at bachelors level and postgraduate level, Māori students complete at a rate lower than the European and Asian students. Māori have the highest rates of retention at levels below degree level. At degree level, however, Māori retention remains low (47 percent, compared with 52 percent for the sector as a whole). Pasifika completion rates remained the lowest over all levels of study.

Women are more likely to complete a tertiary qualification than men. For levels below masters degrees, the rate at which men complete is between 7 and 9 percent lower than the rate for women. This pattern is reversed at masters level where men complete at a rate 6 percent higher than that of women. At doctorate level, completion rates are similar.

INDUSTRY TRAINING

The workplace provides an increasingly important vehicle for tertiary learning, largely as a result of the Industry Training Strategy and initiatives such as Modern Apprenticeships. During 2003, 126,900 students were learning under industry training agreements, an increase of 19 percent from 2002, and over 55 percent since 2000. Employer participation in industry training increased by 19 percent from 24,600 employers in 2002 to 29,200 in 2003.

Three quarters of industry trainees are men, although the proportion of women undertaking industry training has increased from 13 percent in 1996 and 22 percent in 2002. There were close to 22,000 Māori in industry training in 2003, representing 17 percent of all industry trainees, compared with 11 percent in 1996, and up from around 18,500 in 2002. Pasifika trainees represented 6 percent of all industry trainees, a similar share as in 2002, but up from 2 percent in 1996. There were nearly 7,000 Pasifika trainees in industry training in 2003, up by 7 percent on 2002.

Nearly a third of trainees are aged between 20 and 29, while a further 25 percent are aged between 30 and 39. The number of trainees aged between 15 and 19 has increased significantly since 2000 and numbered 12,180 in 2003, or 10 percent of all trainees, reflecting the impact of the government's Modern Apprenticeships initiative introduced during 2000.

In the year 2003, more than 14,000 national certificates were completed by industry trainees, with 74 percent completed at level 3. Around 38 percent of the national certificates completed by Māori and 31 percent of the national certificates completed by Pasifika trainees were at level 4 or above. Industry trainees achieved nearly 2.5 million credits towards national qualifications, an average of nearly 20 credits per trainee.

There was a total of 6,260 Modern Apprentices at 31 December 2003, up 44 percent from the 4,340 apprentices registered at 31 December 2002. Modern Apprenticeships were available in 34 industries, with an average of just over 200 in each. Around 7 percent were women, 15 percent Māori and under 2 percent Pasifika. The average age of apprentices was 17 years, with around half of all trainees aged 17 or 18.

PATHWAYS INTO TERTIARY EDUCATION


Raising the level of foundation skills across the population is key to New Zealand's future social and economic development. As such, enhancing foundation skills is one of the focus areas of the Tertiary Education Strategy 2002/07. Students who leave school without qualifications will generally require further education before they can progress onto higher levels of tertiary education. A range of initiatives has been introduced in recent years to provide pathways into tertiary education and to help people acquire foundation skills.

In 2003, there were almost 137,300 enrolments in the Secondary-Tertiary Alignment Resource (STAR) scheme. STAR aims to assist secondary school students into work or further study through courses not traditionally provided through the schools. In addition, 2,600 students participated in Gateway, a scheme that enables senior secondary students to undertake formal workplace learning while they are still at school. Of those students who participated in Gateway in 2003, 25 percent moved on to full-time employment and 65 percent carried on to further training or education.

Bridging education programmes are designed to assist students to develop the skills necessary for success in tertiary study. From the mid-1980s, there has been a steady increase in the number and quality of bridging programmes offered by tertiary education providers.

DEVELOPING FOUNDATION COMPETENCIES

The 1996 International Adult Literacy Survey (IALS) found that around 20 percent of adult New Zealanders had very poor functional literacy skills. Low literacy is a major barrier to educational attainment. The launch of the government's adult literacy strategy in 2001 set goals in place to improve adult literacy. In 2002, the Adult Literacy Innovations Pool was initiated to provide opportunities for literacy learning in TEIs, PTEs and communities, and this pool was extended in 2003 to provide a number of projects targeted at particular groups in the community with low levels of literacy. A high proportion of participants were Māori and Pasifika peoples.



In general, income levels increase with the level of tertiary education qualifications. HLFS data showed that people with tertiary education qualifications received higher income than those with lower or no qualifications. In 2003, the median weekly income of people with a bachelors degree or higher was \$710, compared with \$560 for people with vocational or trade qualifications and with \$270 for those with no qualifications. Analysis of the Integrated Dataset on Student Loan Scheme Borrowers reinforces the finding of higher qualifications leading to higher income levels. The dataset also provides evidence that successful completion of a tertiary education qualification reduces disparities in median income levels among ethnic groups.

