



MINISTRY OF EDUCATION

Te Tāhuhu o te Mātauranga

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99

NEW ZEALAND'S TERTIARY EDUCATION SECTOR

PROFILE & TRENDS



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PROFILE & TRENDS

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DEFINITIONS

TERTIARY EDUCATION

Tertiary education comprises all involvement in learning activities post-school and includes industry training and community education.

TERTIARY EDUCATION PROVIDERS

Tertiary Education Providers (TEPs) is the generic term used for all institutions and organisations that provide tertiary education. This includes tertiary education institutions (TEIs) and private training establishments (PTEs).

TERTIARY EDUCATION INSTITUTIONS

Tertiary education institutions (TEIs) are public tertiary education institutions that are Crown entities and thus required to follow standard public sector financial accountability processes.

There are four kinds defined in the Education Act 1989: universities, polytechnics, colleges of education and wānanga. Each TEI is governed by its own council.

PRIVATE TRAINING ESTABLISHMENTS

A private training establishment (PTE) is defined in the Education Act 1989 as 'an establishment, other than an institution, that provides post-school education or vocational training'. In the context of this report the term is generally used for PTEs registered with the New Zealand Qualifications Authority (NZQA). The category includes not only privately owned providers, but also those operated by iwi, trusts and the like.

OTHER TERTIARY EDUCATION PROVIDERS

Other tertiary education providers (OTEPs) are those organisations that deliver programmes of study of some national significance, and are recognised by the Minister of Education under s321 of the Education Act 1989. Because the delivery of these programmes of study is in the national interest, these providers have a special relationship with the Crown.

GOVERNMENT TRAINING ESTABLISHMENTS

A government training establishment (GTE) is a government department, or Crown entity other than a TEI, approved by the Minister of Education and registered by NZQA as a tertiary education provider offering training subject to approval and accreditation requirements of the Education Act 1989.

EFTS UNITS

An Equivalent Full-time Student (EFTS) unit is a standard unit of measurement of student enrolments. It is defined and calculated on the basis that a student workload that would normally be carried out by a full-time student in a single academic year is 1.0 EFTS unit.

FORMAL STUDENT

For the purposes of statistical reporting, a formal student is one who is enrolled in a course or courses of study leading to a qualification approved by an authorised certifying body or to an approved award issued by an institution. Formal students are enrolled in courses of more than one week's full-time duration (ie, an EFTS value greater than 0.03).

EFTS-BASED TUITION SUBSIDIES

EFTS-based tuition subsidies are provided by the government as a contribution towards the cost of tertiary education and training. These subsidies (previously known as the Universal Tertiary Tuition Allowance) are paid to approved tertiary education providers on behalf of domestic students enrolled in quality-assured courses leading to quality-assured qualifications. The amount of the tuition subsidy will be calculated according to the equivalent full-time student (EFTS) formula. The cap on government-subsidised EFTS places at tertiary providers was removed from 1 January 1999 apart from medicine, dentistry, veterinary and large animal science and foreign-going nautical. As of 1 January 2000 TEIs and PTEs receive the same rate of tuition subsidy. Extramural study is now subsidised at the same rate as on-site study. Differential subsidies have also been introduced to encourage research-based postgraduate study.

STUDY RIGHT

Study Right is a tuition subsidy policy designed to provide a higher level of subsidy to providers for eligible students entering tertiary education. The entitlement to the higher subsidy rate applies to students under 21 when commencing tertiary study, or beneficiaries, for a maximum of 3.0 EFTS units of tertiary study. The Study Right differential is being phased out in 2001 to support life-long learning objectives. However, these differential subsidies were not always reflected in proportionally reduced student fees.

TRAINING OPPORTUNITIES

Training Opportunities (part of the Training Opportunities Programme [TOP] until January 1999) is targeted towards job seekers, usually aged 18 years or more, long-term unemployed with low qualifications, people with disabilities, certain benefit recipients, refugees, ex-prisoners, or Work and Income New Zealand priority clients. Training is free for trainees and usually includes work-based learning, and is designed to provide trainees with practical pathways to employment or further education.

YOUTH TRAINING

Youth training programmes offer a range of practical skills training for school leavers, under-17-year-olds, students who have no more than two School Certificate passes, or students with no formal qualifications higher than Sixth Form Certificate. The training covers both job-specific and general workplace skills and is linked to the National Qualifications Framework. Youth training is free and available from a diverse range of approved training providers around New Zealand.

SKILL ENHANCEMENT

Skill Enhancement training is aimed at young Māori and Pacific people aged between 16 and 21. The emphasis is on training for the workforce with a minimum of 20 percent of the training being conducted in the workplace. Skill Enhancement training is offered at private training establishments, polytechnics, marae and wānanga, and training is available in a wide range of skills and industries.

NATIONAL QUALIFICATIONS FRAMEWORK

The National Qualifications Framework (NQF) is the unit standards-based system of national qualifications developed by the New Zealand Qualifications Authority. 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, up to Level 4, Certificate Level. Diploma qualifications can be awarded at Levels 5, 6 or 7 on the framework, Level 7 being equivalent to the level achieved at the end of a first degree. Level 8 is postgraduate study.

ISCED LEVEL

ISCED refers to the International Standard Classification for Education, developed by 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:

- | | |
|--|---------|
| • Education at the tertiary level, first stage, of the type that leads to an award not equivalent to a first university degree | ISCED 5 |
| • Education at the tertiary level, first stage, of the type that leads to a first university degree or equivalent | ISCED 6 |
| • Education at the tertiary level, second stage, of the type that leads to a postgraduate university degree or equivalent | ISCED 7 |

NZSCED

NZSCED refers to the New Zealand Standard Classification for Education, a subject-based classification system for courses at universities, polytechnics, colleges of education, wānanga and private training establishments in receipt of government funding. The classification system consists of three broad levels of detail (broad, narrow and detailed fields). It will be used to improve the quality and consistency of statistics collected by the Ministry of Education and other collection agencies in relation to tertiary study.

FOREWORD BY THE SECRETARY FOR EDUCATION

I am pleased to introduce to you the second of the Ministry of Education's reports on the tertiary education sector in New Zealand. The aim of this report is to provide a summary of the overall performance and key characteristics of the tertiary education sector in 1999. It is important that the sector has accurate information about current performance and future trends to inform planning in the sector, and also so that it can inform the current debate about its future role.

The Government has established the Tertiary Education Advisory Commission (TEAC) to develop a vision for a more cooperative and collaborative model for tertiary education in New Zealand. Such work will involve the consideration of proposals for the nature of the tertiary education system in the future, better understanding of the role of New Zealand's tertiary education provision within an international knowledge society, and the role of tertiary education providers in the country's regional development. The resourcing of affordable tertiary education for all New Zealanders is also being examined. At the same time, as part of the Government's Closing the Gaps strategy, the contribution of tertiary education policies and arrangements to the participation and achievement of Māori and Pacific peoples in tertiary education is coming under particular scrutiny.

Recognising these imperatives, the 1999 report has been expanded considerably from that prepared for 1998. However, the general organisation of last year's report was well received and this year's takes a similar format in that we focus, in turn, on the providers, the students, their programmes of study, outcomes of tertiary education and its resourcing. In this report we have also placed particular emphasis on tertiary education provision and outcomes for Māori and Pacific peoples in 1999 wherever such information was available.

In a report of this nature, it is all too easy to focus on the numbers and forget about the people and initiatives behind the data. Accordingly, we have also included a new chapter, based on providers' own volunteered contributions, which offers a small sampler of just a few of the many excellent initiatives being undertaken by New Zealand's tertiary education providers.

A considerable amount of information in this year's report has been provided by different agencies and organisations with responsibilities for tertiary education outside the Ministry of Education. We would particularly like to thank them for the data and assistance they have provided in preparing this report. Sources of further information from these bodies are included in the final chapter.

As I said in my introduction to last year's report, I trust you will find the information presented here relevant and useful to your understanding of the tertiary education sector as a whole. As we did last year, too, we would very much welcome your feedback on ways in which future editions of the report can be made more useful.



Howard Fancy
SECRETARY FOR EDUCATION

1 INTRODUCTION AND OVERVIEW

ONE

INTRODUCTION

IT IS ESTIMATED THAT OVER 90 PERCENT OF TODAY'S 18-YEAR-OLDS WILL PARTICIPATE IN SOME FORM OF TERTIARY EDUCATION BEFORE REACHING THE AGE OF 25. THEY WILL BE PARTICIPATING IN A HIGHLY DIVERSE AND COMPLEX SECTOR. ON THE LATEST COUNT, NEW ZEALAND'S TERTIARY SECTOR OFFERED AROUND 6800 PROGRAMMES OF STUDY COMPRISED OF AN ESTIMATED 86 000 COURSES.

In July 1999, over a quarter of a million students were enrolled in public tertiary education institutions (of which there were 39). A further 33 000 enrolled in more than 400 private training establishments while many others enrolled in 13 Other Tertiary Education Providers and several Government Training Establishments. In addition, a significant number of students will have undertaken tertiary education in the workplace in programmes facilitated by Industry Training Organisations or arranged by employers themselves.

Research is a vitally important function for the universities and these institutions are major contributors to the nation's research effort, employing almost half the total research and development staff in New Zealand. Research activity is also increasing in many other tertiary education institutions.

Furthermore, in addition to, and as a result of, these activities, the tertiary education sector is estimated to generate \$500 million per year in export earnings.

This second annual report on the tertiary sector provides an overview of the sector in 1999. Unsurprisingly, this is a difficult task, not least because comprehensive data is not always available. Nevertheless, the present report provides a useful resource of information on the sector. The Ministry hopes this will assist tertiary institutions to plan for the future and provide a basis for the continuing debate about the form and function of tertiary education as an integral part of New Zealand's future. A comprehensive directory of sector organisations can be found at the end of the report. Many sections of this report have been considerably expanded since the previous report and particular emphasis has been placed on reporting on tertiary education provision for Māori and Pacific peoples in 1999.

It is important, too, to remember that there is a human face to tertiary education behind these figures. Amidst the current debate on the future of tertiary education in New Zealand, it is very easy to concentrate on the challenges and ignore the successes. A new chapter included this year (Chapter 7) attempts to redress this balance a little. It collates examples of innovative and collaborative approaches that were providing successful outcomes in the sector in 1999. The selection of examples is based on information offered by the providers themselves and is therefore not necessarily a balanced sample. It does, however, provide a small window on the wide range of valuable and exciting work being undertaken in tertiary education in New Zealand today.

This report has been written on the assumption that students enrol in a course or courses which form a programme of study that leads to the award of a qualification. Some statistical information refers to programmes of study which may lead to the award of more than one qualification.

KEY FINDINGS

OVERVIEW OF THE TERTIARY EDUCATION SECTOR IN NEW ZEALAND

- New Zealand's tertiary education sector is highly diverse and complex. At the beginning of 1999 there were 39 public tertiary education institutions (TEIs) – reducing to 38 when Wellington Polytechnic became part of Massey University – 13 Other Tertiary Education Providers, over 400 private training establishments (PTEs) and a small number of Government Training Establishments (GTEs), all offering formal courses (courses of longer than one week). In addition there were 50 Industry Training Organisations active in arranging industry training.
- In July 1999, over a quarter of a million students were enrolled in formal courses offered by tertiary education providers. Of these, more than 220 000 were at TEIs. It is expected that total enrolments for 1999 will approach 400 000.
- Of the 826 PTEs operating in 1999, 178 self-identified as Māori providers, while just over 40 had an explicit Pacific focus.
- Just under 6800 programmes of study, comprised of an estimated 86 000 courses, were offered by tertiary education providers in New Zealand in 1999.
- Nearly 180 degrees were offered by providers outside the university sector in 1999.
- The TEIs had combined assets of over \$4 billion, 70 percent of which were held by the seven universities operating in 1999.

STAFFING

- Nearly 13 500 full-time equivalent teaching staff were employed by tertiary education providers in 1999. Student: teaching staff ratios exceeded 20:1 in universities, polytechnics and colleges of education, but were 14.4:1 in wānanga and 11.6:1 in PTEs.
- Over 14 000 full-time equivalent non-teaching staff (ie, managerial, support and research staff) were employed by tertiary education providers.
- Tertiary teaching staff were most likely to be aged between 40 and 49 years of age, European/Pākehā and male. Overall, 43.5 percent of teaching staff in tertiary education providers were women.
- Māori, Pacific and Asian tertiary teaching staff were under-represented compared with the proportions of tertiary students in these groups.

PROVIDERS

- Many providers continued strategies of growth, development of new programmes and establishment of satellite campuses in other areas. Key concerns for providers in 1999 were policy uncertainty and funding issues.
- Strategic alliances, mergers and relationships both nationally and internationally were seen by providers as an important part of future development. Wellington Polytechnic became part of Massey University on 1 July 1999.
- Flexible delivery was a focus for development for many institutions.
- Funding for capital development was a crucial issue for wānanga and the basis of a successful claim to the Waitangi Tribunal on behalf of the three wānanga.
- During 1999 Auckland Institute of Technology received approval to become a university, the Auckland University of Technology, with effect from 1 January 2000.
- The largest contribution of private training establishments (PTEs) to tertiary education and training continues to be in transition and skill enhancement training purchased by Skill New Zealand, but the activity within the private tertiary sector is increasingly diverse. Six PTEs offered degree and/or postgraduate level study in 1999.
- Industry Training Organisations continued to develop their roles in collaboration with other stakeholders, many looking to position themselves as a one-stop service for arranging to meet all the education and training needs of employers.

STUDENT PARTICIPATION IN TERTIARY EDUCATION

- New Zealand's participation rate in tertiary education has grown considerably during the 1980s and early 1990s and is above the OECD average. However, national growth slowed in the latter part of the 1990s and is now showing signs of levelling off. Recent increases in participation appear to be due more to students' returning to study or to increased average length of study.
- Forty-two percent of entrants into tertiary education in 1999 were school leavers, representing 55 percent of those leaving school. Sixty-three percent of female school leavers went on to tertiary education in 1999 compared with 46 percent of male school leavers.
- School decile rating has a considerable impact on participation in tertiary education. In 1999, 71 percent of school leavers from deciles 8-10 schools went on to tertiary education, as did 52 percent of those from deciles 4-7 schools, but only 32 percent of those from deciles 1-3 schools entered tertiary education on leaving school.
- In 1999, 51 percent of first year TEI students and 32 percent of first year students at PTEs were aged between 17 and 19. However, close to half the students in TEIs were aged 25 or more and 17 percent were 40 or older.
- The proportion of students studying part-time is falling: in 1999 part-time TEI students represented 41 percent of students enrolled, continuing a decline from a high of 52 percent in 1992.
- In July 1999, 15.7 percent of students enrolled in formal courses with tertiary education providers were Māori. Māori comprise 31 percent of the enrolments in PTEs but remain under-represented at TEIs.
- One in 12 Māori school leavers in 1998 was enrolled at university in 1999, compared with one in five of all school leavers.
- Fifty-seven percent of Māori in tertiary education were aged 25 or more compared with 49 percent of non-Māori.
- Pacific students are under-represented in TEIs, comprising just 3.7 percent of students enrolled in formal courses in TEIs and 4.7 percent of formal students throughout the sector. In 1999, one in 11 Pacific school leavers enrolled at university.
- In 1999, 3.5 percent of students at TEIs and nearly five percent of students at PTEs were international students.

PROJECTIONS OF TERTIARY GROWTH

- Student numbers are expected to continue to grow for the next three years, though at a slower rate than in the past, with a decrease in the New Zealand population of 18-24-year-olds likely to be balanced by increased participation rates.
- From 2003 until 2011 the population of 18-24-year-olds will increase. Current projections suggest that enrolments will be around five percent higher in 2011 than they were in 1999. However, this population growth is concentrated in certain regions such as Auckland and the Bay of Plenty. Other regions such as Otago/Southland and Taranaki show declining populations in this age cohort.

QUALITY ASSURANCE OF PROGRAMMES

- During 1999 preliminary work was done on the development of improvements to quality assurance arrangements. The new Government confirmed NZQA in the role of quality assurance oversight for all but the university sector.
- During 1999 there was also a continuation of emphasis on the development of providers' own quality assurance systems and proposals for the development of external quality audit by both NZQA and the Association of Polytechnics in New Zealand (APNZ) which operates under delegated authority from NZQA. However, only the New Zealand Universities Academic Audit Unit (AAU) had an operational academic audit system in 1999. During the year the AAU commenced its second audit cycle for the university sector.
- In addition to qualifications registered on the National Qualifications Framework (NQF), there is a wide range of qualifications offered by providers. In 1999 a decision was taken to broaden the NQF to include all quality-assured qualifications.

QUALIFICATIONS OFFERED BY PROVIDERS

- A key feature of the development of tertiary education in the 1990s has been the development of degree level qualifications outside the university sector. In 1999 the polytechnics, colleges of education, wānanga and six PTEs offered a total of 177 degrees. Twenty-eight percent of first degree students and 5 percent of postgraduates were enrolled outside the university sector.
- As at July 1999 a total of 6783 programmes of study were being offered by tertiary education providers, an increase of 3.7 percent since 1998. The polytechnic and university sectors tended to offer the widest range of qualifications, while over one-third of PTEs offered only one qualification

and two-thirds offered three or fewer. Some larger PTEs, however, offer more programmes of study than do some of the smaller polytechnics.

- The most popular qualifications at all levels remain commercial and business programmes, with humanities also being very popular at degree level. Since 1995 growth has been particularly strong in computing, education, and natural and applied sciences (the latter at degree and postgraduate levels). There have been significant decreases in the numbers of students enrolling in the humanities and industrial trades, with smaller decreases in qualifications relating to primary industries and engineering.
- There are some distinct ethnic and gender differences in study preferences. Māori and Pacific students, for example, tend to be under-represented in disciplines such as engineering and sciences. Males are over-represented in industrial trades and crafts, engineering, transport and communication, but are less likely than females to enrol in health, medical and education programmes.
- Forty-three percent of all students were enrolled in degree programmes of study in 1999, 32 percent in certificate qualifications and 15 percent in diploma qualifications. Nearly ten percent of students were enrolled in postgraduate study.
- Twenty-one percent of degree students were enrolled in polytechnics in 1999.
- Proportionally more Māori and Pacific students were studying at lower levels than their European/Pākeha counterparts. Although the number of Māori and Pacific students studying in higher level programmes of study at TEIs has increased since 1995, the rate of increase is slower than for European/Pākeha students.
- Development of the National Qualifications Framework continued in 1999. By the end of 1999 over 15 000 unit standards and 660 national certificates and diplomas had been registered by NZQA.
- By the end of 1999, 56 654 employees were in industry training agreements, an increase of 16 percent over 1998.
- There were over 22 000 students on Training Opportunities training and a further 12 685 enrolled in Youth Training. Eighty-eight percent of these students were enrolled in PTEs. Both Training Opportunities and Youth Training were effective in targeting Māori and Pacific students (who comprised 44 and 11 percent respectively of all students on these programmes of study).
- In addition, almost 1200 Māori and Pacific students participated in Skill Enhancement training in 1999.
- TEIs continued to play an important role in community education, with 18 851 students enrolling in these institutions in 1999.
- Career Services – rapuara has developed KiwiCareers to provide a national internet-based career information system. This also provides information about appropriate qualification requirements for different career options.

GRADUATION FROM TEIs

- Over 60 000 students completed nearly 63 000 programmes of study within TEIs in 1999, a 4.3 percent increase over 1998 and a 31 percent increase over completions in 1995. More than half of all graduations were at degree or postgraduate level.
- The trend in TEIs towards obtaining degree or postgraduate qualifications is accompanied by a decrease in diploma level completions (which accounted for 17 percent of qualifications awarded in 1995 and 11 percent in 1999).
- Forty-seven percent of all qualifications awarded at TEIs in 1999 were at certificate or diploma level. It is estimated that just over 6 percent of qualifications gained at TEIs were national qualifications, the rest being provider qualifications.
- Patterns of qualification completion broadly followed enrolment patterns, with Māori and Pacific students being more likely than others to gain certificates or diplomas. Nevertheless, the number of Māori gaining first or postgraduate degrees in 1999 was more than double that in 1995, while there was a 63 percent increase in the number of Pacific students doing so.
- New Zealand is above the OECD average in the proportion of graduates in higher level awards in fields such as humanities, physical science, health and welfare, but has a lower proportion of graduates in education and engineering. At lower levels of qualification, New Zealand is above the OECD average in fields such as education and services, but below the OECD average in others such as engineering, health and welfare.

QUALIFICATIONS ACHIEVED ON THE NATIONAL QUALIFICATIONS FRAMEWORK

- 13 815 national qualifications were awarded in 1999. This brings the total awarded to nearly 32 000 since the NQF began. Approximately one-third of these have been completed through TEIs (mainly polytechnics) and the rest mainly through PTEs or ITO-facilitated learning.

- Māori learners have gained 16.6 percent of all qualifications awarded to the end of 1999, and Pacific learners 5.9 percent. Over 19 percent of non-Māori learners gained Level 4 certificates, or higher, compared with less than 8 percent of Māori learners.

OUTCOMES OF TERTIARY EDUCATION

- Data on the outcomes of tertiary education are very incomplete, but a 6th or 7th form qualification continues to gain a higher average income for 25-34 year olds than does a tertiary qualification below degree level. Unemployment rates for degree, including postgraduate, level qualifications are now relative to those for a 6th or 7th form qualification.
- Surveys on the continuation of studies suggest that of first year students in programmes of study longer than one year, university students are most likely to return to study the following year, but almost 44 percent of polytechnic and wānanga students do not do so. The reasons why are not clear. Over 13 percent of returning students changed their programme of study the following year.
- Over 60 percent of students on Training Opportunities or Youth Training programmes moved into either employment or further education in 1999. Seventy percent of Skill Enhancement students achieved similar outcomes.

RESEARCH OUTCOMES

- The major research activity in New Zealand's tertiary education institutions takes place in the universities, but other TEIs are reporting increasing research activity.
- Universities have had particular success in gaining contestable research funding from the Health Research Council and the Marsden Fund. Collaborative research between institutions, often involving overseas collaborations, was a significant feature of successful bids.
- Universities also gained just under \$22 million as primary contractors from the Public Good Science Fund (7.4 percent of the 1999/2000 round).
- The universities reported over 15 000 research outputs in 1999, approximately 2.5 per full-time equivalent academic staff member.

RESOURCING TERTIARY EDUCATION IN NEW ZEALAND

- The estimated appropriation for tertiary education for 1999/2000 was \$2.68 billion, of which \$0.72 billion was capital contributions to the student loan scheme.

- The key change to the EFTS-based funding system for tertiary providers in 1999 was that the cap on funded EFTS was removed for all but a few qualifications such as medicine, dentistry and veterinary science.
- Total spending on EFTS tuition subsidies has increased by an average of 2.2 percent per annum from \$0.99 billion in 1991 to \$1.18 billion in 1999. At the same time there has been an increase in the number of EFTS places funded, from 114 110 to 169 469, an increase of 48.5 percent. The average subsidy per actual EFTS place in TEIs has decreased by 13 percent since 1991 and was \$7,260 in 1999.
- Policy changes relating to EFTS subsidy funding for PTEs resulted in 9187 EFTS places in 143 PTEs being funded at an average subsidy rate of \$1,829 per place, at a total cost of \$16.8 million. The previous year, 1998, saw 2151 EFTS places in 52 PTEs funded at an average of \$3,254 per place: a total cost of \$7 million. Funding through Skill New Zealand provided a significant additional source of government funding for the PTE sector. Data collected in July 1999 indicated that income from Skill New Zealand contracts (including those arranged by ITOs) provided PTEs with almost as much income as EFTS-based subsidies.
- There has been an 82 percent increase in the number of subsidised EFTS places in postgraduate study between 1992 and 1999. Over 96 percent of postgraduate education (as measured by the number of funded EFTS places) is undertaken at universities.
- Of the total expenditure of \$1.47 billion provided in 1999/2000 for tertiary education, plus training purchased through Crown agencies, it is estimated that \$0.23 billion is spent on Māori and \$0.06 billion on Pacific students.

FINANCIAL TRENDS AND PERFORMANCE IN TEIs

- The total income of TEIs has grown by 64 percent between 1992 and 1999, to reach \$2.12 billion. This is a reflection of increased student numbers and increased income from other non-traditional sources (ie, other than government funding and student fees). The proportion of total income gained by TEIs from other sources has increased from 12 percent in 1992 to 23 percent 1999. Universities have the highest proportion of this type of income (29 percent) and polytechnics the lowest (12 percent). Colleges of education and wānanga are most heavily reliant on government funding.

- The total costs of provision at TEIs grew by 73 percent from \$1.19 billion in 1992 to \$2.06 billion in 1999. Average total expenditure per EFTS has increased in TEIs by 3.4 percent between 1998 and 1999; average income per EFTS from all sources has increased by 2.8 percent over the same period, although there are considerable variations between types of provider.
- In 1999 the reported operating surplus for the total sector was \$51.4 million, a return on income of 2.4 percent. However, 10 TEIs reported a net operating deficit in 1999.
- Capital expenditure across the sector was \$274 million in 1999, up from \$262 million in 1998.
- The average sums borrowed in a given year increased from \$3,628 in 1992 to \$5,714 in 1998. This average reduced to \$4,917 in 1999, largely as a result of policy changes affecting entitlements to course costs. This represents an average of 79 percent of the maximum entitlement for full-time students and 82 percent for eligible part-time students.
- Pacific and Māori students are more likely to take out loans and borrow more of their entitlement than European/Pākeha students. Asian students are least likely to take out loans.

STUDENT FEES

- According to estimates based on loan draw-downs, student fees have increased by an average of 12 percent per year over the past five years for full-time full-year students. The estimated average fees in PTEs in 1999 was \$5,300, significantly higher than the average fees in TEIs, which received higher average EFTS subsidies per student.
- Within the TEIs, estimated average university fees were \$3,700, compared with \$3,200 in polytechnics and \$2,700 in wānanga. Lowest fees were in colleges of education where average estimated fees were \$2,400, the same as in the previous year.

STUDENT ALLOWANCES AND LOANS

- Total spending on student allowances increased from \$265 million in the year ending June 1995 to \$378 million for the year to June 1999. At the end of July 1999, 47 100 full-time domestic students were receiving student allowances (an estimated 36 percent of the total). There is little difference in overall uptake of allowances between Māori and European/Pākeha students, but Pacific students are slightly less likely, and Asian students more likely, to take up allowances.
- Over 17 700 people, mainly Training Opportunities or Youth Training students, received a Community Wage – Training and 22 672 beneficiaries received training incentive allowances in 1999.
- A total of 115 142 students borrowed through the student loan scheme in 1999, including 74 percent of full-time and 14 percent of part-time students at TEIs. Total student debt was calculated at \$2.97 billion at 30 June 1999 and was held by almost 283 000 people, with the average cumulative debt per person being \$11,700 in June 1999.

THE YEAR 1999

JANUARY

- The Hon. Max Bradford is appointed Minister of Tertiary Education.
- Uncapped funding subsidies come into effect for all tertiary education institutions (TEIs) in all disciplines except medicine, dentistry, veterinary science and foreign-going nautical. Uncapped funding subsidies for private training establishments are also introduced. This is at a lower level than for TEIs, with the rate not to be finalised until the end of the year.
- Differential subsidies for students eligible for Study Right are partially phased out.