Tertiary education has benefits to the community, as well as to individuals. A study of the value added by tertiary education to students at Te Wānanga o Aotearoa, *Ka Awatea Tuarua*, estimated the gains to the economy to be in the region of \$1 billion annually.

RESEARCH OUTCOMES

The tertiary education sector is responsible for producing around two thirds of the country's research output. It conducts the great majority of the pure basic research in New Zealand. Even more important, tertiary education organisations are responsible for the training of the nation's research workforce. Therefore, the sector has a key role to play in New Zealand's knowledge creation and innovation system.

The government has recognised the importance of the contribution of the sector to its knowledge creation goals through two major initiatives intended to enhance the quality and the relevance of the research produced in the sector. Seven centres of research excellence have been created to build on areas of research strength in the sector and to encourage collaboration in research. From 2004, the Performance-Based Research Fund (PBRF) will shift the basis of research funding from a system based on student enrolments to one where funding will be allocated on the basis of research performance.

There has been a significant increase in the number of research outputs produced in the sector over the last seven years, but with output having levelled off in the last four years. In 2003, there were 2.2 publications per full-time equivalent academic staff member (FTE) in New Zealand universities.

An idea of the impact of the research of the New Zealand universities can be inferred from the number of times each research paper was cited by other researchers. Research papers from the New Zealand tertiary education sector published in 1997 were cited on average 6.1 times each over the period 1997 to 2001, an increase from the previous survey that reported 5.8 citations per paper. The rate of citation of tertiary education sector publications was about the same as that of the Crown Research Institutes (CRIs), but somewhat lower than that of the health research sector. It was similar to that of papers internationally, given the journals that they are published in.

In the PBRF 2003 quality assessment, the highest scoring subject area was philosophy. Many of the highest performing subject areas were sciences, with five of the 10 highest ranked subjects in scientific fields. Of the 12 PBRF assessment panels, the four panels with the highest average quality scores were in scientific and technological areas.

Formal training in research is mainly carried out through postgraduate research degrees. Between 1998 and 2003, enrolments in doctoral studies in the eight universities increased by 30 percent. The number of doctor of philosophy (PhD) degrees awarded by New Zealand tertiary education institutions rose by 33 percent between 1998 and 2003.

The proportion of PhD degrees awarded to women in 2003 was 45 percent, compared with 39 percent in 1998. New Zealand has a higher proportion of women among doctorate graduates than most comparable countries. The number of Māori awarded doctor of philosophy degrees is very low in relation to the number of Māori completing all qualifications, but has risen sharply since 1998.

Over the period 1998 to 2003, the four subject areas with the largest number of PhD completions were the biological sciences (20 percent), the social sciences (18 percent), the physical sciences (16 percent) and the humanities (11 percent).

In 2003, the income from research contracts in universities constituted \$264 million, compared with \$131 million in 1997. The rise between 2002 and 2003 was 13 percent. Research contract income accounted for 14 percent of all university revenue in 2003, compared with 13 percent in 2002 and 11 percent in 1997.

OLDER STUDENTS IN TERTIARY EDUCATION

Increases in participation in tertiary education have occurred across all age groups over the last 10 years. Although participation rates for people in the 40 or over age group ('older students') are lower than the general population, enrolments by people in this group have grown more rapidly in the past few years, more than doubling from 3 percent of the population aged 40 or over in 1998 to 7 percent in 2003.

More than one third of the total growth in students participating in formal tertiary education over the past decade can be attributed to growth in the older student population. In 2003, one in four tertiary students was aged 40 and over, compared with around one in seven in 1994.

Wānanga and polytechnic enrolments have been the most significant factor in this growth, contributing 41 percent and 39 percent respectively of the total growth in older student numbers since 1998. In 2003, 45 percent of the student population aged 40 and over were enrolled at polytechnics, 24 percent at wānanga, 20 percent at universities, 12 percent at private training establishments and 4 percent at colleges of education.

Changes to the tertiary education sector from 1998 have provided more opportunities for older people to enter tertiary education, through innovative delivery modes, an increase in the number and range of sub-degree qualifications, especially at wānanga and polytechnics, and qualifications with low or zero fees.

Older tertiary students are more likely to be enrolled in lower-level qualifications, and generally have lighter study loads than younger students. Four out of five older students were studying at sub-degree level in 2003, and only one quarter of older students had study loads of 0.8 or more EFTS.