MARCH

- Government's Five Steps Ahead plan is announced. Twenty-four fora are announced, to be held in April and May. Their purpose is to gain feedback from the tertiary, research and business sectors about how to assist economic growth in New Zealand.

APRIL

- The Waitangi Tribunal releases its report supporting the claim on behalf of the three wānanga for capital funding.

MAY

- Budget announcements affecting the tertiary sector include:
 - an increase of \$2.199 million over three years for the Ministry of Education's Tertiary Ownership Monitoring Unit to ensure successful monitoring of tertiary institutions' governance, accountability and financial management
 - \$2.342 million allocated over three years for the establishment of a data warehouse to enable the Ministry of Education to collect, store and analyse information on the tertiary education sector.

JUNE

- The Ministry of Education begins an advertising campaign, Where It's At - Go Places with Tertiary Education, to encourage potential students into tertiary education. The campaign runs for four weeks and includes television, radio and press advertising, bus and street posters, an 0800 telephone number for ordering the publication *Where It's At*, and direct mailings to potential students and their influencers.

JULY

- Wellington Polytechnic merges with Massey University on 1 July.

AUGUST

- Government announces a scholarship package to develop New Zealand's knowledge economy. The proposed tertiary education component of the package consists of:
 - an Enterprise Education Taskforce
 - a Higher Learning Sector Taskforce
 - a scholarships package consisting of Enterprise Scholarships and Top Achievers' Doctoral Scholarships (see p.75).

SEPTEMBER

- Enactment of the Education Amendment Bill which relates to the provision of direct information from tertiary education providers to Work and Income New Zealand.

OCTOBER

- The Minister of Tertiary Education announces that an Order in Council is to be signed by the Governor General allowing the Auckland Institute of Technology to become the Auckland University of Technology.
- The Student Loan Scheme Amendment Bill (No 6) is introduced. This aims to:
 - make the consequential amendments necessary to reflect the transfer of delivery of the student loan scheme from the Ministry of Education to Work and Income New Zealand
 - clarify the enforceability of loan contracts entered into with students under 18 years of age.

NOVEMBER

- Government opens applications for the Enterprise Scholarships and Top Achievers' Doctoral Scholarships for the year 2000 round.
- Government announces a \$6.8 million interim capital funding injection to Te Wānanga o Aotearoa (\$5.2 million) and Te Whare Wānanga o Awanuiārangi (\$1.6 million) to purchase buildings and necessary equipment for teaching in 2000.
- The general election on 27 November results in a change of government.

DECEMBER

- The new Government is formed and new Ministers with education portfolios are installed. The Hon. Trevor Mallard is appointed as Minister of Education, the Hon. Steve Maharey becomes Associate Minister of Education (Tertiary). The Hon. Lianne Dalziel is appointed as Associate Minister of Education responsible for special education, adult and community education, and the Hon. Parekura Horomia as Associate Minister of Education responsible for Māori education.
- Government announces changes to the student loan scheme, including write-off of interest for full-time, full-year and low income students while they are studying, amounting to approximately \$90 million in 2000/2001, and rising to approximately \$137 million in 2003/2004.



PROVIDERS OF TERTIARY EDUCATION

INTRODUCTION

THE TERTIARY SECTOR CONSISTS OF A DIVERSE ARRAY OF PROVIDERS AND ORGANISATIONS OPERATING ACROSS THE EDUCATION AND TRAINING SPECTRUM. THESE OFFER A WIDE RANGE OF LEARNING ENVIRONMENTS AND SYSTEMS. THIS CHAPTER REVIEWS THE NATURE OF THESE PROVIDERS AND SOME OF THE ISSUES IDENTIFIED BY THEM. LATER CHAPTERS DISCUSS THE STUDENTS AND THEIR ACHIEVEMENTS.

Tertiary education provision consists of a mix of public tertiary education institutions (TEIs), private training establishments and 'other providers'. There are four kinds of TEI – universities (8), polytechnics (23), colleges of education (4) and wānanga (3) – which together enrol over 350 000 students each year. In addition, private training establishments enrol over 40 000. Requirements for the establishment, governance and funding of TEIs are set out in the Education Act (1989), and are identical for all public institutions. The distinguishing characteristics of each kind of TEI are also defined in the legislation, and are summarised below.

As Crown entities, listed under the fourth schedule of the Public Finance Act (1989), TEIs are required to follow standard public sector financial accountability processes and are required to report under Section V of that act.

Each institution is controlled by its own council whose duties and functions are defined under the Education Act (1989). Councils should consist of between 12 and 20 members and should reflect, as far as is reasonably practicable, the ethnic and socio-economic diversity of the communities served by the institution. The Act requires councils to:

- appoint a chief executive
- prepare a charter of the institution
- approve statements of objectives in accordance with the Public Finance Act
- ensure that the institution is managed according to its charter and statements of objectives

- determine the policies of the institution
- strive to ensure that the institution attains the highest standards of excellence in education, training and research
- establish as a committee of council an academic board to advise the council on matters relating to academic issues.

The legislation is intended to maximise an institution's autonomy while remaining consistent with the standard requirements of accountability for public funding. Each tertiary education institution determines its own programmes and is responsible for the quality of its academic provision, subject to review by a quality assurance agency (see p.36).

Prior to 1990, degrees were taught only at universities. An amendment to the Education Act in 1990 allowed non-university institutions to award degrees subject to accreditation and approval by the New Zealand Qualifications Authority (NZQA). By 1999, polytechnics, colleges of education, wānanga and private training establishments offered a total of 177 degree qualifications.

All matters relating to governance and management are the responsibility of the council, which represents the interests of staff, students, and the wider community. Collectively the TEIs have combined assets worth over \$4 billion, 70 percent of which was held by the seven universities operating in 1999.

As well as the public TEIs, there are 13 other tertiary education providers (OTEPs) which are recognised by the Minister of Education as delivering programmes of national significance and which receive their funding from Government.

There is a considerable number of private training establishments (PTEs). A PTE is defined, rather broadly, in the Education Act as 'an establishment, other than an institution, that provides post-school education or vocational training.' A PTE may either be registered or unregistered. Currently, there are more than 800 PTEs registered with the New Zealand Qualifications Authority (NZQA) that have met various financial, educational and management quality requirements set by NZQA. It is these registered PTEs that are referred to in this report. About half of these receive some form of government funding either via EFTS-based tuition subsidies, Skill New Zealand contracts, or eligibility for student access to the allowances and loan schemes.

Numerous organisations provide post-school training and education, including most medium-sized and large firms

and organisations that carry out corporate training within New Zealand, most of which is not government subsidised. Altogether, therefore, New Zealand has a high number of providers of tertiary education and training. They offer courses at widely different levels, and a significant number of providers have low student numbers (see Table 2.1, p.21).

PUBLIC PROVIDERS – TERTIARY EDUCATION INSTITUTIONS

The role of the Tertiary Education Institution is defined in current legislation (s162, Education Act 1989).

UNIVERSITIES

Universities are characterised by a wide diversity of types of teaching and research, especially at a higher level, that maintains, advances, disseminates and assists the application of knowledge, develops intellectual independence, and promotes community learning.

It is further specified in the Education Act (1989) that universities must have all, and other tertiary institutions must have one or more, of the following characteristics:

- to be primarily concerned with more advanced learning, the principal aim being to develop intellectual independence
- research and teaching must be closely interdependent and most teaching must be undertaken by persons active in advancing knowledge
- to meet international standards of research and teaching
- to be a repository of knowledge and expertise
- to accept a role as critic and conscience of society.

In 1999 there were seven universities in New Zealand:

- Lincoln University
- Massey University
- The University of Auckland
- The University of Waikato
- University of Canterbury
- University of Otago
- Victoria University of Wellington.

On 1 January 2000 Auckland Institute of Technology became New Zealand's eighth university, Auckland University of Technology.

POLYTECHNICS

Polytechnics or institutes of technology offer diverse courses of continuing education, including vocational training, that contribute to the maintenance, advancement and dissemination of knowledge and expertise, and promote community learning. They also promote research, particularly applied and technological research, which aids in development.

The 25 polytechnics in New Zealand in 1999 were:

- Aoraki Polytechnic
- Auckland Institute of Technology (became Auckland University of Technology from 1 January 2000)
- Bay of Plenty Polytechnic
- Central Institute of Technology
- Christchurch Polytechnic
- Eastern Institute of Technology
- Hutt Valley Polytechnic
- Manawatū Polytechnic (renamed Universal College of Learning from 21 September 2000)
- Manukau Institute of Technology
- Nelson Polytechnic (renamed Nelson Marlborough Institute of Technology from 15 May 2000)
- Northland Polytechnic
- Otago Polytechnic
- Southland Polytechnic (renamed Southern Institute of Technology from 1 January 2000)
- Tai Poutini Polytechnic
- Tairāwhiti Polytechnic
- Taranaki Polytechnic
- Telford Rural Polytechnic
- The Open Polytechnic of New Zealand
- The Waikato Polytechnic
- UNITEC Institute of Technology
- Waiāriki Polytechnic (renamed Waiāriki Institute of Technology from 27 August 1999)
- Wairarapa Community Polytechnic
- Wanganui Regional Community Polytechnic
- Wellington Polytechnic (became part of Massey University on 1 August 1999)
- Whitireia Community Polytechnic.

COLLEGES OF EDUCATION

Colleges of education provide teaching and research required for the preschool, compulsory and post-compulsory sectors of education and for associated social and educational service roles. While specialising in teacher education for the early childhood and schools sectors, colleges of education may also offer a range of other courses.

The four specialist colleges of education are:

- Auckland College of Education
- Christchurch College of Education
- Dunedin College of Education
- Wellington College of Education.

WĀNANGA

Wānanga are characterised by teaching and research that maintains, advances and disseminates knowledge and develops intellectual independence, and assists the application of knowledge regarding āhuatanga Māori (Māori tradition) according to tikanga Māori (Māori custom).

Three wānanga are established TEIs:

- Te Wānanga o Aotearoa
- Te Wānanga o Raukawa
- Te Whare Wānanga o Awanuiārangī.

PROTECTED TERMS

The terms 'university', 'polytechnic' and 'college of education' are protected in the Education Act (1989) so that any organisation wishing to include such a term within its name in New Zealand must meet the statutory requirements. 'Wānanga' is currently not a protected term and some private training establishments currently describe themselves as wānanga.

PRIVATE TRAINING ESTABLISHMENTS

The establishment of NZQA and the National Qualifications Framework (NQF) since 1990 has allowed PTEs to provide nationally recognised qualifications on the same quality-assured basis as TEIs. This has formally recognised PTEs as providers of tertiary education and enabled them to seek funding to deliver government-sponsored targeted training programmes such as Training Opportunities (TOP), Industry Training and Skill Enhancement as well as qualifications funded through EFTS-based tuition subsidies.

The numbers of registered PTEs grew rapidly between 1990 and 1994, initially due to existing establishments seeking registration (1990-1992). Later, the establishment of new PTEs was fuelled by Skill New Zealand requiring TOP providers to be registered. The number of PTEs registered has increased from 542 in 1994 to 828 in 1999. The number of registered PTEs fluctuates. In 1999, for example, approximately 68 PTEs had their registration withdrawn, most of these voluntarily, and a similar number were registered for the first time.

A 1997 study of the PTE sector¹ recorded a diverse pattern of ownership of PTEs. Some are owned by private individuals, others by organisations, some are for profit, others are not for profit. The two main organisational forms in 1995 were limited liability companies (46 percent) and trusts (37 percent). The remainder had other forms, including Māori organisations and incorporated societies.

PTEs have developed to meet a diverse range of needs for many different groups and in many locations in New Zealand. Most tend to specialise, offering courses in a narrow field. PTEs provide most of the targeted training programmes funded by Skill New Zealand. Although most PTEs offer programmes of study at lower levels on the qualifications framework, it should be recognised that the niche markets they serve are highly diverse and include Training Opportunities training programmes, trade apprenticeships and postgraduate degrees. Interestingly, only just over half of all registered PTEs report offering courses of longer than one week's duration. While some of the remainder are likely to be holding a registration but not delivering training at present, most of this group specialise in short course provision in such areas as industry training, corporate training, computer applications or first aid.

In 1999, 130 PTEs were recognised by the Ministry of Education as eligible for EFTS-based tuition subsidies in that they were offering programmes of study leading to qualifications equivalent to Level 3 or above on the National Qualifications Framework.

Of the 828 PTEs registered during 1999, approximately 178 self-identify as Māori PTEs, while an estimated 5 percent have an explicit Pacific focus.

GOVERNMENT TRAINING ESTABLISHMENTS

Other government agencies also provide post-compulsory education and training for significant numbers of employees. Government training establishments (GTEs) are approved by

the Minister of Education to offer training, subject to approval and accreditation requirements of the Education Act (1989). Skill New Zealand contracts a small amount of Training Opportunities and Youth Training from GTEs.

As at 20 June 2000, 12 GTEs were registered with NZQA:

- Career Services – rapuara
- Custodial Studies Unit of the Public Prisons Service
- Department of Child, Youth and Family Services
- Early Childhood Development
- Naval Training - HMNZS Tamaki
- New Zealand Army Government Training Establishment
- New Zealand Fire Service National Service Centre Training Support
- New Zealand Police Training Services
- New Zealand Qualifications Authority
- RNZAF - Directorate of Education and Training
- Sector Development Unit of the Ministry for Emergency Management
- Specialist Education Services.

OTHER TERTIARY EDUCATION PROVIDERS

Other tertiary education providers (OTEPs) are required to be recognised by the Minister of Education under section 321 of the Education Act (1989). The Minister has discretion in regard to the recognition of OTEPs. An OTEP, once recognised, may be paid a grant out of public money appropriated by Parliament for the purpose.

The criteria for recognition include whether a provider is to supply a service of national significance which is generally not able to be funded solely through an EFTS-based funding mechanism. While Literacy Aotearoa and the National Association of ESOL (English for speakers of other languages) Home Tutor Schemes, the two major adult basic education providers, can count their student numbers in the thousands, many providers of other tertiary education services would consume fewer than 100 EFTS a year. Workbase Education Trust has an advisory role and works with employers to raise literacy levels in the workplace. The National Resource Centre, aside

¹ Baker, J and D Guerin. *The Role of Private Providers in New Zealand Tertiary Education*. Report prepared for the Treasury (unpublished), 1997.

from its role with community education coordinators, provides secretarial and administrative support for the Community Learning Aotearoa New Zealand (CLANZ) community education grant resource of \$200,000 on behalf of the Ministry of Education.

In 1999 the 13 Other Tertiary Education Providers which together received grants amounting to a little over \$11 million were:

- Literacy Aotearoa
- Multicultural Centre for Learning and Support Services (MCLaSS)
- National Association of ESOL Home Tutor Schemes
- National Resource Centre
- Nelson School of Music
- New Zealand Childcare Association
- New Zealand Drama School
- New Zealand Playcentre Federation
- New Zealand School of Dance
- PIERC Education (Pacific Island Education Resource Centre)
- Taratahi Agricultural Training Centre.
- Te Kōhanga Reo National Trust
- Workbase Education Trust

Of the 13 providers funded in 1999:

- three provided early childhood pre-service teacher or parent education qualifications
- two offered community education courses for specific ethnic communities
- four provided adult basic education opportunities including community and workplace literacy, numeracy and ESOL programmes
- three provided qualifications in the performing arts
- one was involved in agricultural training under the terms of its own empowering legislation.

Eleven of these providers are also registered as private training establishments with appropriate approval and accreditation for their qualifications. Like PTEs, all OTEPs must satisfy the Ministry of Education's financial viability and other criteria in order to have their quality-assured qualifications approved for government assistance.

INDUSTRY TRAINING ORGANISATIONS

Industry Training Organisations (ITOs) are industry bodies representing different industries or industry sectors. ITOs are not training providers; under the Industry Training Act (1992) they are responsible for the design, management and delivery of training arrangements for their respective industries. This includes the facilitation of on-job training as well as contracting training providers to offer complementary off-job training and education courses. These activities are funded through the Government's Industry Training Fund administered by Skill New Zealand. A key part of an ITO's role is the development of unit standards and national qualifications for their industry sector and the moderation of assessment against those national standards.

There are 50 recognised ITOs covering a wide range of industries. Approximately 76 percent of the total labour force have access to formal employment-based training through an ITO. (See p.25 for issues related to industry training through ITOs.)

SIZE OF PROVIDERS

Universities are generally the largest institutions in New Zealand's tertiary sector, averaging over 15 100 formal enrolments each, ranging from 3171 full-time or part-time enrolments at Lincoln University to 28 005 at Massey University at 31 July 1999.

Some polytechnics are also very large. The largest, The Open Polytechnic of New Zealand, had 22 000 formal students, and the Auckland Institute of Technology 11 728, at 31 July 1999. The smallest polytechnics had fewer than 500 formal students enrolled (Telford Rural Polytechnic had 285 and Wairarapa Community Polytechnic 482 students).

Colleges of education are more uniform in size, ranging from 4858 formal students at Auckland College of Education to 1626 students at Wellington College of Education.

In each year since 1996 an annual survey has been undertaken of students enrolled and courses offered in registered PTEs. The 1999 survey was undertaken from 3 to 8 August. During this period only 441 of the more than 800² PTEs registered with NZQA had formal students (ie, students enrolled for courses of more than one week's full-time duration). PTEs tend to be relatively small institutions, the average PTE being considerably smaller than the smallest of the TEIs in terms of formal enrolments (Table 2.1). The size distribution of those PTEs with formal students is shown in Figure 2A.

It should be noted that both PTEs and TEIs may operate from several sites, so the number of providers is less than the number of locations at which students may attend courses.

STAFFING OF TERTIARY EDUCATION PROVIDERS STUDENT: STAFF RATIOS

In the last week of July 1999 there were 27 534 full-time equivalent (FTE) staff employed by tertiary education providers, a 1.9 percent increase over 1998. About half (48.8 percent) were teaching or academic staff. The ratio of teaching to non-teaching staff was higher in private training establishments (PTEs), polytechnics and wānanga, and lower in universities and colleges of education (Table 2.2 *see over page*). In part, the ratio reflects the extent to which providers concentrate on teaching alone (universities and colleges of education hire more research and advisory staff than do other tertiary education providers) and on their modes of delivery.

Wānanga and PTEs have fewer formal students per programme of study offered than do other types of institution and this is also reflected in lower student:staff ratios. Although universities have a relatively high number of students per programme of study offered, university student:staff ratios are similar to those in polytechnics. Colleges of education have the highest student:staff ratios. In part, this reflects the relatively high number of students per programme of study, a 26 percent increase in student numbers from 1995 to 1999, and a 9 percent decrease in teaching and academic staff over the same period. This decrease in numbers of teaching and academic staff is exceptional. Across all providers, the numbers of staff in these positions increased by 5 percent from 1995 to 1999, at a time when equivalent full-time students increased by over 10 percent.

In 1998, the latest year for which figures are available, New Zealand's 'all tertiary' student:staff ratio (15.5) was slightly above the OECD average (14.6)³. However, such comparisons in tertiary education should be undertaken cautiously as there are difficulties in calculating full-time equivalent students and staff on a comparable basis between OECD countries.

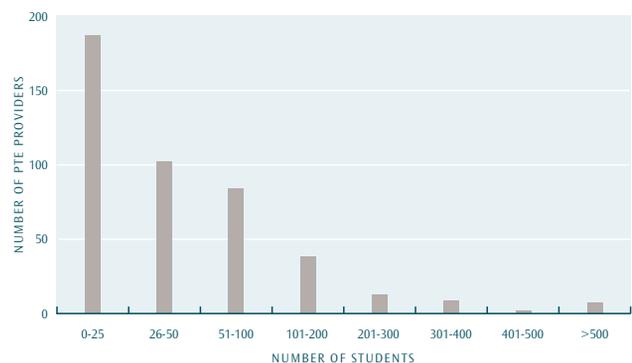
GENDER

PTEs, polytechnics and wānanga have a reasonably even gender balance within their staff. In colleges of education women are over-represented among teaching staff (comprising 73.2 percent) and students (80.8 percent). Over all types of tertiary education provider the average proportion of staff who are women (43.5 percent) is lower than the average proportion of students

TABLE 2.1: FORMAL STUDENTS ENROLLED IN TERTIARY EDUCATION BY TYPE OF PROVIDER, 1999

TYPE OF	PROVIDERS WITH FORMAL STUDENTS AT JULY 1999 NO.	FORMAL STUDENTS AT JULY 1999 NO.	AVERAGE STUDENTS PER PROVIDER NO.
UNIVERSITY	7	105 996	15 142
POLYTECHNIC	25	100 037	4 001
COLLEGE OF EDUCATION	4	12 793	3 198
WĀNANGA	3	1 883	628
PTE	441	33 064	75
TOTAL	480	253 773	529

FIGURE 2A: SIZE DISTRIBUTION OF PTEs WITH FORMAL STUDENTS



Note: A formal student is one enrolled for a course of more than one week's full-time duration.

² Only PTE head offices are included in this total.

³ *Education at a Glance: OECD Indicators*. Paris: OECD Centre for Educational Research and Innovation, 2000.

TABLE 2.2: STAFFING OF TERTIARY EDUCATION PROVIDERS (IN FULL-TIME EQUIVALENTS), 1999

TYPE OF PROVIDER	TEACHING OR ACADEMIC STAFF NO.	TEACHING STAFF AS PROPORTION OF ALL STAFF %	TEACHING STAFF WHO ARE WOMEN %	RATIO OF FORMAL STUDENTS TO TEACHING STAFF, AT JULY 1999
UNIVERSITY	5 008	39.4	32.7	21.2
POLYTECHNIC	4 932	56.9	48.1	20.3
COLLEGE OF EDUCATION	497	37.8	73.2	25.8
WĀNANGA	131	51.8	47.9	14.4
PTE	2 855	62.1	49.2	11.6
ALL PROVIDERS	13 423	48.8	43.5	18.9

who are women (56.5 percent). Women are significantly under-represented amongst university staff (32.7 percent), although women comprise over half (54.7 percent) of the student body.

Within TEIs, the gender distribution is less equal at the level of academic leadership⁴. None of the seven universities, four colleges of education and three wānanga was headed by a woman. However, almost a quarter of academic heads at polytechnics were female. The situation is better at senior manager/deputy level where over one-third (36.4 percent) of incumbents in 1999 were female.

Additional information on tertiary teaching staff can be drawn from the 1996 Population Census, in which 12 600 individuals identified themselves as a tertiary teaching professional. Census data shows that the gender balance is more even among younger tertiary teaching professionals, which may indicate a cohort effect with larger groups of younger women now moving through the teaching profession.

ETHNICITY

According to the 1996 Population Census⁵ the majority (84 percent) of teaching staff were of European/Pākeha origin compared with around two-thirds of students. In 1996, Māori, Pacific and Asian staff formed a significantly smaller proportion of staff than of tertiary students.

AGE

At the time of the 1996 census, tertiary teaching professionals were most commonly between 40 and 49 years of age, one-third of the teaching staff being in this age bracket. Another quarter were aged 30-39, and one-fifth were aged 50-59.

KEY ISSUES IDENTIFIED BY TERTIARY EDUCATION INSTITUTIONS

The annual reports of TEIs indicate what the institutions identified as the key strategic issues they faced in 1999⁶. The wide range of issues, both internal and external to the institutions, are briefly summarised below.

UNCERTAINTY

The major theme from many TEIs was that 1999 was a year of policy uncertainty. The implementation date for the Tertiary Review White Paper legislation was extended and then the White Paper was not implemented. This was a disappointment for those TEIs which expected benefits to accrue from the White Paper. One TEI also expressed frustration that the time and commitment given to the White Paper had not resulted in any action.

FUNDING ISSUES AND STUDENT FEES

Funding issues, including the level of student fees, continued to be a focus throughout the sector. Although the average tuition subsidy per EFTS in 1999 was the same as in 1998, some TEIs commented that the reduction of government tuition subsidies per EFTS was responsible for an increase in student fees; that inflation, compliance costs and technology had resulted in fee increases; and some TEIs believed they had reached the ceiling of what they could expect students to contribute.

There was some comment about changes in funding policy. This included:

- the policy of the Crown now funding all eligible students allowed TEIs to expand to meet the needs of the community and to achieve their vision

- uncertainty surrounding the new uncapped funding regime made planning more difficult; it would have been preferable to have known the funding rate well in advance
- although Study Right was cumbersome to administer, it was in effect a social subsidy to the region and the planned loss of that subsidy has major implications for some providers.

KEY STRATEGIES

Growth

Many TEIs continued strategies which emphasised further growth in student enrolments and options. Many institutions continued to open or develop sites in other centres, generally in smaller cities and towns in the same region. At the same time, however, with the proliferation of ‘satellite’ campuses, concern was expressed about increased competition and overlapping programmes when these campuses opened in the same place as an existing institution. Competition for students between the private sector and TEIs, and between providers within these sectors, was perceived to have intensified with a reduction in the number of school leavers, leading also to uncertainty of funding.

For the first time in many years there was a slowing of growth in many institutions. A number of TEIs noted the impact of reduced international student numbers and institutional income. Nevertheless, globalisation of education was perceived to offer opportunities for TEIs, both with distance education and with provision of services to overseas students.

Most TEIs are continuing to develop new programmes of study. These include: Bachelor of Teaching (Secondary), Master of International Studies, Bachelor of Biomedical Science, Bachelor of Engineering Technology (Electrotechnology), Master in Business, Master of New Zealand Studies, Bachelor of Defence Studies, Doctor of Education, Bachelor of Electronic Commerce and Bachelor of Sports Coaching.

Flexible Delivery and Distance Learning

A number of institutions referred to advances in ‘flexible delivery’. In particular, emphasis was placed on the internet as a means of delivering programmes of study at a distance and of accessing resources such as library systems. Specific internet-based functions included delivery of lectures, use of chat rooms for group discussions and communication by email.

Many TEIs reported that they were implementing distance learning programmes of study and some were graduating the first students from such programmes in 1999. Some use the concept and tools of the internet to supplement a traditional campus-based approach.

Strategic Alliances, Mergers and Relationships

Alliances continued to be a key focus in 1999. A number of TEIs made efforts to forge closer relationships with major businesses and the community, with local *tāngata whenua* and internationally. These strategic alliances⁷ are taking a number of different forms, including:

- different institutions combining to offer joint qualifications (eg, continuing development of the potential of the Tertiary Alliance)
- partnerships with *iwi* (eg, Te Tapuāe o Rehua)
- other external agencies and businesses (eg, the Adidas Institute of Rugby which opened in 1999, an alliance between Massey University and the New Zealand Rugby Football Union; a joint venture between Christchurch Polytechnic and the Aoraki Corporation (Cardinal) to develop software packages; Whitireia Community Polytechnic’s agreements with Inland Revenue to teach COBOL courses, and with the Mountain Safety Council)
- joint ventures in research (eg, a collaborative research project between The Waikato Polytechnic, AgResearch at Ruakura and The University of Auckland)
- joint ventures in capital expenditure (eg, Dunedin’s latest hall of residence, the 180 room City College, was built in conjunction with Dunedin City Council, Dunedin College of Education, Otago Polytechnic and University of Otago)
- cooperative alliances with community associations (eg, The University of Waikato’s alliance with community associations has resulted in, amongst other things, seminars on historical milestones and native flora, and a number of field trips exploring the past and the present ecological environment).