Adult and Community Education (ACE) is an important area of tertiary education for older learners, as it provides opportunities for further education and updating of skills, without having to engage in formal study. In 2003, 95,300 older students were enrolled in school community education courses, making up just over half (53 percent) of all students enrolled in ACE in schools. Older student enrolments in ACE courses at TEIs increased from 76,000 to 144,000 students between 2002 and 2003, mainly because of the increase in enrolments at polytechnics.

Older people are well represented in industry training through ITOs. One in three industry trainees (around 29,000 trainees) was aged 40 years or over at 31 December 2003. Forestry training attracted the largest number of students aged 40 and over, while training in social services and community support through ITOs was dominated by older students.

PROVIDERS AND SYSTEM CAPABILITY

In 2003, the tertiary education sector included 35 public tertiary education institutions (TEIs). These comprised eight universities, 20 institutes of technology and polytechnics, four colleges of education and three wānanga. Between them, the public TEIs enrolled about 86 percent of tertiary education students.

The number of private training establishments (PTEs) registered with the New Zealand Qualifications Authority has increased significantly over the last decade. In 2003, 98 new PTEs were registered for the first time, taking the total to 907 in December 2003. In 2003, the PTEs provided learning for about 14 percent of enrolled tertiary education students.

In 2003, PTE funding was ring-fenced, with providers' Student Component funding capped at their 2001 levels. In 2003, 229 existing PTEs were recognised for government funding in the form of tuition subsidies and access to student loans and allowances. A new fund, the Strategic Priorities Fund (SPF), was established for 2003. This fund provides PTEs with an opportunity to focus on new provision and growth in Student Component funding in areas of strategic priority that are aligned with the Tertiary Education Strategy (TES) and the Statement of Tertiary Education Priorities (STEP). Existing providers seeking extra funding beyond their cap or new providers seeking funding for the first time were required to apply for it via the SPF.

FINANCIAL SUPPORT FOR STUDENTS

The government aims to reduce barriers to participation in tertiary education by providing financial support for students. Financial support is provided by the government through the Student Loan Scheme, student allowances, the Training Incentive Allowance and a range of scholarships schemes. In addition, many students apply for scholarships funded by trusts, businesses, tertiary education organisations and provider groups. The most significant financial support schemes, both in terms of cost and in the numbers supported, are the Student Loan Scheme and student allowances.

In 2003, more than 156,000 tertiary students borrowed through the Student Loan Scheme to finance their study. This was an increase of 4 percent on the number of borrowers in 2002. Around 60 percent of eligible students used the scheme in 2003, compared with an uptake rate of 50 percent in 1999.

The average amount borrowed in the 2003 academic year was \$6,316, an increase of 2 percent on the average borrowing in 2002. Borrowings in 2003 approached \$1 billion in total. The average cumulative student loan balance with Inland Revenue was more than \$14,200 at the end of June 2004, an increase of 4 percent on the figure for June 2003. At 30 June 2004, just over 50 percent of student loan balances with Inland Revenue were under \$10,000. The percentage of borrowers with a loan balance of \$50,000 or more increased from 2.4 percent to 2.8 percent between June 2003 and June 2004.

At 30 June 2004, the total number of loans fully repaid since the scheme began was nearly 141,500. More than 25 percent of the 560,000 who have used the scheme have now repaid their loans.

During the 2002/03 income year, more than 241,000 borrowers received interest write-offs valued at more than \$125 million. More than \$815 million in interest has been written off since the loan scheme began in 1992.

In 2003, around 64,000 full-time students received student allowances, down by 6 percent from 2002. A total of 14,000 students received assistance through either an A or a B Bursary payment, 1 percent fewer than in 2003. The total number of students receiving a single student 25 years and over allowance rose by 21 percent between 1999 and 2003. By contrast, the number of students in the single 16 to 24 years of age category declined by 14 percent between 1999 and 2003. Entitlement to this allowance type is dependent on a parental income test and the declining numbers reflect rising incomes over that time.

Nearly 6,800 students with dependants received student allowances in 2003, a decrease of 7 percent from 2002. Women made up 45 percent of the recipients of this allowance.

The amount of money paid out in student allowances, including the accommodation benefit, was \$392.5 million in 2003, an increase of less than 2 percent since 1999.

The Training Incentive Allowance is designed to help certain classes of beneficiaries prepare for employment by meeting some of the costs of study. Nearly 22,000 people, mostly Domestic Purposes beneficiaries (90 percent) received an allowance under that scheme in 2003.