⁴ Including the positions of Principal, Vice-Chancellor and Chief Executive.

⁵ Tertiary staff ethnicity figures were last recorded in the 1996 census. Caution must be exercised in drawing conclusions from census staff ethnicity figures in comparison with numbers of students as the data is collected in different years.

⁶ This analysis is based on the 1999 annual reports of all universities, colleges of education and *wānanga*, and 20 of the polytechnics.

⁷ A number of these innovative alliances are discussed further in Chapter 7.

Some merger activity continued during 1999, including:

- the merger of Wellington Polytechnic and Massey University as the polytechnic was disestablished and incorporated into the university on 1 July 1999
- merger talks between Massey University and Auckland College of Education were initiated⁸
- Aoraki Polytechnic and The Waikato Polytechnic undertook preparatory work on a case for amalgamation⁹
- Central Institute of Technology withdrew from merger discussions with The Waikato Polytechnic.

International Collaboration

A number of organisations reported new and continuing efforts to establish and develop links with overseas tertiary institutions and other organisations in a wide range of countries. These took the form of staff and student exchanges, international consultancy and contracts with governments, scholarships, collaboration on benchmarking, and special purpose courses. The University of Auckland is a member of Universitas 21, an association of the world's research-led universities.

Many tertiary education providers have arrangements with overseas tertiary institutions to offer programmes of study on their behalf, for example:

- Christchurch College of Education will introduce a new Bachelor of Management degree in 2000 as a result of an alliance with Griffiths University in Australia
- The Waikato Polytechnic has an agreement with The University of Southern Queensland to deliver its postgraduate distance learning qualifications
- UNITEC was in the process of negotiating an agreement with the Royal Melbourne Institute of Technology in 1999
- The Open Polytechnic of New Zealand (TOPNZ) has a memorandum of understanding with The Open University in the United Kingdom under which they are pursuing a range of projects including validation of TOPNZ degrees by The Open University, and inclusion of Open University courses in TOPNZ's BA degree.

WĀNANGA

A critical strategic issue for wānanga was the findings of the Waitangi Tribunal regarding the claim on behalf of the three public wānanga relating to capital funding. The claimant had submitted that the Crown had not treated the three wānanga fairly in terms of capital funding by not providing them with

establishment grants. The case also focused on broader issues such as the function of wānanga and the Crown's obligations as a partner to the Treaty of Waitangi. The Waitangi Tribunal released the *Wānanga Capital Establishment Report* (WAI 718) on 29 April 1999, supporting the claim.

In late 1999 the Crown provided interim capital injections to two of the wānanga totaling \$6.8 million. This was intended to provide for immediately needed facilities for the 2000 year. The Crown is in negotiations with the third wānanga concerning interim capital support. The Government has generally accepted the Tribunal's findings and is negotiating with the wānanga concerning a process for settling the claim and implementing the Tribunal's recommendations.

OTHER ISSUES

A number of TEIs underwent various types of restructuring and reviews during 1999, including their management and organisational structures and internal reviews of various departments. Southland Polytechnic changed its name to The Southern Institute of Technology.

During 1999 Auckland Institute of Technology received approval to become a university. This change took effect on 1 January 2000 and the institution changed its name to The Auckland University of Technology to reflect this change in status. UNITEC reactivated its application for university status in 1999, which had been on hold since 1997.

Administration of student allowances (1999) and student loans (2000) was transferred from the Ministry of Education to Work and Income New Zealand.

ISSUES FOR PRIVATE TRAINING ESTABLISHMENTS¹⁰

Private Training Establishments are diverse and meet the needs of niche markets within New Zealand's tertiary education sector. There is limited public understanding of this.

A significant part of the PTE sector's contribution to tertiary education continues to be in second-chance education and the PTE sector has considerable expertise in working with students with low prior achievement. PTEs describe working in second-chance education programmes funded through Skill New Zealand as very challenging, with weekly funding mechanisms, trainees with learning difficulties and tough outcome targets for trainees. This has led to PTEs developing ways of being highly flexible and responsive to the needs of different groups. With the support of Skill New Zealand

the sector has had considerable success in enhancing the participation rates of Māori and Pacific students.

Funding for TOP declined in real terms by 6.5 percent over the period 1994-1998.¹¹ The New Zealand Association of Private Education Providers questions the equity of this, noting that it creates an incentive for good providers to move into other, more sustainable areas of education and training where compliance costs are lower.

PTEs have welcomed equalisation of tuition subsidies through the EFTS funding system from 1 January 2000, but are concerned that the PTE sector (unlike TEIs) is unable to access EFTS funding for Level 1 and 2 qualifications. PTEs increased their enrolments significantly in 1999 above Level 2 with 9285 EFTS being funded by the Ministry of Education compared with 2300 in 1998. However, they remain aware that many students need to access education at lower levels.

PTEs are very conscious about the level of their fees. For many years they had to charge fees well above those of TEIs because they received much lower government subsidies. However, in general their course income (fees plus subsidies) was similar to that of TEIs¹². Many PTEs dropped their fees considerably in 2000 after they received equal subsidies per student, but some did not, as they claimed they were squeezed in 1999 by a decrease in subsidies (for many PTEs, subsidies were \$2,000 less per student than the previous year).

Most PTEs are also concerned that quality standards be enforced by government agencies. They are aware that poor performance by any PTE reflects on all, and they are urging government agencies to enforce existing standards more tightly and consistently.

ISSUES RELATED TO INDUSTRY TRAINING¹³

As at December 1999, 53 000 people were participating in industry training, a threefold increase since 1993. Employers contributed approximately \$100 million to the costs of training, indicating the value they place on training.

There has been significant change in trainee profiles since 1992. The average age of trainees has risen to 28, reflecting, in part, the training of an existing workforce as well as an increase in adult participation since the reforms of 1992. The number of Māori trainees has also increased, now accounting for 17 percent of all trainees.

There is a trend for Industry Training Organisations (ITOs) to work with employers to provide one-stop, comprehensive education and training services, with ITOs providing planning and facilitation services for all an employer's training needs.

Training programmes and related materials continued to be reviewed and developed in 1999, and much of this was carried out jointly among ITOs. There is increasing use of technology to support learning with many ITOs promoting industry training and supporting existing training through the supply of online resources.

Links with Australia have been strengthened through both the Trans-Tasman Mutual Recognition Treaty and, where common training requirements exist, ITOs collaborating with their Australian counterparts.

Other partnerships underpin aspects of industry training. Some ITOs work closely with schools to provide industry training opportunities while learners are still at school. Training in the 'essential skills' (such as communication, numeracy, self-management and study skills) is more commonly being integrated into industry training. Literacy training has increased, and both Skill New Zealand and Workbase have worked with ITOs to develop appropriate resources. Some ITOs work closely with providers in delivery of both on-job and off-job training.

Preparation continued in 1999 for the implementation of the new Performance Measurement System (PMS) developed by Skill New Zealand in collaboration with ITOs. The requirements of the PMS broadly align with the management information requirements of ITOs and will improve information and data available about industry training across the sector.

The ITO Federation has identified the following issues for attention. The current growth in industry training raises some questions regarding policy and resourcing, particularly with regard to government funding. Growth in 1999 has put substantial pressure on baseline funding. Some aspects of industry training policy, including the ineligibility of state sector employees and the restriction of funding to qualifications of Level 4 of the NQF and below, might discourage participation. The ITO Federation also suggests a review of variable funding rates among ITOs which deliver the same or similar training.

⁸ In September 2000 the Minister of Education announced his preliminary decision that the merger would not be approved.

⁹ The merger discussion was cancelled during 2000.

¹⁰ This section reflects the views expressed in the New Zealand Association of Private Education Providers' submission to TEAC, July 2000.

¹¹ Funding to secondary schools increased over this period.

¹² Baker, J and D Guerin. *The Role of Private Providers in New Zealand Tertiary Education*. Report prepared for the Treasury (unpublished), 1997.

¹³ This section has been provided by the ITO Federation.

3 THE STUDENTS

THREE

INTRODUCTION

PARTICIPATION IN THE TERTIARY EDUCATION SECTOR HAS INCREASED SUBSTANTIALLY OVER RECENT YEARS. IT IS ESTIMATED THAT AROUND 400 000 STUDENTS WILL HAVE PARTICIPATED IN SOME FORM OF TERTIARY EDUCATION IN 1999. THIS CHAPTER ATTEMPTS TO IDENTIFY WHO THESE STUDENTS ARE, WHAT THEY WERE DOING PRIOR TO TERTIARY STUDY AND HOW THEY WERE STUDYING IN 1999.

ENTERING TERTIARY EDUCATION

School leavers are the traditional entrants to tertiary education, and they comprised 42 percent of the first year formal students at tertiary institutions in 1999 (Figure 3A.) Twenty-three percent of the first year students were employed before they began their tertiary study, and another 27 percent were unemployed or beneficiaries.

PTEs provide a significant pathway for beneficiaries into tertiary education. Beneficiaries made up 47 percent of the first year students at PTEs but only 18 percent at TEIs. Training Opportunities accounts for a large number of these enrolments.

Many students, and particularly those who study in TEIs, begin their tertiary study when they are between 17 and 19 years of age. In 1999, 51 percent of first year TEI students and 32 percent of first year PTE students were aged 17-19 years. PTE entrants are more evenly spread across the age ranges, reflecting the lower proportion of these students who were in school the previous year. In the PTE sector just over 29 percent of entrants were aged at least 30 years of age, compared with 26 percent at TEIs, indicating a sizeable group taking up tertiary education after a significant break from studying.

The proportion of school leavers who go directly on to tertiary education is an important measure of accessibility and the value school leavers place on tertiary education. Fifty-five percent of 1998 school leavers continued on to tertiary education in 1999. Of these, 10 percent enrolled in Skill New Zealand funded programmes at PTEs or TEIs, 4 percent enrolled in other programmes of study at PTEs, and 45 percent enrolled in other programmes of study at TEIs (Figure 3B).

The longer-term trend has been for increasing flows of school leavers into tertiary education. Of those students who finished

school in 1981, around 20 percent were enrolled in a TEI in July of the following year, compared with 41 percent of 1998 school leavers¹⁴. Increasing flows of students from school to tertiary education reflect the long-term trend towards staying longer at school and the improving qualifications of school leavers. These trends may have occurred in response to changing labour market structures, as growth has occurred in industries such as business and financial services that require higher skill levels. Higher levels of unemployment among those with fewer qualifications, and higher employer expectations, may also have contributed to tertiary education becoming an increasingly important goal for school leavers.

Female students tend to leave school with a higher level of qualification than males, and more women go directly on to tertiary study. An estimated 63 percent of female school leavers were enrolled in a formal tertiary programme of study in 1999, compared with 46 percent of male school leavers.

Māori and Pacific school leavers were less likely to go directly on to tertiary education than other students in 1999, and those who did continue their studies were less likely to go to university and more likely to enrol in Skill New Zealand funded programmes. Whereas more than one in five of all 1998 school leavers were enrolled in university in 1999, only one in 12 Māori and one in 11 Pacific school leavers were so enrolled. Conversely, Pacific students were nearly twice as likely, and Māori were more than twice as likely, to participate in Skill New Zealand funded programmes on leaving school than were school leavers overall. This reflects the considerably lower proportion of Māori and Pacific students who leave school with a qualification which enables them to go on to higher education at a degree level.

Students from schools drawing from lower socioeconomic communities are significantly less likely to go on to tertiary education than students from other schools. It is estimated that only 32 percent of students leaving schools drawing from low socioeconomic communities (deciles 1-3 schools) in 1998 were enrolled in tertiary education in 1999, compared with 52 percent of students leaving deciles 4-7 schools and 71 percent of students leaving deciles 8-10 schools. Over the 1993-1998 period, both the number of school leavers from deciles 1-3 schools, and the number of deciles 1-3 school leavers directly entering tertiary education the following year, have decreased slightly. There has been, over this period, a small increase in the proportion of school leavers from deciles 1-3 schools who directly enter a tertiary education institution upon leaving school.

FIGURE 3A: SOURCE OF FIRST YEAR FORMAL TERTIARY STUDENTS, JULY 1999

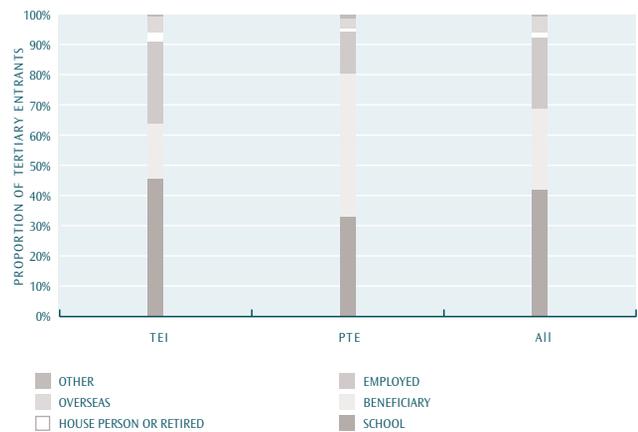
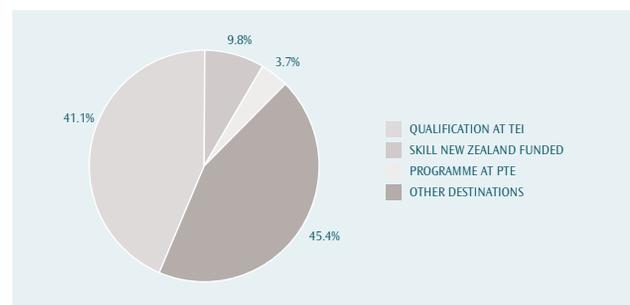


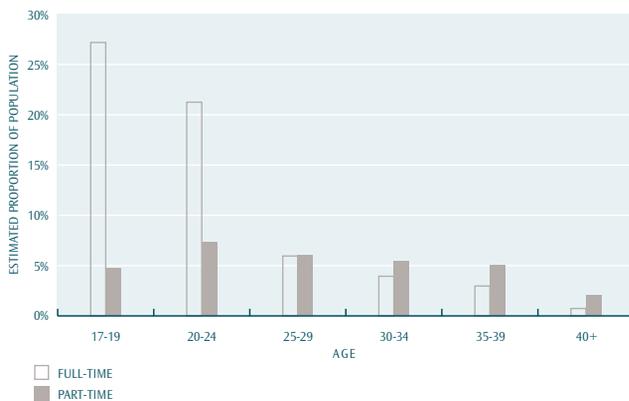
FIGURE 3B: PROPORTION OF 1998 SCHOOL LEAVERS GOING DIRECTLY ON TO TERTIARY EDUCATION IN 1999



Note: Skill New Zealand funded programmes include Training Opportunities, Youth Training and Skill Enhancement.

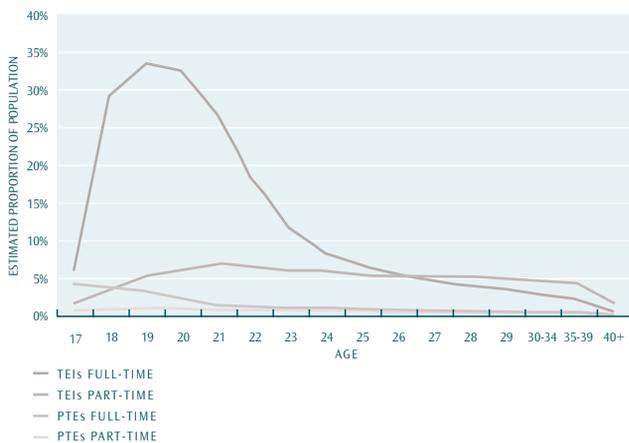
¹⁴ Data is only available for TEIs for 1981. 1998 figures exclude students enrolled in Training Opportunities (TOP).

FIGURE 3C: ESTIMATED PROPORTION OF POPULATION ENROLLED IN TERTIARY EDUCATION BY AGE AND STATUS, 1999



Note: Includes enrolments at TEIs and PTEs.

FIGURE 3D: ESTIMATED PROPORTION OF POPULATION ENROLLED BY AGE, STATUS, AND TYPE OF PROVIDER, 1999



There are also regional differences in the likelihood of 1998 school leavers to be enrolled in tertiary education in 1999. Over 60 percent of the school leavers in Southland, Otago, Taranaki and Wellington are estimated to have moved directly on to tertiary education, whereas less than 50 percent did so in Northland, West Coast, Bay of Plenty, Auckland and Waikato.

PARTICIPATION IN AND ACCESS TO TERTIARY EDUCATION

The proportion of the population enrolled in tertiary education provides a snapshot of participation in tertiary study. Access to tertiary education is reflected not only in current participation levels but also in past participation by those who have completed their studies. It reflects how many people have been enrolled in tertiary education at any time of their lives.

At 1999 levels of participation, the majority (82 percent) of the population will enrol with a tertiary education provider before reaching age 25, and around 60 percent will have studied at a TEI before their 25th birthday. Others will participate in short courses delivered by a range of providers. The core age group for tertiary study is 18-24 years. In 1999, students in this group were most likely to be studying full-time. Tertiary students aged 30 years or more were most likely to study part-time. However, students aged 25-29 were equally as likely to study part-time or full-time (Figure 3C). While the ratio of full-time to part-time enrolments varied in 1999 according to student age, differences were more apparent in TEIs than PTEs.

Participation in New Zealand tertiary education increased in the 1980s and the early 1990s, although growth has slowed in more recent years (Table 3.1). This slower growth overall resulted from decreasing participation in part-time study. Participation in full-time study has continued to increase, helping to maintain an overall trend of increasing participation.

TABLE 3.1: PERCENTAGE OF THE POPULATION ENROLLED IN TERTIARY EDUCATION, 1990–1999

AGE	TEI STUDENTS						TEI AND PTE STUDENTS COMBINED 1999 %
	1990 %	1995 %	1996 %	1997 %	1998 %	1999 %	
18-24 YRS	20.5	27.2	27.4	28.0	28.8	28.9	32.1
25 YRS+	2.7	4.2	4.3	4.5	4.6	4.5	5.2

More recently, increases in participation in TEIs appear to have been due to increasing participation in longer programmes of study or students' returning to programmes of study later in life, rather than to increases in the proportion of the population who enter tertiary education. In 1995 an estimated 0.8 percent of the total New Zealand population aged 25 or more entered a tertiary education institution for the first time, but by 1999 the proportion had dropped slightly to 0.7 percent. However, 14.9 percent of the population aged 17-19 entered a TEI for the first time in 1995, and in 1999 this had increased slightly to 15.1 percent. This suggests that, from an equity perspective, those groups which have been least likely to participate in tertiary education may still not be benefiting from increased tertiary education participation overall.

Over the longer term, however, increases in participation have been so large that they are unlikely to have been due to changes only in course length or re-entering tertiary education later in life. There has been movement to a higher level of participation in tertiary education.

Increased participation in tertiary education in the early 1990s correlated with rapid increases in unemployment during the same period. However, participation in tertiary study has continued to increase despite subsequent declines in the rate of unemployment. Therefore, while employment prospects may be a driver of participation in tertiary education, there appears to be no direct link between falling unemployment and decreasing participation. This implies that there have also been significant changes in expectations of both employers and of potential students with respect to the value of tertiary education. Over the years, there has been a movement towards participation in tertiary education becoming the norm.

In 1998, the latest year for which figures are available, New Zealand's access to tertiary level education was above the OECD average. New Zealand's net entry rate¹⁵ into university level education (68 percent) was well above the OECD average (40 percent). The rates of entry into non-university level education (36 percent) were also well above the OECD average (19 percent).

Compared with other OECD countries, New Zealand's rates of participation in tertiary education were also high. In 1996, the latest year for which figures are available, a higher proportion of New Zealanders between 17 and 34 years of age (12.6 percent) participated in tertiary level education than the OECD average

(11.2 percent)¹⁶. New Zealand has also experienced stronger growth in participation than many other countries, being in the upper-to-middle section of OECD countries ranked in order of growth in participation over the period 1990 to 1997.

STUDENT NUMBERS AND PROFILES

The number of students enrolled in formal programmes of study at TEIs has increased steadily over the last 20 years, with growth being particularly marked in the late 1980s and early 1990s (Figure 3E *see over page*). This period coincided with higher levels of unemployment and increasing retention in the senior school, resulting in more highly qualified school leavers.

In the latter part of the 1990s, growth slowed. In addition to those reasons advanced above, factors affecting the slowing of growth include the high participation rates in tertiary education, which affects the potential for further growth, and reductions in the size of the population of tertiary entrant age. A slowing of migration from the high levels of the mid-1990s and a decrease in the number of international students also contributed to dampening of growth in enrolment numbers, particularly in 1998.

In 1999, student numbers at TEIs decreased slightly, yet enrolments at PTEs continued to grow. Of all formal students, the proportion enrolled at PTEs increased from 11.4 percent in July 1998 to 13 percent in July 1999. The proportion of all PTE students funded through the EFTS system, Ministry of Education supplementary grants or Ministry of Education teacher education contracts, increased from 15.8 percent to 31.8 percent. Overall, the number of formal students enrolled in July (at both TEIs and PTEs) increased by 1.1 percent in 1999.

Figure 3E and Table 3.2 (*see over page*) give a snapshot of formal students enrolled in TEIs at the end of July each year. This data has been presented to give a picture of the trend in tertiary

¹⁵ Net entry rate is calculated by dividing the number of first year students at a particular age by the population at that age. These proportions at individual years of age are then added together to produce a result that represents the proportion of an age cohort who enter tertiary education. Net entry rates differ from the access figures given earlier for New Zealand so as to conform to internationally comparable definitions. Source: *Education at a Glance: OECD Indicators*. Paris: OECD Centre for Educational Research and Innovation, 2000.

¹⁶ These figures differ from participation figures given earlier for New Zealand so as to conform to internationally comparable definitions of tertiary level education. International definitions exclude people studying in lower level programmes in TEIs and all students studying in PTEs. The source of figures in this paragraph is *Education at a Glance: OECD Indicators*. Paris: OECD Centre for Educational Research and Innovation, 1998.

FIGURE 3E: ESTIMATED NUMBER OF STUDENTS ENROLLING IN FORMAL PROGRAMMES OF STUDY AT TEIs, JULY 1965–1999



Note: Dotted vertical line represents change in definition of student count.

TABLE 3.2: NUMBER OF TERTIARY STUDENTS BY TYPE OF PROVIDER AND TYPE OF STUDENT, JULY 1999

TYPE OF STUDENT	TEIs	PTEs*	OTHER PTEs	ALL TERTIARY PROVIDERS
FORMAL	220 709	21 209	11 855	253 773
COMMUNITY AND GENERAL	18 660	0	-	-
STAR (SECONDARY TERTIARY ALIGNMENT RESOURCE)	9 230	0	-	-
<0.03 EFTS	4 837	45	-	-
ALL STUDENTS	253 436	21 254	-	-

Note: Figures for cells marked with a dash are not known.

* PTEs receiving tuition subsidies or eligible for loans and allowances, OTEPs. Figures do not include private language schools.

enrolments, as long time-series exist where data is reasonably (although not entirely) comparable. Over a full year, the number of students participating in tertiary education will be considerably greater than indicated, as some students will have completed a course or not yet started a course on 31 July and others will be enrolled in non-formal courses of study.

At the end of July 1999, more than 286 000 students were enrolled in a course of study with a tertiary education provider. The number of students enrolled at some time during 1999 but who were not actively studying at the end of July (and thus not captured in this data) is estimated to be around 100 000. In addition to these students, an unknown number studied at government training establishments¹⁷.

FULL-TIME/PART-TIME STATUS

In recent years the proportion of all formal students studying part-time has decreased, from 43 percent in 1997 to 41 percent in 1999. Before this time, the available information includes enrolments at TEIs only and these suggest that the proportion of students studying part-time reached its peak in 1992 with the majority being part-time, and has since tended to decline.

In comparison with other OECD countries, New Zealand has a high proportion of students studying part-time rather than full-time¹⁸. Because New Zealand's participation is high by OECD standards, New Zealanders have a higher expected number of years of tertiary level education than those in many other OECD countries. When a breakdown into full-time and part-time study is made, New Zealand's expected number of years of full-time tertiary education is similar to the average for OECD countries, whereas the expected time spent in part-time study is significantly higher.

A sizeable proportion of formal students in tertiary education institutions are combining work with study (Table 3.3). The increasing move to full-time study has probably contributed to the decreasing tendency for students to combine work with education.

ATTENDANCE STATUS BY ETHNICITY

European/Pākeha students are only slightly more likely to be studying full-time than they are to be studying part-time (Table 3.4). Most other ethnic groups show strong preferences toward studying full-time, with two-thirds of all Māori and Pacific students, and close to three-quarters of Asian students, studying full-time.

AGE

While 18-24 years has traditionally been the core age group for participation in tertiary education, close to half the formal students enrolled in TEIs (49 percent) were aged 25 or more in 1999. Growth in the number of students aged 40 or more has been particularly strong in the 1990s, with these students making up 17 percent of all TEI students in 1999 compared with 11 percent in 1990.

Tertiary providers are increasingly catering to such mature students by offering qualifications, such as development of management skills, which can be undertaken as a means of self-development or to enhance such students' careers. In addition, growth in numbers of older students probably reflects a move away from careers for life and toward a need and desire for training throughout life.

Students aged less than 20 form a significant group in PTEs: 34 percent of all 1999 PTE students were in this age group, compared with 20 percent of students at TEIs. However, 47 percent of PTE students were at least 25, and 15 percent were at least 40 years of age.

GENDER

In 1999, women comprised the majority of formal students in each sector of tertiary education, with their representation being particularly strong in colleges of education, where 81 percent of students were women. Women also comprised 55 percent of students in universities and private training establishments, 56 percent in polytechnics, and 57 percent in wānanga.

While women have traditionally been less likely to be involved in tertiary education than men, participation of women is now higher than men at all ages. In the 18-24 year age group, 34 percent of all women were enrolled at TEIs and PTEs in 1999 compared with 29 percent of all men. Among those aged 25 or over, women's participation was 6 percent compared with 5 percent for men.

Times series data available for TEIs only show that in 1990 participation of 18-24-year-olds in tertiary education at TEIs was higher for men than for women and the two groups had similar participation rates in the 25+ age group. By 1993 women's participation surpassed that of men in both age groups, and in the past six years the gap has been increasing.

More than 70 percent of the increase in TEI student numbers since 1990 have been women students (Table 3.5 *see over page*). In 1990 women made up 49 percent of students at TEIs, but by 1999 the percentage had increased to 57 percent.

TABLE 3.3: ESTIMATED PROPORTION OF THE POPULATION AGED 20–24 WITHIN TERTIARY EDUCATION, AND LABOUR FORCE STATUS, 1990 AND 1995–1999

TERTIARY EDUCATION AND LABOUR FORCE STATUS	TEI STUDENTS			ALL STUDENTS		
	1990 %	1995 %	1996 %	1997 %	1998 %	1999 %
STUDYING AND NOT IN LABOUR FORCE	6	11	11	11	12	14
STUDYING AND IN LABOUR FORCE	11	14	14	16	17	15
SUB-TOTAL IN EDUCATION	17	24	24	27	29	29
NOT STUDYING AND IN LABOUR FORCE	68	64	64	60	60	59
NOT STUDYING AND NOT IN LABOUR FORCE	15	12	12	12	12	13
SUB-TOTAL NOT IN EDUCATION	83	76	76	73	71	71
TOTAL IN AGE GROUP	100	100	100	100	100	100

Source: Household Labour Force Survey (Statistics New Zealand) and Ministry of Education roll returns.

TABLE 3.4: DOMESTIC TERTIARY STUDENTS BY ETHNICITY AND ATTENDANCE STATUS, AT JULY 1999

ETHNICITY	FULL-TIME %	PART-TIME %	TOTAL %
EUROPEAN/PĀKEHA	53.8	46.2	100
MĀORI	67.3	32.7	100
PACIFIC	68.2	31.8	100
ASIAN	73.9	26.1	100
OTHER	60.4	39.6	100
TOTAL	58.5	41.5	100

Note: Excludes PTEs that are not eligible for loans and allowances and do not receive tuition subsidies.

¹⁷ During 1999, 296 Skill New Zealand funded students were enrolled with government training establishments.

¹⁸ *Education at a Glance: OECD Indicators*. Paris: OECD Centre for Educational Research and Innovation, 2000.

TABLE 3.5: CONTRIBUTION TO GROWTH IN TEIs, 1990–1999

STATUS	MALE	FEMALE	ALL
	%	%	%
FULL-TIME	28.4	39.4	67.8
PART-TIME	0.0	32.2	32.2
ALL STUDENTS	28.4	71.6	100.0

TABLE 3.6: PERCENTAGE OF FORMAL STUDENTS BY ETHNIC GROUP, 1990 AND 1995–1999

ETHNIC GROUP	TEI STUDENTS ONLY			ALL STUDENTS		
	1990 %	1995 %	1996 %	1997 %	1998 %	1999 %
EUROPEAN/PĀKEHA	84.7	76.1	74.1	69.8	67.9	67.4
MĀORI	6.8	11.4	11.6	14.3	15.0	15.7
PACIFIC	2.5	3.4	3.6	4.2	4.5	4.7
ASIAN	3.0	5.3	7.2	8.5	9.1	8.9
OTHER ETHNIC GROUPS	2.9	3.9	3.5	3.2	3.5	3.4
ALL (NZ) STUDENTS	100.0	100.0	100.0	100.0	100.0	100.0

Note: Time series data for PTEs is limited prior to 1997

ETHNICITY

The proportion of students who are of Māori, Pacific or Asian ethnicity has tended to increase gradually in recent years. Longer-term data series, that are available for TEIs only, suggest that the trend has been similar throughout the 1990s. Table 3.6 shows a particularly sharp rise between 1996 and 1997 which is due in part to the incorporation into the statistics, for the first time, of students enrolled at PTEs, where the proportion of Māori and Pacific students is relatively high.

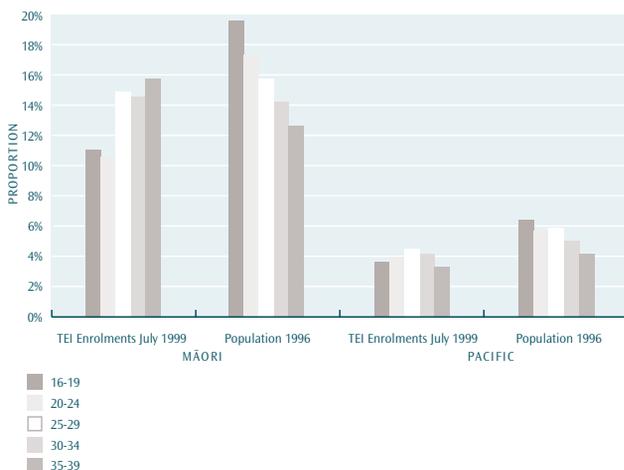
Pacific TEI students are more likely to be in the 20-29 age range and less likely to be aged 30 or more than students from other ethnic groups. This probably reflects the younger age profile of Pacific New Zealanders as well as the greater tendency of older Pacific people to be migrants and to have lower levels of educational qualifications.

The Māori population also has a younger age profile than the non-Māori population, but 57 percent of Māori students enrolled in TEIs are aged 25 or more, compared with 49 percent of non-Māori students. These figures indicate a greater tendency for Māori to participate in tertiary education later in life, with fewer students taking a pathway directly from school to tertiary education (illustrated in Figure 3F).

Because of the dominance of Skill New Zealand funded programmes in PTEs, this sector provides a further opportunity for those who would not otherwise attend tertiary education. In contrast to their under-representation at TEIs, Māori and Pacific students are over-represented at PTEs, comprising 31 percent and 10 percent respectively of the student body in PTEs. European/Pākeha students comprise just over half (52 percent) of the students in these institutions. Given the younger age profile of PTE students compared with TEI students, and the older profile of Māori students in particular at TEIs, PTEs may form an important pathway for Māori to access tertiary qualifications at TEIs later in life.

Monitoring of participation by ethnic groups is complicated by the unavailability of population data except in census years. However, comparing 1996 census populations with tertiary student numbers indicates clearly that both the Māori and Pacific ethnic groups are under-represented in tertiary education compared with their numbers in the general population within each age group (Figure 3F).

FIGURE 3F: PERCENTAGE OF 1999 TEI ENROLMENTS AND 1996 CENSUS POPULATION BY ETHNICITY AND AGE GROUP



Increases in the proportion of students who are Māori or of Pacific ethnic background are due both to gains in participation relative to the European/Pākeha group and to differential population growth. Changes in the definitions of both tertiary students and the population by ethnic group make it difficult to be precise about the extent to which the gap between ethnic groups' participation has closed during the 1990s. However, the rate of growth of participation by Māori in TEIs is six times that of European/Pākeha students. Similarly, the rate of growth of participation by Pacific people is four times that of European/Pākeha. These data suggest that the gap between Māori or Pacific participation in TEIs and that of European/Pākeha has decreased over the past decade.

This reduction in the disparity in participation was not confined to the early part of the decade. Growth in Māori TEI enrolments has significantly outstripped that of European/Pākeha in each of the past five years. Growth in Pacific TEI enrolments has also significantly outstripped that of European/Pākeha in each of the past five years except 1997, when Pacific student numbers decreased a little in comparison with European/Pākeha.

The Māori and Pacific populations have increased faster than the European/Pākeha population over the past few years, and this trend is expected to continue. In 1996, 19 percent of the population aged 18-24 were Māori, and 7 percent were of Pacific ethnic background. By 2006 these proportions are expected to have increased to 21 percent and 9 percent respectively¹⁹. More rapid projected growth in these populations, together with possible continued increases in participation at rates higher than those experienced in the European/Pākeha population, are likely to result in growth over the next 20 years in the proportion of tertiary students who are of Māori or Pacific ethnic background.

INTERNATIONAL STUDENTS

In July 1999 there were 9034 international students studying formal tertiary qualifications in New Zealand (making up 3.6 percent of the student body). The number of overseas students enrolled in TEIs increased rapidly in the mid-1990s, but in the latter part of the decade growth has slowed, probably as a result of the Asian economic crisis. In 1999, 3.5 percent of formal students at TEIs were international students. A sizeable proportion of these students come from Asia (68 percent), particularly Malaysia and Japan. Another 15 percent come from the Pacific Islands. International students accounted for 3.8 percent of formal students at PTEs, and half of these were from either Japan (30 percent) or South Korea (19 percent).

TEIs also provided for international students domiciled offshore. A survey of TEIs²⁰ found that, in 1997, six TEIs maintained an off-shore campus or twinning programme involving 380 students, and 11 TEIs offered distance education off-shore, to a total of 247 students. Approximately 1 percent of New Zealand students spent time overseas on exchange or study tours, 18 TEIs reported international research links, and 17 had staff who participated in technical assistance projects overseas.

PROJECTIONS OF TERTIARY GROWTH

Student numbers are expected to continue to grow, though at a slower rate than in the past. As in previous years, full-time enrolments at TEIs are expected to increase and the numbers studying part-time are expected to decrease.

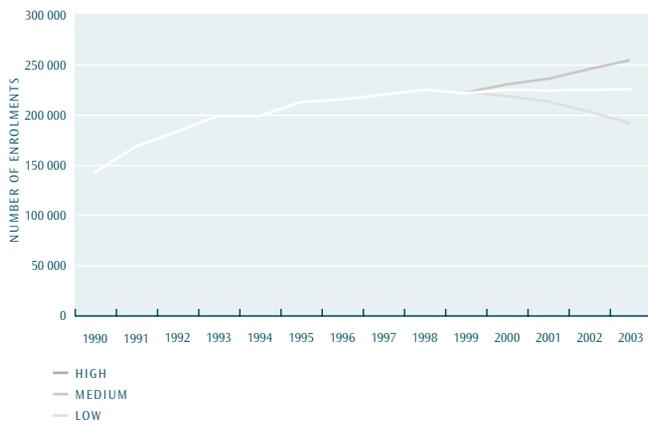
TEI enrolments at July 1999 were slightly (0.7 percent) lower than they were in the previous July, although enrolments across the entire sector (including PTEs) rose by 1.1 percent over the same period. It is unclear at the moment whether the decline in TEI enrolments is simply a one-off change or whether it is the beginning of a shift in enrolment patterns. However, it does appear that the rapid growth in participation rates in TEIs, which has driven the increases in enrolments over the past decade, is levelling off. A number of factors could have contributed to this levelling off including very high participation in tertiary education, with a slowing in the potential for further growth, reductions in the size of the population of tertiary entrant age, and changes to the funding of tertiary institutions.

The increase in tertiary enrolments over the last decade occurred because more people in any given age group enrolled at a TEI. For example, Table 3.1 (p.28) shows that in 1990 20.5 percent of the population in the 18-24 age group were enrolled at a tertiary institution and that this had grown to 28.8 percent of that population by 1998. Participation for the 25-plus age group increased from 2.7 percent to 4.6 percent over the same period. As New Zealand already has very high participation in tertiary education, both in absolute terms and relative to other OECD countries, this reduces the potential for further participation growth. A comparison of participation rates in 1998 and 1999

¹⁹ Source: Statistics New Zealand medium projections. People of both Māori and Pacific ethnic background are included in both figures.

²⁰ Black, Ken, Dorothy Davis and Alan Olsen. *Internationalisation and Tertiary Education Institutions in New Zealand*. Report prepared for the Ministry of Education, June 1998.

FIGURE 3G: ESTIMATED ACTUAL AND PROJECTED NUMBER OF FORMAL STUDENTS ENROLLED IN TEIs, JULY 1990–JULY 2003



Note: Projections as at December 1999.

indicates that the growth has levelled off: for the 18-24 age group the percentage of the population enrolled at a TEI had grown by just 0.1 percent to 28.9 percent in the year to 1999, and for the 25-plus group it had fallen by 0.1 percent to 4.5 percent.

If participation rates have levelled out and remain relatively constant then the effect on enrolments of changes in population, especially in the core tertiary age group of 18-24 years, will become more apparent.

It is expected that the New Zealand population in the core tertiary age group will continue to decrease over the next few years. However, from 2003 until about 2011 the population in this age group will increase. This is the effect of the population bubble that has just moved through primary schools and will soon start to show as an increase in the number of secondary school students. Population in the 25-40 age group is expected to fall over this period though numbers in the 40-plus group will grow substantially. If participation were to remain at 1999 levels, these population changes mean that tertiary roll numbers would show a very small decline each year until around 2002, and then start to increase. Current projections for TEIs are shown in Figure 3G. All other things being equal, population effects suggest that enrolments will be around 5 percent higher in 2011 than they were in 1999²¹.

Population growth in the core age group is concentrated in certain regions. Auckland is the largest region of New Zealand in terms of population, and growth in the Auckland region is numerically larger than growth in other areas. Auckland is also growing faster than most other regions, so that the percentage change in the population is also higher in Auckland than in other regions. This means that an even greater concentration of the total education demand will be located in Auckland in future years. The Bay of Plenty region also shows relatively high growth. Other areas such as Otago/Southland and Taranaki show declining populations, which raises issues for the education institutions in these areas.

Changes to the funding of tertiary education have also contributed to changing enrolment numbers. In 1999 tuition subsidies were made available to a larger number of PTEs than previously. This change led to a greater number of courses offered by PTEs that were eligible for subsidies and may have resulted in students shifting from TEIs to PTEs. In addition, changes over the past decade have led to students, on average, having to contribute more to the costs of their education. Any dampening effect of fees on enrolments will have been masked not only by the long term trend of increased participation but also by the availability of, and changes to, the student loan scheme. Unfortunately there is insufficient data presently available to enable analysis of these effects.

²¹ Based on Statistics New Zealand medium projections of population by age.

4 TERTIARY EDUCATION AND TRAINING QUALIFICATIONS

FOUR

INTRODUCTION

NEARLY 6800 QUALIFICATIONS WERE BEING OFFERED BY TERTIARY EDUCATION PROVIDERS IN JULY 1999, COMPRISED OF AN ESTIMATED 86 000 COURSES. THIS CHAPTER DESCRIBES THE NATURE OF THESE QUALIFICATIONS, WHO DELIVERS THEM AND WHICH STUDENTS CHOOSE TO UNDERTAKE THEM. OUTCOMES OF TERTIARY STUDY ARE CONSIDERED IN THE FOLLOWING CHAPTER.

A critical issue for participants in such a diverse tertiary education system is the quality assurance of their qualifications and programmes of study. Current quality assurance arrangements across the tertiary sector are outlined prior to a discussion of the qualifications themselves.

Uptake of unit standards-based qualifications and programmes of study administered by Skill New Zealand are given special emphasis in this year's report. Special focus is also placed on the participation of Māori and Pacific peoples in study and training programmes.

QUALITY ASSURANCE OF TERTIARY EDUCATION IN NEW ZEALAND

KEY COMPONENTS OF THE CURRENT SYSTEM

Quality assurance of tertiary education in New Zealand focuses on the quality of qualifications (as a whole) and of tertiary education providers. Only those tertiary education qualifications and providers that have been quality assured by a quality approval body are able to generate government financial assistance based on student enrolment numbers (ie, through EFTS funding and student access to the allowances and loan schemes). Subsequent to that initial approval, providers and developers of qualifications that generate government assistance must demonstrate that they are maintaining quality on an ongoing basis. Quality requirements also operate for industry training, Training Opportunities and Skill Enhancement funding.

Quality approval agencies decide whether tertiary providers and qualification developers meet appropriate quality standards. There are currently four quality approval agencies:

- New Zealand Qualifications Authority (NZQA)
- Committee on University Academic Programmes (CUAP), a standing committee of the New Zealand Vice-Chancellors' Committee (NZVCC)

- New Zealand Polytechnic Programmes Committee (NZPPC)
- Colleges of Education Accreditation Committee (CEAC).

NZQA and NZVCC derive their authority from the Education Act (1989). NZQA has delegated responsibility for some aspects of qualification approval and accreditation of polytechnic courses to the Association of Polytechnics in New Zealand (APNZ) which has established the NZPPC to give effect to this. CEAC has similar delegated authority for some aspects of qualification approval and accreditation for colleges of education. As the delegating authority, NZQA has responsibility for NZPPC's and CEAC's quality assurance systems.

During 1999, preliminary work was undertaken on the establishment of the Quality Assurance Authority of New Zealand (QAAZ), as the overarching quality assurance body for tertiary education in New Zealand proposed in the Tertiary White Paper of 1998. By the time the pre-establishment team produced its final report in September 1999 it was clear that the then Government would not proceed with the necessary enabling legislation within the anticipated timeframe. The present Government has now confirmed that NZQA will continue this quality assurance role for all but the university sector. NZQA retains responsibility for course approval and accreditation for all degree qualifications offered by providers other than universities. All registered providers and approved courses and qualifications outside the universities are listed on the NZQA website: www.nzqa.govt.nz.

All quality assurers of teacher education qualifications currently also seek the approval of the Teacher Registration Board (TRB) for these qualifications. The TRB has a separate legislative authority to approve teacher education qualifications for the purposes of registration (see p.38).

During the 1990s the quality assurance capability within the tertiary sector has been built up, with the focus beginning to shift from the approval of individual qualifications to the quality assurance systems of the qualification providers. This has necessitated a greater emphasis on risk assessment by the quality approval bodies and on the development of external audits of providers.

University qualifications are already independently audited through the Academic Audit Unit (AAU), which they are considering linking more closely with their quality approval processes. NZQA is developing its own independent quality audit approach, as are APNZ and NZPPC for the polytechnics.

THE NATIONAL QUALIFICATIONS FRAMEWORK (NQF)

The learning and quality of the learning recognised by qualifications needs to be transparent and credible to students, employers and the public. The National Qualifications Framework (NQF) was established under the Education Act (1989) to give people a clearer understanding of the purpose of qualifications and the relationships between them, and to improve ways of gaining qualifications and recognising student achievement. The NQF is a register of national qualifications and national standards which have the following broad characteristics:

- Standards and qualifications have been developed or endorsed by a relevant nationally recognised body. Where there is an Industry Training Organisation (ITO), that organisation is the standard-setting body.
- The component parts of a qualification (the national standards) must be registered. Qualifications are defined as packages of credits from national standards. Learners can gain credits separately, from any accredited provider, and apply credits to a range of registered national qualifications. National standards are expressed as learning or performance outcomes against which learners are assessed.
- Any organisation that has been accredited by NZQA (or its delegated agent) can assess against national standards and award credits. The NQF does not prescribe programmes of study. Providers can assess against NQF standards within a variety of programmes of study and assessors associated with accredited organisations can assess against standards outside the programme of study.
- Each national qualification has its own moderation action plan designed to ensure that unit standards are assessed uniformly by accredited providers and assessors.

By the end of 1999, over 15 000 unit standards had been registered in the NQF's 17 fields and over 660 National Certificates and Diplomas had been registered (see p.43).

It has not always been clear how these national qualifications relate to the wide range of qualifications developed by individual providers and how these local qualifications relate to each other. The previous Government therefore decided to broaden the NQF to include all quality-assured qualifications, to make it easier for people to understand the whole array of qualifications and to transfer learning from one qualification to another. The Qualifications Authority is currently developing proposals to address this.

The Ministry of Education's Prospectus database includes a full listing of all qualifications that have been verified by the Ministry as having met the criteria (including quality assurance criteria) to access government assistance (either tuition subsidies or the student allowances and loan schemes). It can be accessed on the Ministry of Education's web-site: www.minedu.govt.nz. Work is now underway to develop a comprehensive quality register of all recognised, quality-assured qualifications, courses and providers.

THE NEW ZEALAND UNIVERSITIES ACADEMIC AUDIT UNIT

The Academic Audit Unit (AAU) was established by the New Zealand Vice-Chancellors' Committee to carry out academic quality audits of all the universities. The AAU also:

- identifies and disseminates information on good practice in developing and maintaining quality in higher education
- provides advice and training in New Zealand and overseas
- publishes reports and other monographs.

In 1998 the AAU completed the first cycle of audits, and a quality audit report has now been produced on each of New Zealand's then seven universities and on the Committee on University Academic Programmes. Audit reports may be purchased from the AAU.

The AAU audits each university against its mission and goals set out in its Charter and Statement of Objectives, and against the definition of a university (Education Act 1989). Among other factors, the Act requires universities to 'meet international standards of research and teaching'. Each audit report describes the extent to which the university is achieving these goals, and mentions any shortcomings or particular strengths identified. Results of the first cycle of audits suggest that the universities are showing up well against the criteria. Furthermore, the mid-term responses (provided 12 months after the audit report) reveal that the universities are addressing and remedying the shortcomings identified through the audit process, and are building a strong quality assurance culture.

A new audit cycle, Cycle 2, began in 1999. The audits in this cycle will be narrower in scope to permit greater depth of investigation. During 1999-2001, the AAU will audit in each university:

- provision and support for postgraduate students
- the research/teaching link
- research policy and management.

In addition, in each university, the AAU will audit a second theme agreed between the university and the AAU. Selected themes include the library, electronic information services, distance education, internationalisation, communication, and planning. Discussions were initiated with Auckland Institute of Technology about a broad-spread audit in 2001, following its becoming Auckland University of Technology at the beginning of 2000.

Internationally, typical audit cycle times are from four to 10 years. The commitment of New Zealand universities to quality and accountability is demonstrated by their willingness to use a much shorter cycle time.

In addition to its quality enhancement role and auditing and accountability functions, the AAU provides expert advice and comment on matters relating to quality assurance in higher education.

During 1999, the AAU organised a range of workshops on various aspects of quality education provision. In August, the fourth annual AAU Quality Enhancement Meeting was held in Christchurch. This brought together over 30 participants from the universities, polytechnics, colleges and the AAU, with overseas participation from Australia and the UK.

The AAU Series on Quality, a series of monographs on issues related to the work of the AAU, was launched in 1999. Four titles were published in 1999, with work in hand on two more. Topics include academic freedom, quality in online education, good practices, and the influence of professional associations.

THE TEACHER REGISTRATION BOARD

One of the statutory criteria for teacher registration is that teachers be 'satisfactorily trained'. To ensure that graduates are 'satisfactorily trained' the Teacher Registration Board (TRB) has the legislative role of accreditation and approval of teacher education providers and qualifications and an ongoing role in the quality assurance of those qualifications. The board has developed its own guidelines against which teacher education qualifications are evaluated. Although the board has separate legislative authority for such approvals, it works closely with other quality assurance bodies which also have responsibilities in this area. With some 32 teacher education providers offering over 120 qualifications throughout New Zealand, this comprises a significant part of the TRB's work.

TABLE 4.1: QUALIFICATIONS OFFERED BY TYPE OF PROVIDER, 1999

TYPE OF PROVIDER	NO. OF QUALIFICATIONS	AVERAGE NO. QUALIFICATIONS PER PROVIDER	NO. OF INSTITUTIONS	RANGE OF QUALIFICATIONS OFFERED PER PROVIDER	AVERAGE NO. OF FORMAL STUDENTS PER QUALIFICATION
UNIVERSITY	1 424	203	7	70 - 310	74
POLYTECHNIC	3 191	128	25	21 - 271	31
COLLEGE OF EDUCATION	181	45	4	18 - 68	71
WĀNANGA	118	39	3	21 - 62	16
PTE	1 869	4	441	1 - 68	18
ALL PROVIDERS	6 783	14	480	1 - 310	37

QUALIFICATIONS OFFERED BY PROVIDERS

The structure of the tertiary education sector in New Zealand is changing dramatically as a result of initiatives being taken by individual providers. A significant development of the late 1990s was the number of degrees approved outside universities. By 1999 polytechnics, colleges of education, wānanga and private training establishments (PTEs) offered a total of 177 degrees.

Polytechnics cover a large and increasing number of subjects at various levels of specialisation. Many are now accredited to offer degree qualifications. The increasing number of professional courses offered at degree level has had an impact upon the roles of some institutions as providers have sought to position themselves for the future. Mergers and alliances between universities and polytechnics, and the growing range of students catered for by private providers, further blur the distinctions between types of provider. For example, in 1999 the Auckland Institute of Technology earned university status²² and Wellington Polytechnic merged with Massey University to form Massey University Wellington campus.²³

The number of providers of teacher training is growing. The four specialist colleges of education together only cater for 60 percent of students currently in pre-service teacher education at tertiary education providers (TEIs). Teacher training in early childhood, primary, secondary and Māori language education is also offered by other tertiary education providers, including polytechnics. PTEs also offer pre-service teacher trainee qualifications in early childhood, primary and secondary. One in 34 students of PTEs²⁴ were enrolled in pre-service teacher trainee qualifications at July 1999, compared with one in 18 in TEIs.

PTEs are often focused on a limited range of qualifications. In 1999 over one-third (37 percent) of PTEs offered one programme of study and two-thirds (66 percent) of PTEs offered three or fewer programmes of study. The total PTE sector offers a wide range of qualifications, often in niche markets, and at diverse levels, ranging from transition training through trade apprenticeships to postgraduate degrees. A small number of PTEs offer as wide a range of qualifications as the smaller polytechnics, colleges of education and wānanga.

At July 1999 a total of 6783 qualifications were being offered by tertiary education providers (an increase of 3.7 percent since 1998). Polytechnics and universities tended to offer the widest range of qualifications, with a significantly higher number of qualifications being offered at each of these types of institution than at others. PTEs tend to be much smaller and, as outlined above, more specialised.

Analysis of the number of qualifications provided relative to student numbers in each sector shows that universities and colleges of education, on average, have larger numbers of students per qualification (Table 4.1). On the other hand, wānanga and

²² On 7 October 1999 the Minister of Tertiary Education announced that Auckland Institute of Technology (AIT) had met the criteria to become a university. From 1 January 2000 AIT became AUT, Auckland University of Technology.

²³ Massey University's Wellington campus was established on 1 July 1999 after the disestablishment of Wellington Polytechnic.

²⁴ Includes students within other tertiary education providers (OTEPs) in receipt of a Ministry of Education grant and PTE students receiving tuition subsidy and/or loans and allowances.