THE YEAR 2003

JANUARY

- The Tertiary Education Commission (TEC), Te Amorangi Mātauranga Matua, a Crown entity, is created with the enactment of the Education (Tertiary Reform) Amendment Act 2002. TEC will give effect to the government's Statement of Tertiary Education Priorities (STEP) and is responsible for the funding of tertiary education and training offered by universities, polytechnics, colleges of education, wānanga, private training establishments, foundation education agencies, industry training organisations and adult and community education providers.
- An announcement is made that income thresholds for student loan repayments and interest write-offs will rise in April, in line with regular adjustments to the Domestic Purposes Benefit.

FEBRUARY

- Prime Minister launches the Tertiary Education Commission.
- Contracts are signed establishing two further Centres of Research Excellence (CoREs) – the National Centre for Advanced Bio-Protection Technologies (based at Lincoln University) and the National Research Centre for Growth and Development (based at the University of Auckland).

MARCH

- The Supporting Learning Pathways Credit Recognition and Transfer Policy is announced, setting out principles agreed by all providers to provide consistency and surety for students.
- The Hui Taumata Mātauranga is hosted by Ngāti Tūwharetoa in Taupo. The focus of this hui is on supporting effective teaching and successful education outcomes.

AUGUST

- Government confirms the new system of fee course costs maxima, announced in the Budget, after consideration of public submissions. A limit on annual fee movements is also introduced.
- Step Up tertiary scholarships are launched. These scholarships aim to improve the participation by low-income people in high-cost areas of tertiary education and to lift the retention of skilled graduates in New Zealand.
- The Statement of Tertiary Education Priorities (STEP) is released, setting priorities in the tertiary education system up to December 2004.
- Aotearoa Tertiary Student Association – Te Huinga Taurira, National Conference, Gisborne.
- The revised Code of Practice for the Pastoral Care of International Students is published.

SEPTEMBER

- Nominations open for the 2004 Tertiary Teaching Excellence Awards.
- The Partnerships for Excellence programme is announced to encourage greater private sector investment in tertiary education and to foster better linkages between tertiary institutions, business and industry.
- The Modern Apprenticeships programme receives a \$600,000 cash boost to keep up with higher than expected growth in the current financial year.
- A discussion paper, *Student Support in New Zealand*, is released with the aim of building a common base of understanding about the level of financial assistance currently available to tertiary students. The paper sets out to engage students and other stakeholders to provide feedback on what refinements they think should be made to the current system.
- Adult Learners Week, He Tangata Mātauranga, is celebrated with the theme of 'Lifelong Learning – of course you can do it!'
- The website KiwiQuals is launched. KiwiQuals will enable users to find and compare on one site all quality-assured qualifications available in New Zealand – www.kiwiquals.govt.nz. The site covers more than 5,000 qualifications offered by more than 1,000 providers.

- The Māori Industry Training Summit is hosted by Te Wānanga o Aotearoa in Mangere. Representatives from industry, tertiary education and Māori communities gather together to support Māori participation and success in New Zealand industry.
- Education Minister Trevor Mallard meets with Chinese Education Minister Zhou Ji. The Ministers agree on broad principles to guide their future work, including the importance of active cooperation and the need to regulate and manage the development of international education relationships in ways that build stability, certainty and quality.
- the government signs a protocol with the New Zealand Association of Private Education Providers, signalling the intent of both parties to work cooperatively together.

OCTOBER

- New on-line student loans, allowances and bursary applications systems for tertiary students are launched to help improve the student loan and allowance applications processes.
- Limits are placed on the number of government-funded in-flight aviation training places from 2004 while the TEC determines the number of places it will fund in the longer term and whether aviation student access to the Student Loan Scheme should be retained.
- The Student Loan Scheme Annual Report is tabled in Parliament, showing a \$2.6 billion fall in debt forecasts.
- 270 applications are received for a share of the \$34 million funding from the Innovation and Development Fund and e-Learning Collaborative Development Fund (eCDF). The funds aim to improve the connectedness of TEOs with the needs of business and the community, and to foster the use of technology-based learning tools.
- Youth Pathways: He Ara Rangatahi programme is launched with pilots in Palmerston North, Christchurch and Napier, focusing on young people who have left school, are too young to qualify for welfare assistance, and who are considered 'at risk' because they have no concrete plans to enter further education or employment.
- Prime Minister Helen Clark and Chinese President Hu Jintao witness the signing of an Arrangement on Mutual Recognition of Academic Degrees in Higher Education between the Chinese and New Zealand Ministries of Education.
- Student loan help for teachers is announced.