FIGURE 4A: PERCENTAGE OF FORMAL STUDENTS BY TYPE OF PROVIDER AND LEVEL OF QUALIFICATION, JULY 1999

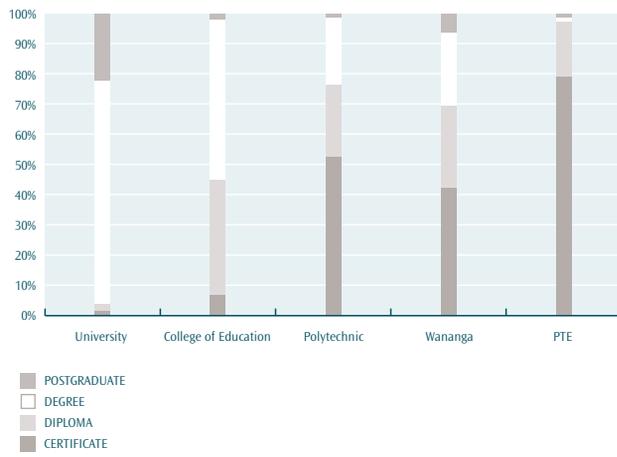


FIGURE 4B: PERCENTAGE OF TEI STUDENTS ENROLLED IN SELECTED FIELDS OF STUDY, 1995 AND 1999

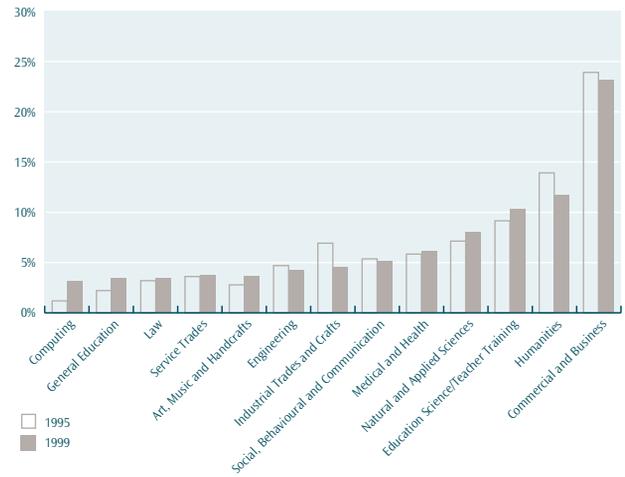


TABLE 4.2: REPRESENTATION OF STUDENTS IN SELECTED SUBJECTS BY ETHNICITY AND GENDER

	SUBJECTS WHERE STUDENTS ARE MOST OVER-REPRESENTED	SUBJECTS WHERE STUDENTS ARE MOST UNDER-REPRESENTED
MĀORI	FOUNDATION, SPORT AND RECREATION, SOCIAL, BEHAVIOURAL AND COMMUNICATION	ENGINEERING, ARCHITECTURE AND TOWN PLANNING, LITERACY PROGRAMMES
PACIFIC	FOUNDATION, RELIGION AND THEOLOGY	AGRICULTURE, HORTICULTURE AND FORESTRY, NATURAL AND APPLIED SCIENCES, GENERAL PROGRAMMES
ASIAN	ENGINEERING, MATHEMATICS, NATURAL AND APPLIED SCIENCES, LITERACY PROGRAMMES	AGRICULTURE, HORTICULTURE AND FORESTRY, SPORTS AND RECREATION, EDUCATION, SOCIAL, BEHAVIOURAL AND COMMUNICATION
EUROPEAN/PĀKEHA	ARCHITECTURE AND TOWN PLANNING, AGRICULTURE, HORTICULTURE AND FORESTRY, MASS COMMUNICATION	GENERAL FOUNDATION PROGRAMME
FEMALE	MEDICAL AND HEALTH, SOCIAL, BEHAVIOURAL AND COMMUNICATION, EDUCATION	TRANSPORT AND COMMUNICATION, ENGINEERING, INDUSTRIAL TRADES AND CRAFTS

TABLE 4.3: DISTRIBUTION OF FORMAL STUDENTS BY LEVEL OF QUALIFICATION AND TYPE OF PROVIDER, JULY 1999

TYPE OF PROVIDER	POSTGRADUATE	DEGREE	DIPLOMA	CERTIFICATE	ALL QUALIFICATIONS
UNIVERSITY	23 528	79 267	2 145	1 056	105 996
POLYTECHNIC	562	22 996	24 380	52 099	100 037
COLLEGE OF EDUCATION	217	6 784	4 928	864	12 793
WĀNANGA	112	464	500	807	1 883
PTE	292	559	5 951	26 262	33 064
TOTAL (NO.)	24 711	110 070	37 904	81 088	253 773
TOTAL (%)	9.7%	43.4%	14.9%	32.0%	100.0%

PTEs tend to have a smaller number of students per qualification. These figures may suggest that qualification overheads will be higher in the wānanga and PTE sectors, since opportunities for economies of scale will be reduced.

Commercial and business qualifications are very popular with TEI students at all levels of study, engaging 21 percent of postgraduate and degree students, 32 percent of diploma students and 22 percent of certificate students. Humanities are also popular, particularly at degree level: 18 percent of students are studying for degrees in humanities. Students studying sciences are concentrated at degree and postgraduate level, with few students studying at diploma or certificate level. Education and teacher training qualifications are popular at diploma level, with 20 percent of diploma students studying in this area. Industrial trades and crafts (16 percent) and service trades (12 percent) are popular certificate level qualifications.

The majority of PTE qualifications are studied at certificate or diploma level (see Figure 4A). Within PTEs the most popular diploma level qualifications are service trades; art, music and handicrafts; education science and teacher training; and religion and theology. At certificate level, agriculture, horticulture, forestry and fishing; art, music and handicrafts; and service trades qualifications are the most popular. Among the small proportion of students who study at degree or postgraduate levels, religion and theology; commercial and business; and education science and teacher training are the most popular qualifications.

Since 1995, growth in TEI qualifications has been particularly strong in computing (the biggest growth area), education science and teacher training, general education and natural and applied sciences (Figure 4B). In each of these areas there are over 2500 more students enrolled than there were in 1995. In some fields of study the number of students has decreased over the last five years, going against the trend of increasing tertiary enrolments. There has been a decrease of over 4000 students in humanities and in industrial trades and crafts. There have also been smaller declines of fewer than 1200 students in agriculture, horticulture, forestry and fishing and engineering qualifications.

DIFFERENCES IN PATTERNS OF PARTICIPATION

Māori and Pacific students are over-represented in lower level foundation courses and under-represented in disciplines requiring scientific skills (Table 4.2). Literacy, and transport and communication are popular programmes of study with overseas

students, but industrial trades and crafts, law and education are less likely to attract overseas students. Males are over-represented in industrial trades and crafts, engineering, transport and communication, and are less likely to enrol in health and medical, and education qualifications.

Māori and Pacific participation in programmes of study within PTEs is higher than within TEIs, partly because of the heavy involvement of PTEs in targeted training programmes and the strong community link that many PTEs have with Māori and Pacific communities. PTEs differ from TEIs in the range of qualifications they offer and in student participation patterns.

At July 1999, PTE students were more likely than TEI students to be enrolled in qualifications in the service trades, religion and theology, and industrial trades and crafts. These students were, however less likely to be enrolled in higher level qualifications in law, and natural and applied sciences. There was a similar relationship between programme of study and gender among students enrolled in PTEs and those enrolled at TEIs. Within all tertiary education providers males were over-represented in engineering and industrial trades and crafts, while females were over-represented in medical and health, and education qualifications.

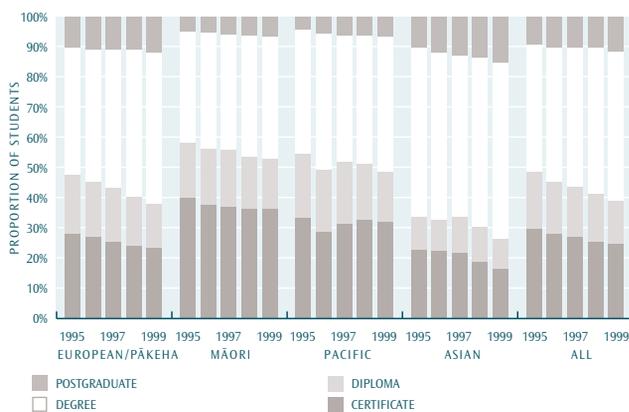
LEVELS OF QUALIFICATIONS

In 1999, 43 percent of all students were enrolled in degrees, 32 percent in certificates, 15 percent in diplomas and nearly 10 percent in postgraduate qualifications. Certificate programmes of study are mainly offered by polytechnics (which account for 64 percent of certificate students) and private training establishments (32 percent). Polytechnics are also the main providers of diploma courses, enrolling 64 percent of diploma students in 1999. Table 4.3 shows the distribution of formal students by level of qualification and type of provider.

Degrees have traditionally been the preserve of universities, but other types of institution are increasingly offering programmes of study at degree level. In 1999, 72 percent of degree students and 95 percent of postgraduate students were enrolled at a university. Polytechnics are also significant providers of degree level qualifications, and one in five degree students (21 percent) were enrolled in polytechnics in 1999.

Students are increasingly moving towards higher level qualifications. Since 1995 the number of TEI students studying in certificate and diploma qualifications has decreased (by 13.8 percent and

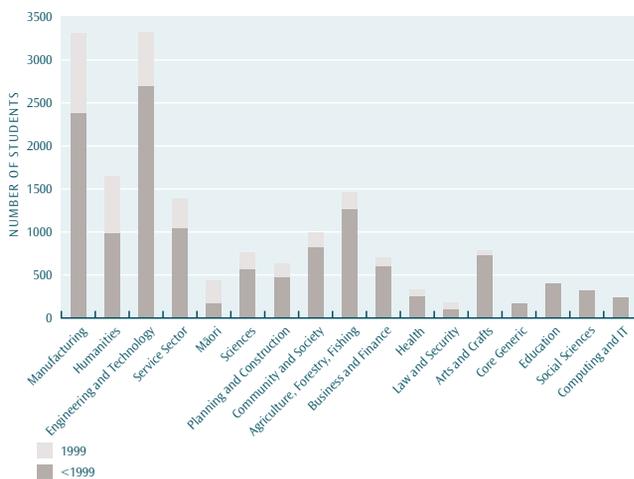
FIGURE 4C: STUDENT ETHNICITY IN TEIs BY LEVEL OF QUALIFICATION, 1995-1999



18.4 percent respectively), whilst the number of students studying degree and postgraduate qualifications has increased (by 22.6 percent and 29.5 percent respectively).

The trend for students to study in higher level qualifications is in part a reflection of many providers moving towards degree level qualifications (Figure 4A). In 1995, 18 percent of all college of education students and 10 percent of polytechnic students were studying in degree level qualifications; by 1999 these figures had increased to 53 percent and 23 percent respectively. Since 1995 the number of students studying in diploma level qualifications in colleges of education and universities has decreased. Since 1995 the number of students studying certificate level qualifications in polytechnics and universities has also decreased.

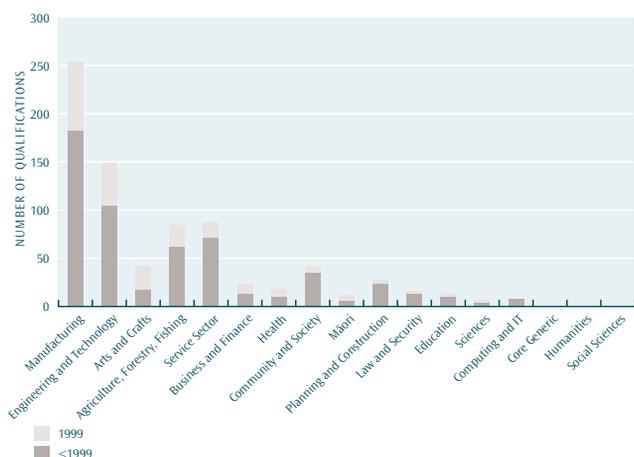
FIGURE 4D: UNIT STANDARDS REGISTERED BY FIELD OF STUDY BY YEAR



New Zealand Māori and Pacific students were more likely than other students to be studying at a lower level in 1999. In PTEs, for example, 95 percent of Māori and 85 percent of Pacific students were studying at certificate level, compared with 73 percent of European/Pākeha students. In TEIs, 62 percent of European/Pākeha students were studying at degree or postgraduate level compared with 47 percent of Māori and 51 percent of Pacific students²⁵.

Since 1995 the number of New Zealand Māori and Pacific students in higher level qualifications within TEIs has increased, but at a slower rate than that for European/Pākeha students (Figure 4C). Māori, Pacific, Asian and European/Pākeha students are, however, less likely to study lower level qualifications than they were in 1995. There has been strong growth in the number of Asian students enrolled in postgraduate level qualifications, more so than of any other ethnic group.

FIGURE 4E: NATIONAL QUALIFICATIONS REGISTERED BY FIELD OF STUDY BY YEAR



In contrast, international students are more likely to study certificate and diploma qualifications and less likely to study degree level qualifications than in 1995.

There are relatively small gender differences among students by level of qualification within TEIs. In 1999 women (52 percent) were more likely to be studying in degree level qualifications than men (47 percent). However, women (10 percent) were less likely to continue on with postgraduate level qualifications than men (12 percent).

NATIONAL QUALIFICATIONS FRAMEWORK²⁶

As previously noted, by the end of 1999 over 15 000 unit standards had been registered in the NQF's 17 fields. Figure 4D shows standards registered by field during and prior to 1999.

By 1999, 662 National Certificates and National Diplomas had been registered. Figure 4E shows the fields in which qualifications had been registered.

Of the 475 661 learners registered for the NQF, 113 238 (24 percent) were first registered in 1999.

The NQF now plays a significant role in both course-based and work-based education and training in New Zealand. In some areas National Certificates and National Diplomas have replaced previous qualifications. In most fields, (for example, carpentry, plumbing and electrical engineering) trade certificates have been phased out and replaced by National Certificates.

Many NQF qualifications have been developed for new or growing industries. There is significant uptake, for example, in computing, business administration, hospitality and seafood processing.

In other areas, the NQF has enabled nationally recognised qualifications to be developed where none existed previously. National Certificates in sport and recreation, call centre operations, cleaning and caretaking, crane operations and film and television are examples.

Equally significant is the wide availability of NQF qualifications. The modular nature of the qualifications has enabled learners and workers to gain credits towards qualifications outside traditional courses. Many mature workers have had their existing competencies formally assessed on the job and have subsequently received National Certificates. Industries in which this wider access to qualifications has been significant include forestry, seafood processing, cleaning and caretaking, dairy manufacturing, food handling, manufacturing and mechanical engineering, mental health, real estate and support of the older person.

There is a growing acceptance among tertiary providers that students can and should have access to assessment of their existing skills and knowledge prior to enrolling for a course of study. By the end of 1999 one major polytechnic was ready to open a facility dedicated to the assessment of prior learning and was planning to base most assessment on unit standards.

INDUSTRY AND TRANSITION TRAINING ADMINISTERED BY SKILL NEW ZEALAND²⁷

The Role of Skill New Zealand

Skill New Zealand (formerly the Education and Training Support Agency) is a Crown agency operating at the critically important interface of education and the labour market. A particular focus of Skill New Zealand is transition training programmes designed to assist people with low skills into employment or to move on to higher tertiary training and education. Skill New Zealand was established under the Education Amendment Act (1990) and is governed by a board appointed by the responsible minister. It reports directly to the Associate Minister of Education (Tertiary Education) through the board. The board's membership reflects the interests of industry, the wider community, and employee and employer organisations.

Skill New Zealand's legislative mandate comes from the Education Act (1989) (and subsequent amendments) and the Industry Training Act (1992). As a Crown agency, Skill New Zealand also operates within the framework of the State Sector Act (1988) and the Public Finance Act (1989). With approximately 200 staff, Skill New Zealand has a national office in Wellington and a network of 11 regional offices and three satellite offices around the country.

Skill New Zealand's range of initiatives is designed to build a highly skilled and adaptable workforce. These prepare school leavers to start their working lives, assist unemployed people to re-enter paid work, and offer training to raise the skills of people currently in employment.

The Agency works with many stakeholder groups including industry, educators, Māori and Pacific people. It purchases quality-assured training on behalf of Government for these groups. The Agency also works closely with Work and Income New Zealand, the Ministry of Education, Te Puni Kōkiri, the New Zealand Qualifications Authority, Workbridge, the Department of Labour and secondary schools.

Skill New Zealand contracts a wide range of education and training providers to develop innovative and effective learning pathways under Youth Training, Training Opportunities, Skill

²⁵ Ethnic breakdowns for both PTEs and TEIs exclude overseas students.

²⁶ Information in this section was supplied by the New Zealand Qualifications Authority.

²⁷ Information in this section was supplied by Skill New Zealand.

Enhancement and other training programmes. The Agency co-purchases industry training through Industry Training Organisations and also oversees a range of complementary initiatives at enterprise level aimed at identifying skill needs and improving productivity. A key development focus is on integrating capability skills such as literacy, numeracy and communication into workplace education and training.

Industry Training

Skill New Zealand supports training in most areas of industry through ITOs. The Industry Training Strategy was in its seventh year in 1999. Major focuses were on finalising new funding arrangements and the development of a new performance management system for the year 2000. The performance management system was piloted by a small group of ITOs during the first six months of 1999. The effect of the new arrangements was to focus ITOs more strongly on trainees' credit achievement and completion of qualifications. Significant achievements in industry training in 1999 included:

- a record number of employees with industry training agreements: 56 654 by 31 December 1999, an increase of 16 percent from 1998
- industry training extended to a much wider range of industries; about 76 percent of the workforce now potentially has access to formal work-based training, linked to the National Qualifications Framework, where training is available for entry level and intermediate occupations
- improved quality; about 95 percent of industry trainees are now linked to externally set competency standards and ITOs have established a network of over 11 000 workplace assessors.

Training Opportunities

Training Opportunities (part of the Training Opportunities Programme [TOP] until January 1999) is the most significant of the transition training programmes offered by Skill New Zealand in terms of both numbers of trainees and funding. It is currently funded through Work and Income New Zealand. Targeted towards long-term unemployed with low qualifications, people with disabilities, benefit recipients, refugees or ex-prisoners, Training Opportunities provides full-time, fully funded training options to targeted clients of Work and Income New Zealand and Workbridge, enabling them to develop skills and gain credits towards nationally recognised qualifications. This in turn assists them to move into employment or further education and training.

There are at least 1400 Training Opportunities courses running throughout the country, delivered by a diverse range of training providers and through more than 400 work-based options. At 30 June 1999 there were 408 Training Opportunities providers. Many PTEs specialise in Training Opportunities and/or Youth Training (see below). Eighty-eight percent of participants in Training Opportunities or Youth Training programmes attended PTEs in 1999; only 5 percent attended TEIs. Schools contributed 2 percent of places and government training establishments a further 1 percent. Employer-based programmes accounted for the remainder.

During 1999 there were 22 127 Training Opportunities trainees. Seventy percent had no qualification before entering the programme. Forty-nine percent had never been in full-time employment. Forty-two percent of trainees were Māori and 11 percent were of Pacific ethnic background, much higher proportions of these groups than are in the population generally. Gender balance was approximately equal, 49 percent of participants being women.

Youth Training

Youth Training (split away from the former Training Opportunities Programme in January 1999) is the brand name of a wide range of training options for school leavers aged under 18, with low or no qualifications. It is an education programme for those who have not succeeded in a classroom environment but are able to respond to a different educational setting. It allows young people to explore work options, expand their understanding of the world of work and develop job skills before moving into further education or employment. Over 5000 young people are in this programme at any one time.

At 30 June 1999 there were 334 providers offering Youth Training programmes, with 12 685 trainees undertaking programmes of study during the year. Eighty percent of trainees had no qualification before entering the programme and 86 percent had never been in full-time employment. Skill New Zealand has participation targets for Māori (45 percent), Pacific (10 percent) and female (45 percent) participation within this programme. Unlike most post-school programmes of study there were slightly fewer women amongst trainees, comprising 46 percent of the total. Forty-eight percent of trainees were Māori and 11 percent of Pacific ethnic background. These proportions are much higher than in the population generally. For example, only 20 percent of the 1996 census population aged 16-19 were Māori,

but 46 percent of Youth Trainees in the same age group were Māori. Similarly, 8 percent of the 1996 census population aged 16-19 was of Pacific ethnic background compared with 13 percent of the Youth Trainees in the same age range.

Skill Enhancement - Rangatahi Māia / Tupulaga Le Lumana’i

In line with the Government’s policy of Closing the Gaps, Skill New Zealand is committed to reducing education and employment disparities between Māori and Pacific peoples and others.

Skill Enhancement provides a bridge between school and work or further tertiary education in a wide range of skills, including trades skills, at Levels 3 and 4 on the National Qualifications Framework. Participants are Māori and Pacific people aged 16-21. There were 63 Skill Enhancement training providers in 1999.

During 1999, 1198 trainees attended Skill Enhancement training. Of these, 82 percent were Māori and 18 percent were Pacific. Forty percent of Skill Enhancement trainees had no qualification before entering the programme. Another 23 percent had only one or two School Certificate passes.

English for Migrants

This programme of study, offering English language training for migrants, was introduced in 1999. The target client group includes business migrants and non-principal applicants in general skills categories. The English for Migrants programme of study heralded a new approach to the purchase of training. In this case, purchase is not on behalf of the Crown but directly on behalf of the learner who has paid the tuition fee as part of the immigration process. Skill New Zealand identifies quality providers and contracts with them to provide a range of English language tuition options to suit the needs of migrants.

By 31 December 1999, 281 migrants had paid their tuition fee through the New Zealand Immigration Service. Of these, 26 had enrolled in English language programmes.

SECONDARY TERTIARY ALIGNMENT RESOURCE

The Secondary Tertiary Alignment Resource (STAR) assists schools to better meet the needs of their senior students. STAR funding (\$24.17 million for 1999) enables secondary schools to purchase or provide higher cost tertiary level qualifications. This allows students to take courses of study and/or workplace experience

that lead to skills and qualifications which promote their transition from school to either employment or further education.

STAR funding is not provided to fund courses that are conventionally taught in secondary schools. The range of subject/skill areas supported by STAR varies greatly among schools. Popular subject choices include hairdressing, electrotechnology, childcare, first aid, life skills, tourism, automotive, agriculture, horticulture, and food and hospitality.

Programmes of study supported in full or in part by STAR funding must be offered by providers registered with and accredited by NZQA. These may be schools themselves or a range of other tertiary providers. In 1999 there were 9230 STAR-funded students in TEIs, comprising 3 percent of all TEI students. Almost all the STAR students studied at polytechnics (there were 54 STAR students at The University of Waikato). Forty-one percent (3797) of all STAR students were enrolled at Manukau Institute of Technology.

COMMUNITY EDUCATION

Community education programmes were provided by four universities, 23 polytechnics and two colleges of education in 1999 and attended by about one in every 153 New Zealanders²⁸. Seventy-seven percent of TEI community education students in 1999 were enrolled at polytechnics. The majority of the 18 851 students enrolled were of mature age: 61 percent were aged 35 or more; only 17 percent were younger than 25. As in formal tertiary education, women were more likely to enrol than men: 62 percent of community education students at TEIs in 1999 were women.

Schools, mostly secondary, continued in 1999 to provide community education programmes for adults in addition to their regular daytime curriculum. Government-funded school community education programmes include adult basic education (such as numeracy, literacy, and English for speakers of other languages), Māori language and culture, training for volunteer community workers, parent education courses, courses developed to meet a defined community need, or personal development (such as life skills, anger management, and self-defence courses for women). Other activities, particularly recreational courses such as wine tasting, were offered by schools on a self-funded basis.

²⁸ 0.64 percent of the New Zealand resident population aged 16 or more.

Adult community groups continued to have access to CLANZ (Community Learning Aotearoa New Zealand) funding for non-formal community education activities in 1999. CLANZ gives priority to grant applications for projects and courses without easy access to other funding sources, which are organised by local and regional rather than national organisations, and which are conducted in small communities in rural settings. In 1999, 319 adult community groups sought total funding of \$741,563, of which 189 groups were recommended by CLANZ for grants totalling \$200,766.

PROVISION OF INFORMATION AND ADVICE ON CAREERS AND STUDY OPTIONS

Career Services – rapuara is a Crown entity that was established in 1990 to assist the achievement of government education, training and employment goals. It does this through the provision of information, advice and guidance services designed to help people make informed career choices.

Key clients include the Minister and Associate Minister (Tertiary) of Education, Work and Income New Zealand, Accident Compensation Corporation and a range of individuals and organisations which pay fees for services. The Minister of Education purchases various information and advisory services, which include:

- development and provision of career information
- promotion of the development and accessibility of career information to training and other organisations
- advice to individuals on how to best use career information
- provision of career planning services to target client groups who are unlikely to access such assistance through other channels.

Career Services – rapuara has also developed a leading internet-based career information system, KiwiCareers, which provides wide-ranging access to comprehensive career information. Through KiwiCareers, Career Services:

- encourages industry, employment and education organisations to provide relevant career-related information via the internet
- integrates the internet-based career information produced by other organisations into one national system
- produces information to address gaps in the provision of career information via the internet
- promotes the use of the national system (KiwiCareers) by career information providers and seekers.

Following a successful pilot in early 2000, Government is to fund CareerPoint, a free telephone-based careers information and advice service which will be available during business hours, weekday evenings, and for some time on Saturdays.

5 TERTIARY EDUCATION AND TRAINING OUTCOMES

FIVE

INTRODUCTION

THIS CHAPTER PROVIDES AN OVERVIEW OF OUTCOMES OF TERTIARY EDUCATION WITHIN NEW ZEALAND. INCLUDED IS SUMMARY INFORMATION ON COMPLETION OF QUALIFICATIONS AND PROGRAMME OF STUDY COMPLETIONS, AND SUBSEQUENT OUTCOMES FOR GRADUATES. RESEARCH OUTPUTS ARE ALSO REVIEWED.

As will be readily appreciated, data on student outcomes is difficult to collect, with considerable definitional and sourcing problems. In particular, comprehensive information on employment outcomes of students attending tertiary education providers other than universities and colleges of education is not available in New Zealand at present. Extreme care must therefore be taken in extrapolating any data to other parts of tertiary education where that information is not yet available.

Often providers have difficulty maintaining contact with past students, especially those who have participated in tertiary education and training for only a short time. Similarly, identification of whether individual student decisions about which programme or qualification to study impacts on their subsequent employment outcomes is more often than not confounded by other variables. Each individual's choices about participation in tertiary education are made within a unique framework of individual preferences, circumstances and influences. Much work needs to be done on understanding whether students' expectations of the outcomes of tertiary education and training are met. Furthermore, it is important to remember that benefits of tertiary education and training are not exclusively measurable in terms of employment outcomes. Other benefits (and opportunity costs) to society and to the individual are even more difficult to identify.

Measuring tertiary education outputs in terms of qualification completions can present a very incomplete picture of what is being achieved by tertiary education providers. There is an increasing trend for students to participate in tertiary education in different ways, for example by mixing periods of full-time and/or part-time study with periods of employment, or by undertaking individual courses within a qualification because of the career benefit those

courses might carry. Successive governments' policies to encourage lifelong learning have actively encouraged this flexibility. There are strong arguments, therefore, for the systematic collection of data on successful course completions rather than on qualifications alone. Many providers are already doing this.

GRADUATION FROM TERTIARY EDUCATION INSTITUTIONS

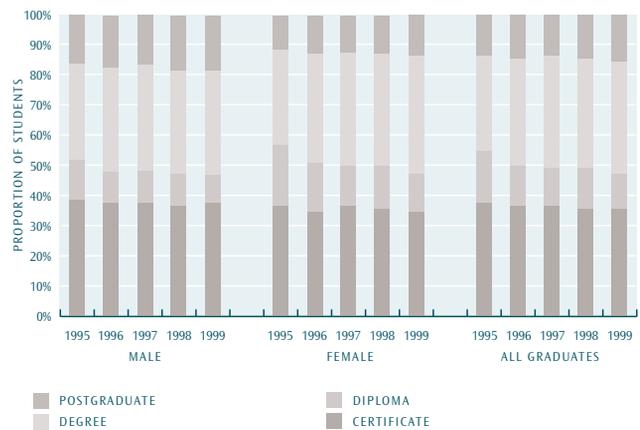
A total of 60 098 students completed 62 711 programmes of study within tertiary education institutions (TEIs) in 1999. This represents a 4.3 percent increase in the number of students who completed programmes of study over the previous year and a 31 percent increase since 1995. It is estimated that approximately 6 percent²⁹ of qualifications awarded in TEIs were national qualifications registered on the NQF. Almost all these students were studying in polytechnics. An unknown proportion of local qualifications offered by TEIs (and the polytechnics in particular) do include achievement of unit standards which lead towards the award of national qualifications.

The rise in the number of TEI students completing qualifications has largely followed growth in student numbers, with increasing proportions of students completing at degree or postgraduate level. In 1999 over half (53 percent) of all higher level qualification completions within TEIs were degree (38 percent) or postgraduate (15 percent) awards. This compares with less than half (45 percent) of all degree (32 percent) and postgraduate (13 percent) completions in 1995. Figure 5A shows that the trend towards higher level qualifications is accompanied by a decrease in the proportion of diplomas awarded since 1995 (17 percent in 1995 decreasing to 11 percent in 1999).

Since 1995, the number of female students who completed qualifications has increased by 39 percent, while the number of male students has increased by 21 percent. Sixty percent of all students who completed TEI qualifications in 1999 were female (36 130 in total).

Female graduates are less likely than male graduates to complete a postgraduate award or an undergraduate certificate, but are more likely to complete a degree or diploma. Since 1995 females have tended towards degree level awards at a greater rate than males, yet they were less likely to complete a diploma award in 1999 than they were in 1995 (Figure 5A).

FIGURE 5A: TEI GRADUATES BY LEVEL OF QUALIFICATION AND GENDER, 1995-1999



ETHNICITY

During 1999, 37 839 European/Pākeha students completed programmes of study at tertiary education institutions, representing around two-thirds (67.9 percent) of all domestic students completing programmes of study. In addition there were 8085 Māori graduates (15 percent), 1990 Pacific graduates (3.5 percent) and 5892 Asian graduates (10.6 percent)³⁰. The numbers of Māori and Pacific graduates are increasing at a greater rate than those of either European/Pākeha or Asian students. Since 1998 the number of European/Pākeha students who completed qualifications increased by 1.4 percent, whilst Māori graduates increased by 7.9 percent, Pacific graduates by 7.5 percent, and Asian graduates by 3.3 percent.

AGE

In 1999 an estimated 2.1 percent of the population aged 16 or more³¹ completed an award at a TEI, including 6.4 percent of those aged 16-24 and 1.2 percent of those aged 25 years or more. Of all award completions within TEIs in 1999, 51 percent were by students aged 16-24. Students in this age group accounted

²⁹ This estimate has been derived from NZQA statistics on cumulative completion data for 1993-1999. It has been assumed that proportions of Māori and non-Māori learners achieving in different sectors has not changed significantly during this time.

³⁰ See Table 3.6, p.32 for participation rates for these groups of students.

³¹ Based on Statistics New Zealand population estimates 1999.

TABLE 5.1: MOST POPULAR MAJOR SUBJECTS IN TEIs BY LEVEL OF QUALIFICATION, 1999

RANK	CERTIFICATE	DEGREE	POSTGRADUATE	ALL AWARDS
1	HOTEL AND RESTAURANT TRADES (1817)	NURSING (1793)	GENERAL ENGINEERING (540)	PRIMARY TEACHER TRAINING (2393)
2	FUNCTIONAL LITERACY (1231)	EDUCATION/EDUCATION STUDIES (1551)	BUSINESS ADMINISTRATION (453)	BUSINESS ADMINISTRATION (2124)
3	CARING PROGRAMMES (1140)	PRIMARY TEACHER TRAINING (1465)	PSYCHOLOGY (409)	NURSING (2074)
4	CLERICAL OR OFFICE SYSTEMS (850)	ACCOUNTANCY (1408)	MANAGEMENT (407)	HOTEL AND RESTAURANT TRADES (1862)
5	MECHANICAL REPAIR TRADES (805)	ENGLISH LANGUAGE/LITERATURE (1002)	EDUCATIONAL MANAGEMENT (296)	EDUCATION/EDUCATIONAL STUDIES (1787)
6	BUSINESS ADMINISTRATION (759)	SECONDARY TEACHER TRAINING (999)	MARKETING (267)	BUSINESS STUDIES (1752)
7	COMPUTER PROGRAMMING AND/OR ANALYSIS (645)	BUSINESS STUDIES (996)	MEDICINE AND SURGERY (245)	ACCOUNTANCY (1688)
8	BUILDING TRADES (596)	COMPUTER SCIENCE (879)	EDUCATION/EDUCATIONAL STUDIES (236)	ENGLISH LANGUAGE/LITERATURE (1614)
9	COMPUTER AWARENESS (594)	BUSINESS ADMINISTRATION/MANAGEMENT/MARKETING (857)	OTHER NURSING PROGRAMMES (213)	CARING PROGRAMMES (1245)
10	BUSINESS COMPUTING/INFORMATION SYSTEMS (583)	GENERAL LAW (786)	ENGLISH LANGUAGE (208)	PSYCHOLOGY (1240)

Note: Figures in brackets represent the number of graduates who majored in the subject.

for more than one-third (36 percent) of all postgraduate completions, and 61 percent of all degrees, 41 percent of all diplomas and 51 percent of all certificates completed in 1999.

Although 18-24 year olds form the core age group for tertiary study, a significant number will enrol and later obtain awards after their 24th birthday. Tertiary providers are increasingly catering for mature students by offering qualifications that appeal in terms of personal development or career enhancement. These factors account, in part, for the 49 percent of TEI students who obtain awards after their 24th birthday.

FIELD OF STUDY

Most completions in 1999 were in the following fields of study: commerce and business (19 percent), education (12 percent) and humanities (11 percent). Since 1995, growth in the number of graduates completing awards has been strongest in education, with approximately 3250 more completions since 1995, and commercial and business (around 1940 more completions than

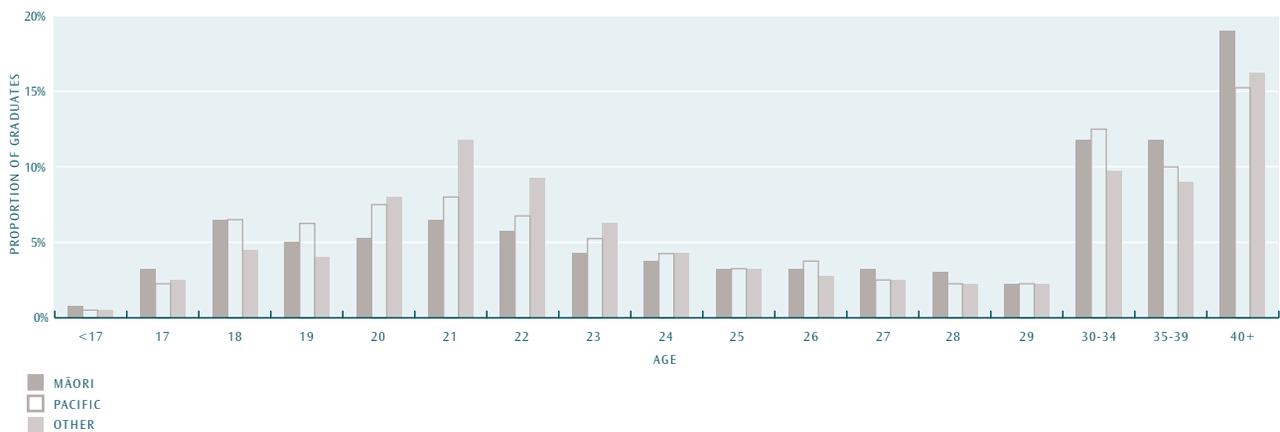
in 1995). There have also been increases in the number of graduates completing awards in computing, medical and health, social, behavioural and communication skills, and humanities, each producing over 1000 more graduates than in 1995. Science (including maths) graduates at doctorate level continue to grow in numbers, now making up 47 percent of total graduates.

SUBJECTS

The most popular subject majors in 1999 varied by level of qualification, although business subjects were among the ten most popular at each level (Table 5.1).

Female students are more likely to complete subject majors such as primary teacher training and nursing, where for every male student there are six and 15 female students respectively. Conversely, female students are less likely to complete subject majors such as computer science and engineering, where for every female student there are two and 10 males respectively.

FIGURE 5B: MĀORI, PACIFIC AND OTHER TEI GRADUATES BY AGE, 1999



COMPARISON WITH OTHER OECD COUNTRIES

New Zealand compares favourably with other OECD countries³² in the distribution of awards in many fields of study. New Zealand is above the OECD average in the proportion of graduates in higher level awards (degrees and postgraduates) in fields such as humanities, physical science and health and welfare. However, New Zealand has a lower proportion of graduates than the OECD average in fields such as education and engineering. In lower level qualifications (certificates and diplomas) New Zealand is above the OECD average in fields such as education and services, but below the OECD average in some fields, for example, engineering, and health and welfare (Table 5.2 *see over page*).

MĀORI AND PACIFIC GRADUATES

In 1999, 8085 Māori and 1990 Pacific graduates gained a tertiary qualification at a TEI, an increase of 46 percent in Māori and 49 percent in Pacific graduates since 1995. By comparison, 47 646 non-Māori (an increase of 28 percent since 1995), and 53 741 non-Pacific graduates (an increase of 29 percent since 1995), completed a tertiary qualification in 1999. As there are more female than male Māori and Pacific enrolments, there are more female Māori and Pacific graduates than male. In 1999, 61 percent of both Māori and Pacific graduates were women.

Māori, and to a lesser extent Pacific, graduates tend to be older than other graduates (Figure 5B). In 1999, 58 percent of Māori graduates and 52 percent of Pacific graduates were aged 25 years or more, compared with 49 percent of non-Māori and 50 percent of non-Pacific graduates. This, in part, reflects a greater

tendency for Māori and Pacific students to participate in tertiary education later in life.

Māori and Pacific graduates are more likely to gain awards from polytechnics than any other TEI (Figure 5C *see over page*). In 1999, 63 percent (5071) of Māori graduates, and 63 percent (1248) of Pacific graduates gained awards at polytechnics, compared with 46 percent (22 118) of non-Māori and 48 percent (25 941) of non-Pacific graduates. Both Māori and Pacific graduates are under-represented at universities: 24 percent (1957) of Māori and 27 percent (532) of Pacific graduates gained awards at universities in 1999, compared with 47 percent (22 197) of non-Māori and 44 percent (23 622) of non-Pacific graduates. A further 5 percent (443) of Māori and 9 percent (177) of Pacific graduates gained their award at a college of education, and 8 percent (614) of Māori graduates completed an award at a wānanga.

Since 1995, the number of Māori completing awards at polytechnics has increased by 32 percent (1221) compared with 30 percent (5159) of non-Māori graduates. Similarly, Pacific graduates of polytechnics have increased by 61 percent (474), whilst non-Pacific graduates have increased by 29 percent (5906). Even though there was a greater proportion of graduates among Māori than any

³² *Education at a Glance: OECD Indicators*. Paris: OECD Centre for Educational Research and Innovation, 2000. Caution must be exercised in drawing conclusions as the comparability of results between New Zealand and other OECD countries depends on all countries classifying qualifications in a similar fashion.

FIGURE 5C: MĀORI AND NON-MĀORI, PACIFIC AND NON-PACIFIC TEI GRADUATES, BY TYPE OF PROVIDER, 1999

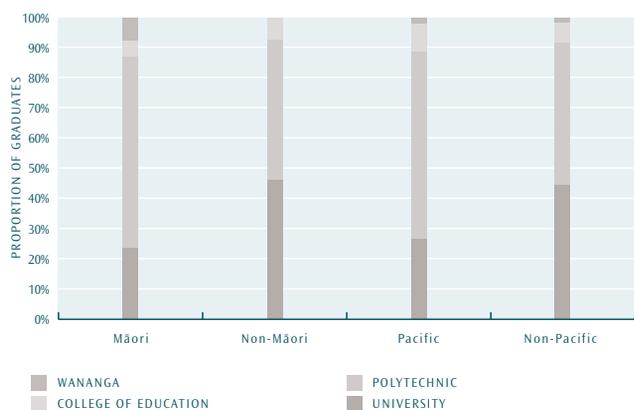


FIGURE 5D: MĀORI AND NON-MĀORI, PACIFIC AND NON-PACIFIC TEI GRADUATES, BY LEVEL OF QUALIFICATION, 1999

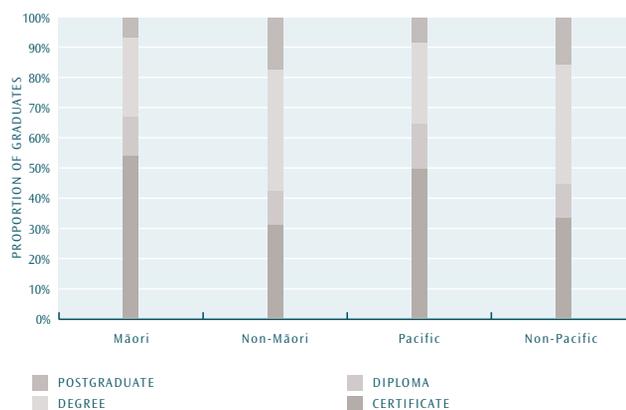


TABLE 5.2: PROPORTION OF QUALIFICATIONS BY FIELD: COMPARISON OF NEW ZEALAND AND OTHER OECD COUNTRIES, 1998

SUBJECT	POSTGRADUATE AND DEGREE		DIPLOMA AND CERTIFICATE	
	NEW ZEALAND	OECD AVERAGE	NEW ZEALAND	OECD AVERAGE
	%	%	%	%
SOCIAL SCIENCE, BUSINESS AND LAW	28.4	32.3	24.7	24.9
HUMANITIES AND ARTS	23.4	13.5	7.8	9.1
HEALTH AND WELFARE	14.1	11.4	8.4	16.2
PHYSICAL SCIENCE	11.8	3.3	0.3	0.5
EDUCATION	7.7	12.9	42.2	18.7
ENGINEERING, MANUFACTURING AND CONSTRUCTION	6.9	14.2	4.6	16.4
SERVICES	1.8	2.0	6.4	5.8
AGRICULTURE	1.8	2.5	3.1	2.3
COMPUTING	0.9	2.3	0.7	3.6
LIFE SCIENCE	0.4	3.2	0.9	0.5
MATHEMATICS AND STATISTICS	0.1	1.2	0.0	0.3
NOT KNOWN OR UNSPECIFIED	2.7	1.3	0.9	1.6

TABLE 5.3: MAIN FIELD OF STUDY OF MĀORI AND PACIFIC TEI GRADUATES, 1999

RANK	MĀORI		PACIFIC	
	FIELD OF STUDY	GRADUATES %	FIELD OF STUDY	GRADUATES %
1	HUMANITIES (1161)	14	COMMERCIAL AND BUSINESS (366)	18
2	EDUCATION (1076)	13	EDUCATION (273)	14
3	SOCIAL, BEHAVIOURAL AND COMMUNICATION SKILLS (1073)	13	HUMANITIES (182)	9
4	COMMERCIAL AND BUSINESS (938)	12	INDUSTRIAL TRADES AND CRAFTS (172)	9
5	SERVICE TRADES (594)	7	SOCIAL, BEHAVIOURAL AND COMMUNICATION SKILLS (156)	8
6	INDUSTRIAL TRADES AND CRAFTS (558)	7	SERVICE TRADES (128)	6
7	ART, MUSIC AND HANDICRAFTS (442)	5	MEDICAL AND HEALTH (118)	6
8	MEDICAL AND HEALTH (434)	5	COMPUTING (84)	4
9	AGRICULTURE, HORTICULTURE, FORESTRY AND FISHING (281)	3	GENERAL FOUNDATION PROGRAMMES (75)	4
10	COMPUTING (271)	3	ART, MUSIC AND HANDICRAFTS (73)	4

Note: Figures in brackets represent the number of Māori or Pacific graduates in each field.

other ethnic group in polytechnics in 1999 (Figure 5C), growth in Māori graduate numbers since 1995 has been higher in universities, colleges of education and wānanga. Since 1995, the number of Māori completing qualifications at universities has increased by 49 percent (647) and at colleges of education by 53 percent (154). Because wānanga were only established in 1993, numbers of enrolments and resulting graduates were low in 1995. Nonetheless, 101 qualifications were completed by Māori within wānanga in 1995, and by 1999 this had reached 614.

Qualifications Gained by Māori and Pacific Graduates

Degrees and certificates were the most common qualifications obtained by graduates overall in 1999. However, Māori and Pacific graduates were more likely than others to obtain certificates or diplomas. Certificates were gained by the majority of both Māori (80 percent) and Pacific (81 percent) graduates in the 16-20 age group, compared with 60 percent of non-Māori and 61 percent of non-Pacific graduates of these ages. Both Māori and Pacific graduates were less likely to receive higher level qualifications (degrees and postgraduate qualifications) than non-Māori and non-Pacific graduates (Figure 5D).

Over the past five years, an increasing proportion of Māori graduates have achieved higher level qualifications. Whereas 22 percent (1220) of Māori graduates completed at degree or

postgraduate level in 1995, by 1999 this had risen to 32 percent (2602). Of Pacific graduates, the proportion increased from 32 percent (425) in 1995 to 35 percent (691) in 1999.

Main Field of Study

The most common field of study for Māori TEI graduates in 1999 was humanities, closely followed by education, and social, behavioural and communication skills, all three fields having produced more than 1000 graduates. The most favoured field of study for Pacific graduates was commercial and business, which, together with education, accounted for almost one-third (32 percent) of all qualifications for Pacific graduates in 1999 (Table 5.3).

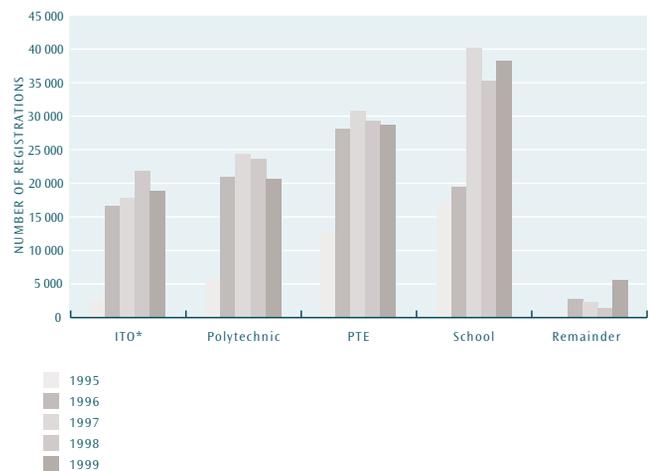
The gender imbalance among Māori graduates was most apparent in the fields of education (with a 1:3 male:female ratio) and medical and health (a 1:7 male:female ratio). Similarly, Pacific male graduates were less likely than Pacific female graduates to complete a qualification in education (a 1:7 male:female ratio) or medical and health (a 1:3 male:female ratio).

Both Māori and Pacific females are under-represented as graduates in fields such as industrial trades and crafts, and agriculture, horticulture, forestry and fishing. Māori males are six times more likely, and Pacific males 13 times more likely, to complete an industrial trades and crafts qualification than females of their

TABLE 5.4: NATIONAL CERTIFICATES MOST FREQUENTLY GAINED TO THE END OF 1999

NO. CERTIFICATES GAINED	FIELD OF STUDY
MORE THAN 7000	COMPUTING
MORE THAN 2000	BUSINESS ADMINISTRATION AND COMPUTING; FOOD HANDLING; TRAVEL
MORE THAN 1000	CARPENTRY; MOTOR INDUSTRY; SUPPORT OF THE OLDER PERSON
MORE THAN 500	BUSINESS ADMINISTRATION; EMPLOYMENT SKILLS; HAIRDRESSING; HORTICULTURE; TOURISM
MORE THAN 300	AGRICULTURE; CLEANING AND CARETAKING; COMMERCIAL ROAD TRANSPORT; DAIRY MANUFACTURING; DRAINLAYING; SEAFOOD PROCESSING; SECURITY
MORE THAN 200	AMBULANCE; ANIMAL CARE; EDUCATIONAL ACHIEVEMENT; ELECTRICAL SUPPLY; ENGINEERING; FOOD SAFETY; HUMAN SERVICES; MECHANICAL ENGINEERING; PLASTICS PROCESSING; PLUMBING; REAL ESTATE; RETAIL AND WHOLESALE; SCAFFOLDING; VETERINARY NURSING
MORE THAN 100	FOOD PROCESSING; AERONAUTICAL ENGINEERING; ARCHITECTURAL TECHNOLOGY; CIVIL CONSTRUCTION WORKS; EARLY CHILDHOOD EDUCATION AND CARE; ELECTRICAL ENGINEERING; ELECTRONICS; EQUINE; FURNITURE; GASFITTING; HOSPITALITY (FOOD, BEVERAGE AND COOKING); MANUFACTURING AND MECHANICAL ENGINEERING; MENTAL HEALTH (SUPPORT WORK); PAINTING AND DECORATING; PRINTING; SCIENCE; SEAFOOD VESSELS OPERATION; SOCIAL SERVICES; SOLID WOOD PROCESSING; SPORT

FIGURE 5E: ANNUAL LEARNER REGISTRATIONS BY TYPE OF PROVIDER, 1995-1999



Note: ITOs are not themselves providers of training, but most assess for NQF credits.

TABLE 5.6: NQF QUALIFICATIONS BY LEVEL AWARDED TO MĀORI AND NON-MĀORI LEARNERS, TO END OF 1999

LEVEL OF QUALIFICATION	MĀORI %	NON-MĀORI %
LEVEL 1	21	16.0
LEVEL 2	47	37.0
LEVEL 3	22	28.0
LEVEL 4	7	18.0
LEVEL 5	0.44	1.0
LEVEL 6	0.32	0.19
LEVEL 7	-	0.28

TABLE 5.5: ATTAINMENT OF NQF QUALIFICATIONS BY ETHNICITY, TO END OF 1999

ETHNICITY	PROPORTION OF ALL NQF REGISTRATIONS %	PROPORTION OF ALL NQF QUALIFICATIONS AWARDED %	PROPORTION OF MĀORI AND PACIFIC NQF-REGISTERED LEARNERS COMPLETING QUALIFICATIONS %
MĀORI	19.3	16.6	7.5
PACIFIC	7.2	5.9	6.0
OTHER	73.5	77.5	
ALL	100.0	100.0	6.7

TABLE 5.7: MĀORI AND NON-MĀORI NQF QUALIFICATIONS AND CREDITS BY PROVIDER, TO END OF 1999

TYPE OF PROVIDER	PROPORTION OF LEARNERS EARNING QUALIFICATIONS		PROPORTION OF LEARNERS GAINING CREDITS ON THE NQF	
	MĀORI	NON-MĀORI	MĀORI	NON-MĀORI
	%	%	%	%
PTE	53	38	40	35
POLYTECHNIC	26	33	26	23
ITO*	12	18	12	19
SCHOOL	4	6	12	17
WĀNANGA	2	0	1	0
OTHER	3	5	10	6

* ITOs are not themselves providers of training, but most assess for NQF credits.

ethnic group. Māori and Pacific males are twice as likely as their female counterparts to complete a qualification in agriculture, horticulture, forestry and fishing.

Since 1995 the greatest increases in Māori graduate numbers have been in education and in social, behavioural and communication skills, these fields having produced 475 and 444 more graduates respectively. Māori graduate numbers have also increased in humanities (210), commercial and business (182) and computing (174). Growth in Pacific graduate numbers since 1995 has been strongest in education and in commercial and business, these fields having produced 93 and 86 more graduates respectively. Pacific graduates have also favoured service trades and computing, 61 more qualifications having been completed by Pacific graduates since 1995.

QUALIFICATIONS ACHIEVED ON THE NATIONAL QUALIFICATIONS FRAMEWORK³³

NZQA awarded 13 815 national qualifications in 1999, an increase of 46 percent over 1998. This brings the total awarded since the establishment of the NQF to almost 32 000. Table 5.4 indicates the fields of study in which the greatest numbers of certificates were awarded in 1999.

Other areas in which significant numbers of certificates were gained include Design, Film and Electronic, Extractive Industries, Fencing, Fire and Rescue, Joinery, Journalism, Meat Retailing, Motor Industry, Te Reo Māori, Quantity Surveying, Pulp and Paper, and Telecommunications.

To be eligible to receive NQF credits and qualifications, learners must be registered for the NQF. In the initial years of the NQF,

the accredited organisation through which learners were registered was a significant indicator of NQF uptake.

Registration is for life and learners will move between providers, so in time most learners will be registered while at school, and post-school numbers of registrations can be expected to decline. Thus apparent declines in post-school numbers of learners registered by tertiary providers may simply indicate an increased tendency to register in schools. This statistic can not necessarily be taken as an indicator of provider activity. In Figure 5E, which shows annual learner registrations by sector from 1996 to 1999, school registrations were for both curriculum-related unit standards and industry-related unit standards.

In 1999, the most significant increase in the reporting of results occurred among ITOs. Growth continues also in PTEs.

THE NQF AND CLOSING THE GAPS

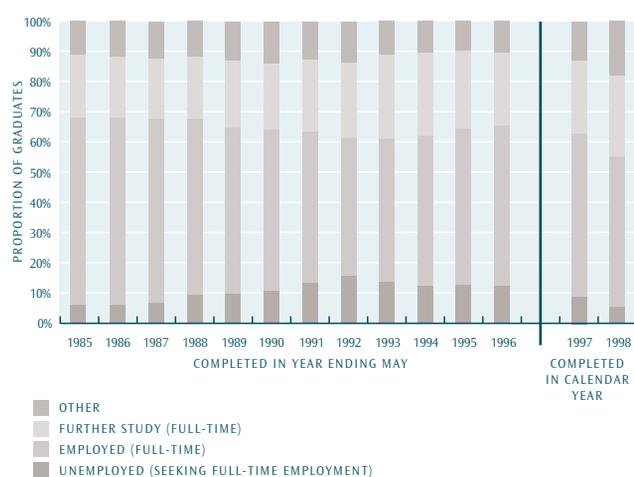
Access to education and assessment against NQF standards has been especially beneficial for Māori and Pacific learners. Qualifications are now available in more relevant industries and through a wider array of on-job and off-job assessment. The success of Māori and Pacific learners in gaining qualifications is comparable to their proportion in the population.

The growth in the private training sector has been significant for Māori. Of the 828 PTEs operating in 1999, approximately 178 identify as Māori PTEs. Overall, PTEs awarded 53 percent of all NQF qualifications and 40 percent of NQF credits gained by Māori. PTEs have registered 44 percent of all Māori learners.

33 Information and text provided by NZQA.

TABLE 5.8: NQF FIELDS IN WHICH MĀORI AND NON-MĀORI LEARNERS EARN CREDITS

NQF FIELD	MĀORI	NON-MĀORI
	%	%
SERVICE SECTOR	15	21
ENGINEERING AND TECHNOLOGY	8	15
AGRICULTURE, FORESTRY AND FISHERIES	18	13
SCIENCES	5	9
HUMANITIES	11	9
COMPUTING AND INFORMATION TECHNOLOGY	8	7
BUSINESS AND FINANCIAL SERVICES	8	7
PLANNING AND CONSTRUCTION	3	6
CORE GENERICS	9	5
MANUFACTURING	4	5
HEALTH	4	3
MĀORI	1	0
OTHERS: ART AND CRAFT, COMMUNITY AND SOCIAL SERVICES, EDUCATION, LAW AND SECURITY, SOCIAL SCIENCES	6	0

FIGURE 5F: DESTINATIONS OF UNIVERSITY GRADUATES

TABLE 5.9: ENROLMENT STATUS OF 1998 FIRST YEAR STUDENTS IN TEIs IN 1999

TYPE OF PROVIDER	IN SAME PROGRAMME OF STUDY	AT SAME INSTITUTION-DIFFERENT PROGRAMME OF STUDY	AT DIFFERENT INSTITUTION - SAME SECTOR	IN DIFFERENT SECTOR	NO LONGER ENROLLED AT A TEI
	%	%	%	%	%
UNIVERSITY	55.4	16.8	1.8	1.7	24.3
POLYTECHNIC	11.8	18.0	1.3	1.2	67.7
COLLEGE OF EDUCATION	41.8	25.4	0.3	3.0	29.6
WĀNANGA	11.8	22.9	1.3	2.3	61.7
ALL FIRST YEAR STUDENTS	32.4	14.1	1.5	1.5	50.6

TABLE 5.10: ENROLMENT STATUS OF 1998 FIRST YEAR STUDENTS (IN PROGRAMMES OF STUDY OF LONGER THAN ONE YEAR) IN 1999

TYPE OF PROVIDER	IN SAME PROGRAMME OF STUDY	AT SAME INSTITUTION-DIFFERENT PROGRAMME OF STUDY	AT DIFFERENT INSTITUTION - SAME SECTOR	IN DIFFERENT SECTOR	NO LONGER ENROLLED AT A TEI
	%	%	%	%	%
UNIVERSITY	63.1	15.4	1.9	1.6	18.1
POLYTECHNIC	47.1	6.6	1.2	1.4	43.8
COLLEGE OF EDUCATION	47.4	25.9	0.3	1.5	24.8
WĀNANGA	33.7	17.4	2.0	3.0	43.9
ALL FIRST YEAR STUDENTS	57.6	13.5	1.6	1.5	25.8

Tables 5.5, 5.6 and 5.7 (see previous page) compare outcomes for Māori and non-Māori on the National Qualifications Framework. Of all qualifications gained by Māori, 89 percent (4435) were at NQF Levels 1 to 3. NZQA and Māori have both identified achievements at higher levels as a high priority for the future.

Choices of options for study on the NQF differ between Māori and non-Māori learners and this raises interesting questions for future study. It has to be remembered, however, that the majority of certificate and diploma students in TEIs are studying either qualifications not based on unit standards, or are studying some unit standards within a local qualification. Nearly all degree qualifications are not registered on the NQF.

Table 5.8 compares Māori and non-Māori credits by field of study. Māori learners have gained 17 percent of their credits in agriculture, forestry and fisheries (compared with 13 percent for non-Māori) and 15 percent in the service sector (21 percent for non-Māori). Of all NQF qualifications awarded to Māori, 34 percent were in computing and information technology (22 percent for non-Māori).

CONTINUING STUDIES IN TEIS

Over the past decade or more the numbers enrolled at TEIs have increased significantly. Some of this increase will be due to students staying longer in the system and some due to more people accessing tertiary education (see p.28). Just as an increasing number of students indicates an increase in participation in tertiary education, so the length of time students spend in the system may be indicative of the depth of this education.

Changes in collection methods over the past five years have meant that it is possible, to a certain extent, to track students over their time in the tertiary sector. Table 5.9 indicates the proportion of students first enrolled at a TEI in 1998 who returned to study the following year.

Table 5.9 shows that of all 1998 first year students, just under half enrolled again in the following year. This indicates that approximately half the first year students enrolling at a TEI stay there for a year or longer. Students at polytechnics are less likely to stay longer than one year; only 32 percent of first year students re-enrolled the following year. Though polytechnics are offering more degree qualifications, they mostly offer shorter duration certificate qualifications and the return-to-study statistics reflect this. In other sectors, three-quarters of first year

university students returned to study the following year, as did 70 percent of those first enrolling at a college of education; and less than 40 percent of those enrolling for the first time at a wānanga.

Table 5.10 includes only those 1998 first year students who enrolled for a qualification longer than one year in duration and who did not expect to finish that qualification within the calendar year following their enrolment. The proportions of these students not continuing are more indicative of dropout rates (though some students will return to study later on).

Table 5.10 shows that university students are most likely to continue with their programmes of study, and polytechnic students least likely. Again, this may be due to the differences in the types of qualification offered by the various institutions. Polytechnics offer more work-related training and preparatory programmes of study and students taking these types of course may be more likely to move into work should opportunities arise.

Further analysis by age and ethnicity indicates that, in all sectors, students over 25 are very much less likely to continue with their studies. There are also consistent differences by ethnicity – Māori are less likely than European/Pākehā to continue their studies, with the biggest difference being in universities where 82.4 percent of European/Pākehā return compared with 68.7 percent of Māori. The retention rate for Pacific students is 73.6 percent and for Asian students 91.2 percent.

Compared with other OECD countries, New Zealand does well in retaining tertiary level students, with New Zealand's survival rate (the proportion of first year degree students who complete their degrees and graduate) being above the OECD mean.

GRADUATE DESTINATIONS

UNIVERSITY GRADUATE DESTINATIONS

Graduate destinations provide some insight into the value of qualifications gained. The New Zealand Vice-Chancellors' Committee publishes an annual report on university graduate destinations. The latest reports on 42.6 percent of New Zealand graduates who completed programmes of study in 1998.³⁴

³⁴ Earlier reports by the New Zealand Vice-Chancellors' Committee, *Graduate Employment in New Zealand*, on students who graduated in the years ending May 1985 to 1996, used a different methodology, and generally represented a far higher proportion of graduating university students.

The destination of university graduates is closely related to trends in the labour market. While unemployment increased in the late 1980s and early 1990s, greater proportions of graduates were unemployed, moved overseas, or returned to study (Figure 5F). The proportion of employed graduates started to grow in 1994 following improvements in the New Zealand economy. In 1998, the proportion of unemployed graduates seeking full-time employment (5.4 percent) was lower than that in 1997 (8.6 percent), suggesting a stronger demand for graduates in the workplace. However, in 1998, 18 percent of graduates travelled overseas or were not available for employment, compared with 13 percent in 1997.

The survey does not indicate the extent to which graduates take jobs relevant to their qualifications and training. However, of the 1998 graduates who were seeking full-time employment, 21 percent were already employed full-time, which suggests that one in five were not satisfied with the position they held.

OUTCOMES OF TEACHER TRAINING QUALIFICATIONS

Just under half of all graduates from teacher training qualifications in 1999 were employed in state schools as teachers in 2000. The remaining graduates are likely to have gained employment in private schools or chosen other fields of employment. The employment in state schools of graduates from teacher training

qualifications is highly dependent on the level of roll growth in schools which dictates the level of demand for extra teachers. Over the last few years between 75 percent and 91 percent of all primary teacher trainees and 60 to 80 percent of all secondary teacher trainees have gained positions in state schools within three years of graduating.

EMPLOYMENT OUTCOMES FROM TERTIARY STUDY

The contribution of tertiary qualifications to employment and income are important measures of the value of tertiary study.

Table 5.11 shows the unemployment rate by level of qualification.³⁵ The age group 25 to 34 has been selected because it represents the first period when most people have completed their initial tertiary education. Caution must be exercised, however, in drawing conclusions about the effect of tertiary qualifications below degree level because of the very broad and diverse range of post-school qualifications offered at these levels.

Tertiary qualifications below degree level do not appear to bring benefits over school qualifications in reducing unemployment rates, but gaining a degree is associated with a reduced unemployment rate relative to that of those whose tertiary qualifications are below degree level.

TABLE 5.11: UNEMPLOYMENT RATE BY QUALIFICATION (25-34 AGE GROUP), 1990-1999

HIGHEST QUALIFICATION	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
DEGREE, INCLUDING POSTGRADUATE	3.3	6.0	4.8	4.7	4.3	3.4	2.5	4.6	4.7	3.0
OTHER TERTIARY QUALIFICATION	5.4	8.3	8.0	8.1	6.2	3.6	4.5	5.4	5.6	6.1
6TH OR 7TH FORM QUALIFICATION	4.5	8.8	7.1	6.0	3.2	1.4	3.1	3.4	5.6	3.1
SCHOOL CERTIFICATE	5.7	9.8	9.7	8.5	7.7	6.2	4.1	6.8	8.1	5.7
NO QUALIFICATION	13.5	19.6	20.5	20.2	16.4	11.4	13.1	12.1	15.9	13.3

TABLE 5.12: AVERAGE INCOME BY QUALIFICATION (25-34 AGE GROUP) IN 1999

	NO QUALIFICATION	SCHOOL CERTIFICATE	6TH OR 7TH FORM SCHOOL QUALIFICATION	OTHER TERTIARY QUALIFICATION	DEGREE, INCLUDING POSTGRADUATE
MALE	\$28,900	\$32,000	\$38,000	\$36,600	\$47,500
FEMALE	\$19,600	\$21,800	\$30,500	\$25,500	\$37,000
TOTAL	\$25,400	\$26,800	\$34,400	\$31,900	\$42,500

Note: Only income from work (including self-employment) is included. Data for 1999 was derived from the June quarter of Statistics New Zealand's Income Survey Supplement, whereas data discussed in last year's edition of this report was derived from the Household Economic Survey.

Table 5.12 shows average income by qualification (25-34 age group), in 1999. Gaining a degree is associated with greater gains in income from work. However, in 1999 a tertiary qualification below degree level was associated with a lower income compared with a sixth or seventh form qualification.

In 1999, men earned more on average than women at each qualification level, and also showed a greater income gain between gaining a degree and gaining a sixth or seventh form qualification.

TRANSITION TRAINING OUTCOMES³⁶

TRAINING OPPORTUNITIES

Training Opportunities is designed as an intervention to achieve employment and further training outcomes for eligible clients of Work and Income New Zealand. This has been attained through the following achievements:

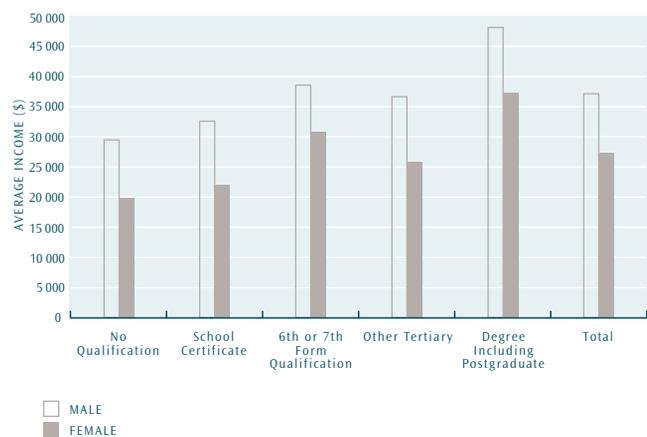
- almost 11 500 moved into further education, training or employment on leaving the training programme in 1999
- more than 16 000 gained credits on the National Qualifications Framework, each trainee achieving 20 credits on average
- around 42 percent of trainees leaving Training Opportunities in 1999 were Māori; 57 percent of Māori trainees achieved positive outcomes of either employment or further education and training
- the proportion of trainees achieving a positive outcome increased by 6 percent to 60 percent (comprising 50 percent who moved into employment and 10 percent who progressed into further training or education outside the training programme).

YOUTH TRAINING

Skill New Zealand's goal for Youth Training in 1999 was to clearly position it for the year 2000 as an effective education and labour market programme of study for young low-qualified school leavers. During its first year, outcomes from Youth Training were as follows:

- 64 percent of trainees, or 7000 people, who left Youth Training in 1999 achieved a positive outcome; most of these (38 percent of all trainees) moved into employment while the remainder (26 percent of all trainees) progressed into further training or education outside the training programme
- around 9500 trainees obtained credits on the National Qualifications Framework, each gaining 17 credits on average
- around 45 percent of trainees in 1999 were Māori, of whom 57 percent moved on to further training or employment.

FIGURE 5.G: AVERAGE INCOME BY QUALIFICATION (25-34 AGE GROUP) BY GENDER, 1999



INDUSTRY TRAINING OUTCOMES

At present, data collected on outcomes of industry training facilitated by the Industry Training Organisations is limited, with no consistent or reliable data set for achievement currently available. The Performance Management System currently being introduced by Skill New Zealand will remedy this for 2000 and provide detailed information on the outcomes for each ITO trainee.

³⁵ The unemployment rate is defined as the number of 25-34 year olds who are unemployed as a proportion of the labour force in the same age group. These figures are derived from the June quarter of Statistics New Zealand's *Household Labour Force Survey*.

³⁶ Data provided by Skill New Zealand.

SKILL ENHANCEMENT OUTCOMES

Rangatahi Māia / Tupulaga Le Lumana'i (Skill Enhancement) was positioned from 1999 as the premier vocational training for young Māori and Pacific people. Throughout the year its performance was enhanced and achievements included:

- 70 percent of students (700 people) who left Skill Enhancement in 1999 achieved a positive outcome; more than half of these progressed into further training (38 percent of all on the training programme) and the remainder into full-time employment (32 percent of all on the training programme)
- outcomes improved in 1999, by 2 percent over the previous year
- 71 percent of Māori students and 67 percent of Pacific students moved into further training or employment
- 699 students achieved credits on the National Qualifications Framework.

NON-FINANCIAL INDICATORS OF PERFORMANCE QUALITY AND OUTCOMES FOR TERTIARY EDUCATION PROVIDERS

TERTIARY EDUCATION INSTITUTIONS

As well as the financial and research performance indicators on which institutions may be evaluated, institutions report annually on a range of non-financial performance indicators. A number of these are quantitative, such as level of demand in terms of student numbers, student profiles (including ethnicity), staffing numbers (including ethnicity), ratios of staff to students, and numbers and types of qualifications conferred.

Others are to do with 'quality', such as measures of student satisfaction, successful completion or achievement rates³⁷, and surveys to determine graduate destinations, whether to employment or further study.

The tertiary education sector does not have common definitions and methods of evaluating quality and this also extends to some of the quantity measures. This means that, although many institutions are incorporating performance measures into their annual reports, it is still not possible to reliably compare the performance of different institutions.

The Association of Polytechnics in New Zealand (APNZ) has been collecting benchmark data from polytechnics each year since 1994. The report of the polytechnic benchmark data covers student fee contributions, student and qualification profiles

(using Ministry of Education data), financial profiles, staff profiles and award category profiles.

A small number of institutions also benchmark various aspects of their performance with overseas institutions.

PRIVATE TRAINING ESTABLISHMENTS

Where a grant has been paid to the governing body of a private training establishment under section 238A of the Education Act (1989), the governing body is required to provide the Secretary of Education with an audited Statement of Service Performance by 31 March of the year following the receipt of the grant.

The Statement of Service Performance is expected to report on actual performance in relation to the performance indicators set for each of the outputs contained in the PTE's Statement of Objectives. Each establishment develops objectives and associated performance measures relative to its own mission statement and goals. Performance reporting is therefore against self-selected targets.

While reported student satisfaction for most courses was at or above target level, achievement rates of students were often at variance with the targets set, with approximately 20 percent of providers sampled reporting targets not being met by a variance of more than 20 percent. Similarly, about 12 percent of the sample reported that the course completion rate target was not met by a variance of more than 20 percent. It should be noted, however, that many of the courses provided and reported on had fewer than 20 participants and the performance of a few students impacted significantly on set targets. The Ministry will monitor these providers over the next academic year and explanations for a continuation of the low completion or graduation rates will be sought.

Equal Education Opportunity objectives reported include indicators for tertiary students with disabilities and for Māori and Pacific students. For each of these indicators, the proportion of establishments meeting set targets was significantly higher than those not achieving set targets. Most establishments also included a gender indicator and about 70 percent achieved their targets in this respect.

RESEARCH ACTIVITIES OF TERTIARY EDUCATION INSTITUTIONS

The following section summarises some of the key areas noted in annual reports³⁸. It is not comprehensive, as there is a wide range of research being undertaken, in a variety of different forms. A number of institutions only summarised or specifically identified a small amount of research activity in their annual report, as it is provided in a separate report. Areas of endeavour particularly noted in annual reports included health and medicine, environmental issues, information systems and technology, science, and Māori development.

The major research activity takes place in universities. However, polytechnics have also reported more research activity in their areas of expertise. Some institutions, such as wānanga and some polytechnics, are only just starting to develop their research activities in a more structured way, and are seeking to increase their staff's knowledge of research, develop a research culture and service and develop a research strategic plan.

Many institutions commented on developments in their research infrastructure – the framework and organisation of research activities undertaken within their respective institutions. These have included the establishment of (additional) research centres or activity clusters that have a specific focus on broad themes of research activity. Other institutions have established research offices, or coordinators to improve the coordination of research opportunities and connections.

GAINING CONTESTABLE FUNDING FOR RESEARCH

The university sector has been particularly successful in gaining contestable research funding from the Health Research Council (HRC) and the Marsden Fund.

The HRC is the government agency responsible for purchasing health research, purchasing approximately 60 percent of the New Zealand total. In 1999/2000, the HRC allocated \$43.45 million (GST inclusive) of contestable funding for health research. Ninety-one percent of this was awarded to researchers based in universities.

The Marsden Fund, administered by the Royal Society of New Zealand, is designed to fund basic, untargeted research. In the 1999 funding round the Marsden Fund announced 74 new research grants totalling \$9.59 million, from a total

of 773 applications. The universities were awarded contracts representing 80.5 percent of the funding allocated for the duration of the research programmes (usually 3 years). The remainder went to Crown Research Institutes (CRIs), research institutes and private individuals.

It is notable that more than half the funded projects involved researchers at different institutions. For contract administration, one of the institutions involved in the contract is designated the organising institution so the funding allocation for an institution may include subcontracts to other institutions. It is also notable that approximately one-third of the funded projects in the university sector involved overseas researchers.

The Public Good Science Fund, (PGSF) administered by the Foundation for Research, Science and Technology, is designed to fund targeted research contracts which generate outputs of benefit to the New Zealand economy and society. In contrast to HRC funding and the Marsden Fund, the universities only access a minor proportion of this fund, the majority of contracts being won by the Crown Research Institutes. For the 1999/2000 round, tertiary education institutions were allocated as prime contractors just under \$22 million from this fund (7.4 percent of the \$297.5 million allocated)³⁹. This represents a small increase on contracts allocated to the sector in 1998 (\$20.1 million from \$290.7 million). All but \$75,000 of the 1999 allocation was to the universities (Auckland Institute of Technology being the only other TEI to gain funding).

Universities were major contributors⁴⁰ in the following discipline areas:

- Tourism, Commercial and Other Services: 65 percent of funding
- Society and Culture: 77 percent of funding
- Information and Communications Networks and Services: 60 percent of funding.

³⁷ Generally defined as the percentage of students successfully completing a paper/course in which they have enrolled.

³⁸ Analysis based on the 1999 annual reports of all universities, colleges of education, wānanga and 20 of the 24 polytechnics.

³⁹ These figures do not include subcontracts from other organisations allocated PGSF funding. Subcontract arrangements with universities were worth at least another \$4.2 million.

⁴⁰ Percentages calculated over the 1998-2000 PGSF funding round.

TABLE 5.13: UNIVERSITIES' RESEARCH OUTPUTS
(EXCLUDING THESES) PER ACADEMIC STAFF (FTE), 1999

UNIVERSITY	OUTPUTS	ACADEMIC STAFF (FTE)	OUTPUTS PER ACADEMIC STAFF (FTE)
THE UNIVERSITY OF AUCKLAND	5 214	1 489	*3.50
UNIVERSITY OF CANTERBURY	1 308	599	2.18
LINCOLN UNIVERSITY	828	190	4.36
MASSEY UNIVERSITY	**2 769	^988	2.78
UNIVERSITY OF OTAGO	2 917	1 475	2.00
VICTORIA UNIVERSITY OF WELLINGTON	1 055	589	*1.79
THE UNIVERSITY OF WAIKATO	1 051	662	*1.59

* Ratios not stated in annual report; this figure has been calculated.

** Including duplicates (without duplicates total publications = 2683).

^ Total = 1231 when Wellington Polytechnic academic staff FTEs included.

RESEARCH OUTPUTS IN THE UNIVERSITY SECTOR

The various forms of research output reported include seminars, exhibitions, publications (eg, books, chapters, commissioned reports and periodicals), theses, conference presentations, creative performances and television productions. Some institutions reported projects funded by external grants, and collaborations with external agencies and industries, both in New Zealand and overseas. Several institutions, including most universities, identified the achievement of increases in external research funding/contracts. All universities quantified their research outputs in their annual report, and some converted these to a ratio per full-time equivalent academic staff member (Table 5.13). This data should, however, be treated with caution: there is some uncertainty about consistencies of definitions for research outputs, both between institutions and between disciplines.

6 RESOURCING FOR TERTIARY EDUCATION

SIX

INTRODUCTION

Government support for tertiary education was provided by various means in 1999, including:

- tertiary education and training subsidies, providing funding for teaching and accompanying research by subsidising equivalent full-time student (EFTS) places in approved qualifications
- training for designated groups, which involves purchasing training linked to the National Qualifications Framework and the purchase of either fully or partially funded on-job and off-job training places
- community education, where funding is provided for the delivery of non-formal community and adult education courses through schools and other agencies
- tertiary education scholarships for Māori and Pacific tertiary students who meet established criteria
- tertiary education doctoral, enterprise and university bursary scholarships
- student allowances to assist students from low income families, who are studying in recognised tertiary qualifications, with living expenses
- student loans, where funds are loaned to eligible students to assist with the costs of tuition fees, course-related expenses and living costs
- training benefits (Community Wage – Training) and training incentive allowance, delivered through Work and Income New Zealand.

In addition to these areas, Government provides funds for the management and administration of the tertiary education sector, with funding allocated to:

- the Ministry of Education for
 - policy advice on various aspects of the tertiary education system, anticipating future opportunities and pressures, identifying priorities for improvement, developing options to improve the effectiveness of the tertiary education system, and recommending appropriate legislative change
 - Ministerial services to assist the Minister and Associate Ministers to meet their obligations to Parliament, primarily through drafting replies to questions and inquiries put to the Minister and his associate(s) or responding to inquiries directly
 - facilitating the purchase of services from third parties on behalf of the Crown
 - advice on the long-run capability and viability of tertiary education institutions and education Crown entities. This includes advising on Ministerial appointments to governing bodies, advising on strategic objectives for individual entities and taking follow-up action with governing bodies and management as required
 - provision of information to both consumers and providers of tertiary education services to address information gaps and other inequalities between various participants
 - administration of tertiary education sector resourcing, involving the distribution of resources to participants in the sector, including consumers (students)

- Career Services – rapuara, Skill New Zealand, and NZQA for the provision of tertiary information and advisory services to the public, community groups, industry, and the education community
- the management of grants and contracts, including for the purchase and delivery of targeted education and training programmes, and administration of tertiary scholarships
- the development, registration, maintenance and review of unit standards and qualifications on the National Qualifications Framework, including the establishment and support of national standards-setting bodies.

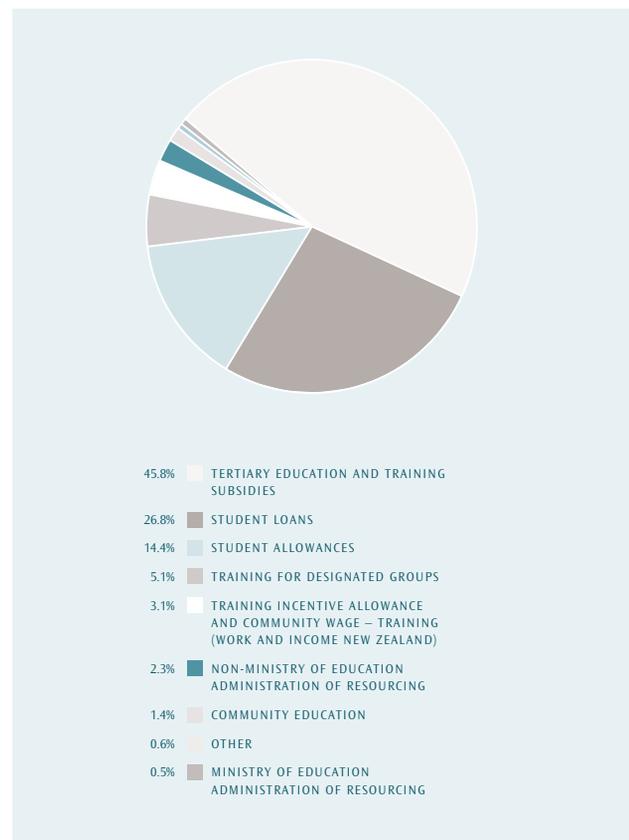
TOTAL GOVERNMENT FUNDING OF THE TERTIARY EDUCATION SECTOR

Funding for the tertiary education sector was provided by the Government in 1999 through Vote Tertiary Education. The 1999 Estimates of Appropriations bring together all government spending on the sector, except for community education provided through the school system and for income support and services for students provided by Work and Income New Zealand. Comparisons with earlier years are difficult as many of the output classes in Vote Tertiary Education, especially related to Ministry of Education funding, were previously reported within broader classes, such as funding for all policy advice.

Figure 6A and Table 6.1 (*see over page*) look specifically at the 1998/99 and 1999/2000 financial year funding for tertiary education according to the new structure for Vote Tertiary Education, plus the relevant elements from Vote Work and Income. Appropriations through Vote Work and Income are made to cover Training Incentive Allowances, the Community Wage – Training, and services to students (for administration of the student allowances scheme).

For 1999/2000 the estimated appropriation for tertiary education is \$2.68 billion. Of this, \$1.96 billion is for expenditure and \$0.72 billion is capital contributions provided through the student loan scheme.⁴¹ This expenditure includes appropriations in Vote Tertiary Education as well as appropriations in Vote Work and Income.

FIGURE 6A: GOVERNMENT APPROPRIATIONS FOR TERTIARY EDUCATION, 1999/2000



⁴¹ *Estimates of Appropriations for the Government of New Zealand For the Year Ending 30 June 2001, vols 1 and II.*

TABLE 6.1: GOVERNMENT APPROPRIATIONS FOR TERTIARY EDUCATION, 1998/99 AND 1999/2000

	1998/99*		1999/2000	
	\$000	% OF TOTAL	\$000	% OF TOTAL
MINISTRY OF EDUCATION	\$23,990	0.9	\$12,604	0.5
POLICY ADVICE AND OTHER SERVICES	\$2,577	0.1	\$3,733	0.1
OWNERSHIP ADVICE**	\$2,274	0.1	\$1,825	0.1
ADMINISTRATION OF RESOURCING	\$19,139	0.7	\$7,046	0.3
NON-MINISTRY MANAGEMENT AND ADMINISTRATION	\$170,279	6.4	\$202,040	7.5
PROVISION OF INFORMATION AND ADVISORY SERVICES	\$14,685	0.6	\$13,813	0.5
SERVICES TO STUDENTS	\$12,821	0.5	\$42,067	1.6
MANAGEMENT OF CONTRACTS	\$7,191	0.3	\$6,927	0.3
DEVELOPMENT OF STANDARDS AND QUALIFICATIONS	\$3,887	0.1	\$2,976	0.1
TRAINING FOR DESIGNATED GROUPS	\$131,695	4.9	\$136,257	5.1
BENEFITS AND OTHER UNREQUITED EXPENSES	\$491,933	18.5	\$476,843	17.8
STUDENT ALLOWANCES	\$391,603	14.7	\$386,162	14.4
TRAINING INCENTIVE ALLOWANCE AND COMMUNITY WAGE – TRAINING	\$94,644	3.6	\$83,311	3.1
TERTIARY SCHOLARSHIPS	\$5,686	0.2	\$7,370	0.3
OTHER EXPENSES	\$1,246,753	46.8	\$1,262,245	47.1
COMMUNITY EDUCATION	\$34,916	1.3	\$37,016	1.4
TERTIARY EDUCATION AND TRAINING SUBSIDIES	\$1,211,837	45.5	\$1,225,229	45.8
CAPITAL CONTRIBUTIONS	\$731,365	27.5	\$723,823	27.0
STUDENT LOANS***	\$728,979	27.4	\$717,005	26.8
OTHER CAPITAL CONTRIBUTIONS	\$2,386	0.1	\$6,818	0.3
TOTAL FUNDING	\$2,664,320		\$2,677,555	

* The 1998/99 figures for Tertiary Education are estimates of what the appropriation would have been for Vote Tertiary Education 1998/99.

** In 1998/99 and 1999/2000 the Ownership Advice figure included an appropriation for the establishment of a quality assurance authority.

*** It was estimated for the 1999/2000 budget that 89 percent of this figure would be repaid.

FUNDING PUBLIC TERTIARY EDUCATION PROVIDERS

Government funding for public tertiary institutions⁴² was predominantly delivered in 1999 by way of bulk grants. These grants were determined by a funding formula based on an equivalent full-time student (EFTS) unit, where 1.0 EFTS is defined as the student workload that would normally be carried out by a full-time student in a single academic year. The tuition subsidies (discussed below) are a contribution towards the cost of tertiary education and training – they do not cover the full cost of tuition. It is estimated by the Ministry that

in 1999 the Government provided, on average across the whole TEI sector, a 72.4 percent contribution towards the cost of tuition of domestic students. From these grants, and other revenue they may generate, institutions meet all their own costs. Until 1998 tertiary funding was provided by the EFTS bulk funding system which was introduced in legislation passed in 1990. Key principles of this system were that tertiary institutions are:

- funded on the basis that similar courses of study in different institutions are funded similarly

- free to set tuition and other fees which are charged to students to cover the additional costs of providing courses of study which the tuition subsidies do not cover
- able to develop their own specialisations and courses of study to meet and respond to student demand
- able to make their own decisions about how their bulk grants are spent, in order to meet their objectives and the delivery of agreed outputs.

All qualifications are grouped into classifications, which have one or more funding categories, with associated Study Right or non-Study Right funding rates.⁴³ Prior to 1999, Government determined the total number of EFTS places that were funded and available for distribution each year. Institutions were bulk funded on the basis of their approved EFTS places within the course classifications and associated Study Right subsidy rate. Government grants were also made to approved private training establishments on a modified EFTS basis.

In 1999, the EFTS Bulk Funding System was replaced by the Universal Tertiary Tuition Allowance, paid to approved tertiary education providers, including a wider range of private tertiary education providers. This tuition subsidy was paid for all domestic students enrolled in approved qualifications at accredited providers. The main change to the previous system of funding in 1999 was that subsidies would henceforth be delivered on the basis of actual enrolments, and as such not be 'capped' by a predetermination of how many EFTS places would be funded. The amount of the tuition allowances continued to be calculated according to the EFTS formula.

SPECIAL PURPOSE GRANTS

SPECIAL SUPPLEMENTARY GRANTS

Special supplementary grants may be provided to TEIs for purposes that cannot be readily or appropriately funded through the EFTS formula, or where special conditions are applied to the use of the grant. The Education Act (1989) makes provision for the payment of one or more special supplementary grants out of money held by Parliament for the purpose.⁴⁴ The Minister, or his delegate, ensures that no special supplementary grant is paid before the council of the TEI receives written notice of the purposes for which the grant is to be used.

Over \$29 million was allocated for special supplementary grants in 1999. These grants support functions such as the Mangere

Refugee Centre in Auckland, coordination of a Skills Olympics programme which has a focus on trade training, aspects of medical training, or various special education provisions that support student learning. Of the total funding for special supplementary grants in 1999, approximately \$17 million supported wholly research programmes in tertiary education institutions (mainly universities). In 1999, \$4.7 million was allocated to tertiary education institutions to improve the access of students with disabilities to educational opportunities.

GRANTS TO OTHER TERTIARY EDUCATION PROVIDERS

The Education Act (1989) also allows the Minister to recognise an organisation that provides any education service or facility, and to pay this body a grant out of public money held by Parliament for the purpose. Thirteen other tertiary education providers were funded using this mechanism in 1999.

Over \$11 million was provided in 1999, as in 1998, through this section of the Education Act to these 'other providers'. Those providers receiving over \$1 million from this source were: Te Kōhanga Reo National Trust (\$2.01m), Literacy Aotearoa⁴⁵ (\$1.76m), the National Association of ESOL Home Tutor Schemes (\$1.9m), and the New Zealand Childcare Association (\$1.08m).

FUNDING FOR PRIVATE TRAINING ESTABLISHMENTS

Before 1990, students studying at private training establishments were not subsidised by the government. Since then, however, there has been competitive tendering for targeted training programmes funded by government and, since 1992, funding has been available on an EFTS basis. Generally, therefore, PTEs receive government funding through a number of mechanisms, including:

- Industry Training
- Training Opportunities
- Youth Training

⁴² Universities, polytechnics, colleges of education and wānanga.

⁴³ Study Right is a policy that was designed to encourage school leavers and certain beneficiaries to undertake tertiary education, by provision of a higher rate of subsidy for those groups – 95 percent of a base tuition subsidy rate compared to 75 percent for non-Study Right eligible students. The Tertiary Education Review White Paper of late 1998 included a key decision to phase out Study Right by 2001 with 2000 being a transition year. The funding rates in 2001 are, therefore, differentiated only by subject content and qualification type (eg, non-degree, degree, etc).

⁴⁴ Section 199 (1) (b).

⁴⁵ Formerly the Adult Reading and Learning Assistance Federation.

FIGURE 6B: BULK FUNDED EFTS FUNDING AND AVERAGE SUBSIDY PER EFTS ACHIEVED, 1991–1999

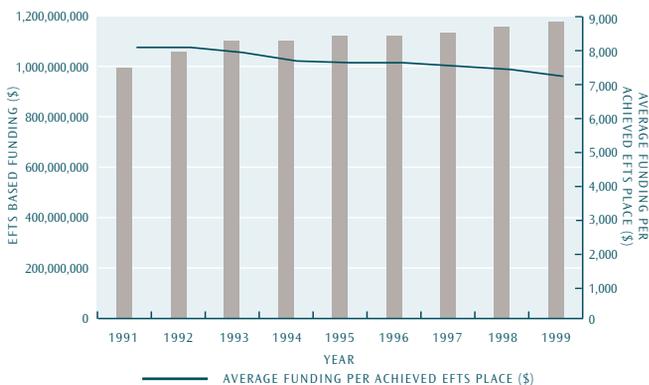
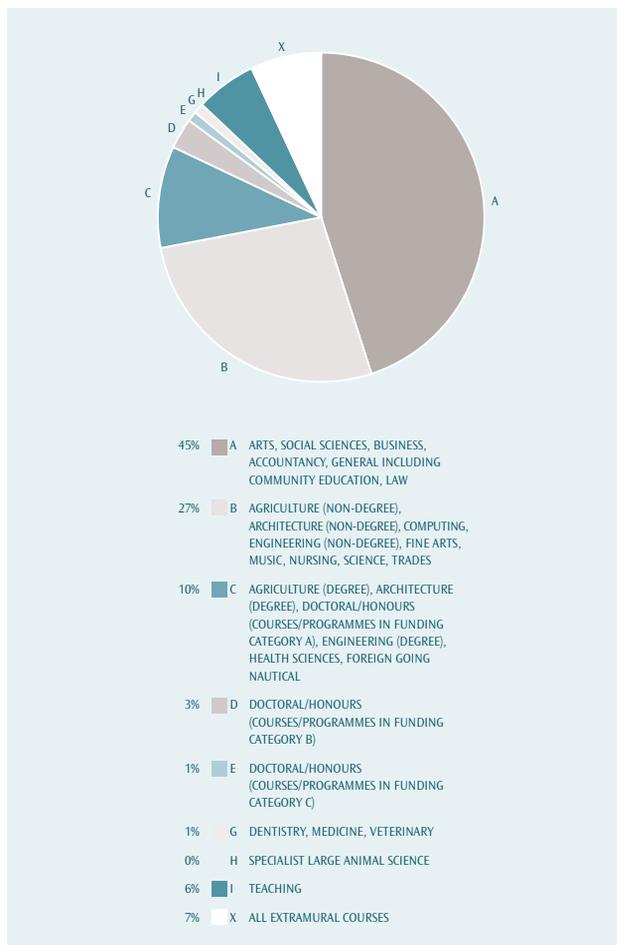


FIGURE 6C: PERCENTAGE EFTS PLACES IN EACH FUNDING CATEGORY, 1999



- Skill Enhancement
- other targeted training programmes
- EFTS tuition subsidies (for qualifications at, or equivalent to, NQF Level 3 or above).

The EFTS funding mechanism for PTEs has been significantly different from that for tertiary education institutions, with funding allocated from a capped contestable pool on a pro-rata basis according to bids received. Because of excess demand it was decided to restrict access to the pool to certain designated priority areas of training, with differential pro-rata tuition rates. Courses not included in the list of designated priorities were not funded. In 1999, however, the subject restriction for PTEs was removed and funding was provided for all enrolments in quality-approved courses at registered PTEs. The funding rate for PTEs in 1999, however, was still significantly lower than that provided to TEIs. In 1999, 143 PTEs were funded a total \$16.8 million for 9187 EFTS places - an average subsidy of \$1,829 per place. This compares with 1998 when 52 PTEs were funded a total \$7 million for 2151 EFTS places – an average subsidy of \$3,254 per place.

FUNDING FOR INDUSTRY TRAINING

Industry training is jointly funded by the government and industry. Government's contribution is through the Industry Training Fund, with industry contributions being in cash or in kind. Employees may also bear some of the costs, by meeting some proportion of off-job training fees or by accepting a lower wage rate as part of the training arrangement.

There is also an Industry Training Development Fund available to ITOs or groups seeking ITO recognition to assist in meeting the costs of developing systematic training arrangements. Grants disbursed by Skill New Zealand peaked at around \$6.2 million in 1995 and 1996, and have tailed off to \$2.4 million in 1998.

STUDENT TUITION SUBSIDIES

Total spending on bulk-funded EFTS tuition subsidies to tertiary education providers has increased from \$993 million in 1991 to \$1,180 million in 1999, an overall increase of 18.8 percent or an average of 2.2 percent per annum. At the same time, there has been an increase in the number of EFTS places funded from 114 110 in 1991 to 169 469 in 1999, an overall increase of 48.5 percent or an average increase of 5 percent per annum.

FIGURE 6D: TOTAL EFTS PLACES BY FUNDING CATEGORY, 1991–1999

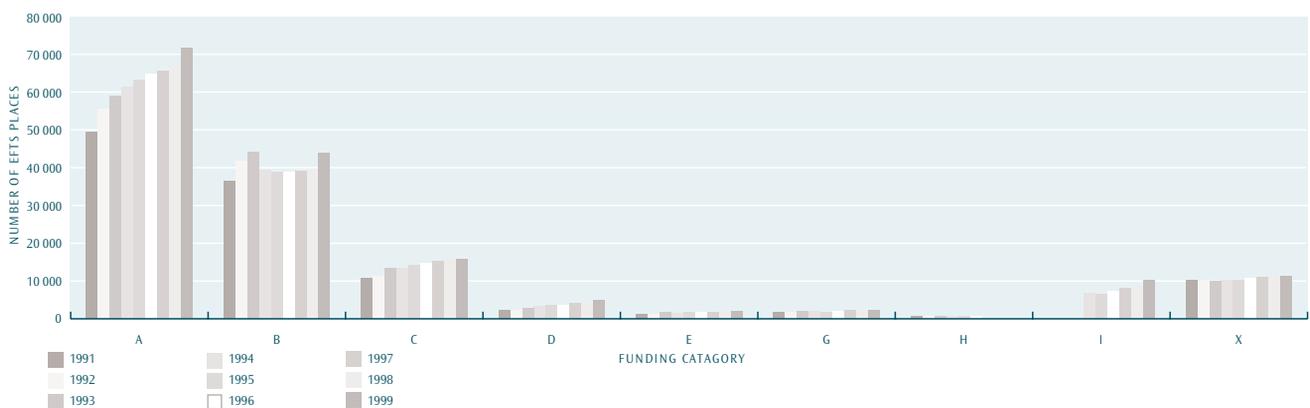


Figure 6B shows the change in total tuition funding for all tertiary education providers and the change in average subsidy rate since 1991. For TEIs, the average subsidy per actual EFTS place has decreased by 13 percent since 1991, or 1.7 percent per annum. It should be noted that, for TEIs, the average subsidy per actual EFTS place achieved depends on a number of factors including:

- tuition funding rates
- the mix of students in different funding categories (A, B, etc)
- the proportion of students funded at the lower non-Study-Right rate
- the number of student places achieved in addition to the level funded.

The following paragraphs look at the trends in each of these factors.

Since 1991, policy decisions to fund increased participation at the expense of individual student support resulted in tuition subsidy rates declining by approximately 1.6 percent per year for Study Right students, and 3.1 percent for non-Study Right students (with some variations in different funding categories). For 1999, Government made a decision to reduce the subsidy rates by 2.46 percent in response to the Asian economic crisis.⁴⁶ The reduction in subsidy rates together with additional government expenditure has enabled the number of funded places to increase by 48.5 percent since 1991.

The proportion of students in each funding category in 1999 is set out in Figure 6C.

Figure 6D shows the changing profile of provision of funded places with tertiary education providers from 1991 to 1999.⁴⁷ There has been relatively sustained growth in funded EFTS places in Category A between 1991 and 1999, amounting to an increase of over 20 000 subsidised places during this period.⁴⁸ Similar increases in categories C, D and E are largely due to increased numbers of postgraduate students. The increase in the numbers of EFTS funded places in teacher education (Category I)⁴⁹ in 1999 is largely because of the funding, in that year, of pre-service teacher education places through the EFTS funding system that were previously funded by separate contract.

⁴⁶ Government also contributed an additional 1.54 percent in funding, however, to allow for growth totalling 4 percent.

⁴⁷ Comparisons between 1999 and previous years' data should be treated with caution because of the removal of the cap on EFTS-subsidised places in 1999 and other policy changes in previous years. The large increases in 1999 in categories A and B largely reflect the level of unfunded places in 1998 which were funded in 1999.

⁴⁸ Reasons for the apparent inconsistencies between the funding data and the enrolment data presented in Figure 4B are not clear and require further investigation. Possible contributory factors may include changes in the pattern of enrolments in Category A funded qualifications (ie, the proportion of full-time to part-time enrolments).

⁴⁹ The I funding category was established in 1994 following the decision to fund pre-service primary teacher education (previously funded in category B) and secondary teacher education (previously funded in category C) at the same rate.

FIGURE 6E: GROWTH IN EFTS IN POSTGRADUATE STUDY, 1992–1999

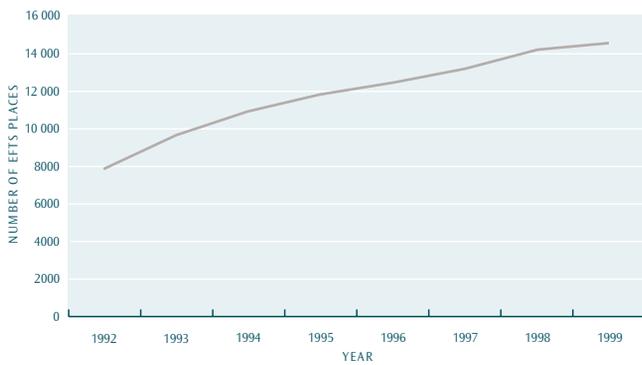
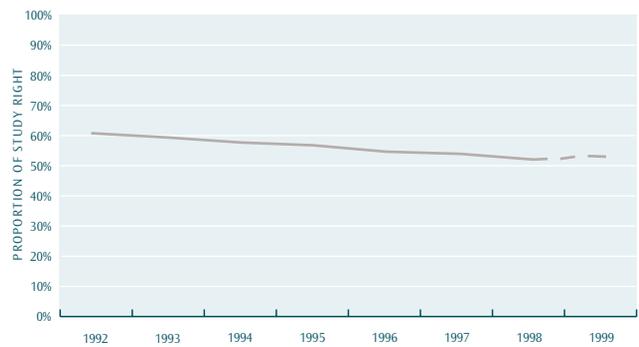


FIGURE 6F: FUNDED STUDY RIGHT RATIOS, 1992–1999 (ESTIMATED)



Note: Ratios prior to 1999 are based on August of the previous year. 1999 ratios are based on 31 December 1999.

FIGURE 6G: ESTIMATED TERTIARY EDUCATION EXPENDITURE ON MĀORI AND PACIFIC STUDENTS, 1999/2000



FIGURE 6H: TOTAL TEI SECTOR SOURCES OF INCOME

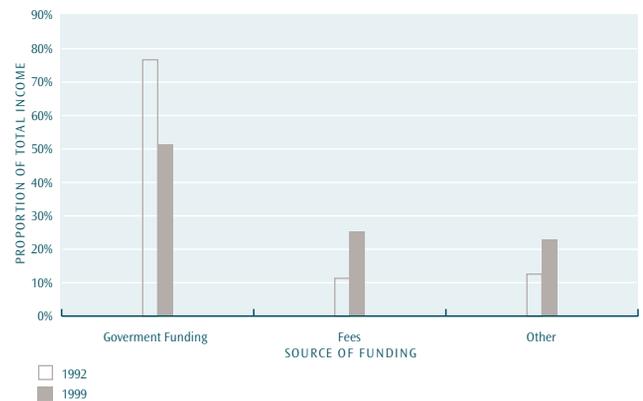


TABLE 6.2: NUMBER AND PROPORTION OF TEI EFTS BULK FUNDED

BULK FUNDED	1994	1995	1996	1997	1998	1999
ACTUAL ACHIEVED MINISTRY EFTS	140 723	144 501	146 549	150 984	156 867	160 282
TOTAL BULK FUNDED EFTS	137 224	139 916	142 962	145 686	148 978	160 282
'ADDITIONAL' EFTS	3 499	4 585	3 587	5 298	7 889	0
BULK FUNDED (%)	98	97	98	96	95	100
EFTS FUNDED FROM OTHER SOURCES	11 564	14 441	16 939	18 764	17 101	15 425
TOTAL EFTS PLACES	152 287	158 942	163 488	169 748	173 968	175 707

* From 1999, the cap on numbers bulk funded has been removed, so that subsidies will apply to all student enrolments in quality-approved courses.

Growth is not reflected in Category B funded places which includes nursing, sciences and trades. This was relatively static from 1994 to 1998. The decrease in subsidised places in Category B between 1993 and 1994 was mainly due to the policy decision to fund pre-service primary teacher education at the separate I rate from 1994 onwards. The number of EFTS places funded in this category has also been affected by the decision to transfer funding for apprenticeship training to Skill New Zealand for Industry Training.

The overall change to the mix of students across funding categories has tended to increase the average subsidy.

There has been a significant increase in the number of students enrolled in postgraduate study. Between 1992 and 1999 the number of EFTS places funded has increased by 82 percent. Over 96 percent of postgraduate education (as measured by the number of funded EFTS places) is still undertaken in universities.

There has been a steady decline in the proportion of students funded at the higher Study Right rate since that policy was introduced in 1992 (Figure 6F). The proportion of Study Right students in 1992 was estimated at 60 percent but this had decreased to 52 percent by 1999. This reflects the smaller school leaving age cohort, the increase in the number of enrolments by older students, and a tendency for students to stay longer in tertiary education.

Prior to 1999, the average subsidy rate was also influenced by the number of students actually enrolled by the institutions relative to numbers funded by the government. The difference between the number of EFTS places bulk funded and the number of eligible EFTS enrolled (actual achieved Ministry EFTS) is shown as 'additional' EFTS⁵⁰ in Table 6.2.

Many of the TEI EFTS funded from other sources were still funded by the government (such as through STAR or ITO funding). While EFTS places funded from other sources increased from 11 564 in 1994 to over 18 764 in 1997, there have been significant decreases in the last two years. The reasons for these are not clear, although one contributory factor is the Asian economic crisis which has had an impact on the number of foreign students enrolling at TEIs.

TERTIARY EDUCATION EXPENDITURE ON MĀORI AND PACIFIC STUDENTS

Figure 6G shows an estimate of the proportion of funding for tertiary education and training expended on Māori and Pacific students.

Of the total expenditure provided in 1999/2000 for tertiary education and training through Crown agencies (NZQA, Skill New Zealand and Career Services) and tertiary funding (\$1,471.1 million)⁵¹ it is estimated that \$231.6 million is spent on Māori and \$60.9 million is spent on Pacific students. These estimates are based on expenditure on programmes of study directly targeted at these groups (eg, \$8.9 million targeted specifically for Māori tertiary students) combined with an estimate of the expenditure in more general programmes of study where the percentage of Māori and Pacific peoples participating can be identified.

FINANCIAL TRENDS AND PERFORMANCE IN TERTIARY EDUCATION INSTITUTIONS

The government has a large public investment in tertiary education institutions. The government monitors its financial interest in the 38 public TEIs designated as Crown entities through the Tertiary Ownership Monitoring Unit (TOMU) of the Ministry of Education, which was established in early 1998.

TOMU monitors the financial performance of tertiary institutions and provides early warning of potential risks. It reports to the Associate Minister of Education (Tertiary Education) on financial trends in the tertiary education sector and on any risks to the viability of specific institutions.

Where available, information used for this section of the report is obtained from the audited financial statements in TEIs' annual reports. Where the financial statements have not been audited⁵² the most recent statements from the TEIs were used.⁵³

SOURCES OF INCOME

The total income of TEIs has grown by 64 percent between 1992 and 1999, to reach \$2.12 billion. This is a reflection of growth in student numbers and increased income from other non-traditional sources.

⁵⁰ Sometimes called 'unfunded' EFTS places.

⁵¹ This figure also includes the capital funding for tertiary education institutions in 1999/2000 of \$6.8 million.

⁵² Four TEIs were awaiting audit opinion as this report went to print.

⁵³ Omission of these unaudited figures would have skewed the sector totals and averages.

TABLE 6.3: TEIS' INCOME SOURCES, 1999

TYPE OF PROVIDER	GOVERNMENT FUNDING %	STUDENT FEES %	OTHER SOURCES %
UNIVERSITY	47.1	23.7	29.1
POLYTECHNIC	57.0	31.2	11.7
COLLEGE OF EDUCATION	63.6	19.2	17.3
WĀNANGA	63.0	21.8	15.2
ALL TEIS	51.1	25.8	23.1

Note: Numbers may not add to 100% due to rounding.

TABLE 6.4: TEIS' AVERAGE TOTAL INCOME PER EFTS, 1998–1999

TYPE OF PROVIDER	1998	1999	1998–1999 % CHANGE
UNIVERSITY	\$13,739	\$14,098	2.6
POLYTECHNIC	\$9,150	\$9,340	2.1
COLLEGE OF EDUCATION	\$12,279	\$11,917	-2.9
WĀNANGA	\$8,307	\$9,153	10.2
ALL TEIS	\$11,710	\$12,034	2.8

TABLE 6.5: TEIS' AVERAGE TOTAL EXPENDITURE PER EFTS, 1998–1999

TYPE OF PROVIDER	1998	1999	1998–1999 % CHANGE
UNIVERSITY	\$13,285	\$13,701	3.1
POLYTECHNIC	\$8,883	\$9,152	3.0
COLLEGE OF EDUCATION	\$11,765	\$11,557	-1.8
WĀNANGA	\$7,708	\$8,285	7.5
ALL TEIS	\$11,331	11,718	3.4

TABLE 6.6: TEIS' AVERAGE RETURN ON INCOME, 1998–1999

TYPE OF PROVIDER	1998 %	1999 %
UNIVERSITY	2.9	2.7
POLYTECHNIC	0.2	1.7
COLLEGE OF EDUCATION	3.2	3.0
WĀNANGA	7.2	9.5
ALL TEIS	2.1	2.4

The income mix has continued to diversify as many TEIs explore opportunities for expansion through means other than traditional educational instruction. The proportion of total income from other sources has increased from 12 percent of total income in 1992 to 23 percent in 1999 (Figure 6H, p.70).

The mix of income sources varies between the different sectors, as Table 6.3 illustrates. Universities, on average, have the highest proportions of 'other sources' of income, and wānanga and colleges of education are the most heavily reliant on government funding. In addition to variation between the different sectors, there is also variation within each sector. Within the universities sector, for example, the highest proportion of any one university's other income was 49 percent and the lowest was 21 percent.

The average total income per EFTS for each sector in 1998 and 1999 is set out in Table 6.4. The different sectors are not entirely comparable because of the variation in the nature of programmes offered by each.

TERTIARY EDUCATION INSTITUTIONS' COSTS OF SERVICES

The total costs of providing tertiary educational activities at TEIs grew by 73 percent from \$1.19 billion in 1992 to \$2.06 billion in 1999. The main factors contributing to cost increases are servicing increased student numbers and the development of new courses and qualifications. However, cost increases can also be attributed to inflation, wage growth, the greater use of technology, and overseas factors such as the exchange rate.

The average total expenditure per EFTS for each sector in 1998 and 1999 is set out in Table 6.5. The different sectors are not entirely comparable because of the variation in the nature of the qualifications offered by each. However, trends within each sector show that, with the exception of colleges of education, the cost per EFTS is increasing.

OPERATING SURPLUSES

The operating surplus of an institution⁵⁴ provides it with investment/reinvestment capacity. This is particularly important in terms of maintaining or increasing the intellectual value of an institution. It is helpful to express the operating surplus (or deficit) as a percentage of income, to give the return on income.

The tertiary education sector typically produces a low return on income. The level of return varies according to the many institutional circumstances, including capitalisation levels,

depreciation levels, extent of plant or equipment leasing, development strategies and overall efficiency of operation. Generally, however, an operating result of 3 percent or more is regarded by TOMU as an indicator of financial health.

In 1999 the net operating surplus⁵⁵ for the total sector was \$51.4 million, an increase of \$9.4 million on the \$42 million recorded in 1998. Two universities recorded large abnormal items during 1999⁵⁶ and this had an impact on the total sector result.

This result gave a return on income of 2.4 percent, up from 2.1 percent in 1998. The decline in return on income from 1992 to 1995 (Figure 61) was due to overall cost increases and declining revenue per EFTS. In 1993 the result was particularly affected by a number of abnormal items (such as asset revaluations, provisions for retirement allowances and increasing depreciation on revalued assets). The results prior to 1995 reflected the fact that only about half the institutions included depreciation on Crown-owned assets in their statements of financial performance. However, depreciation on Crown assets used by TEIs is not a major contributor to sector trends.

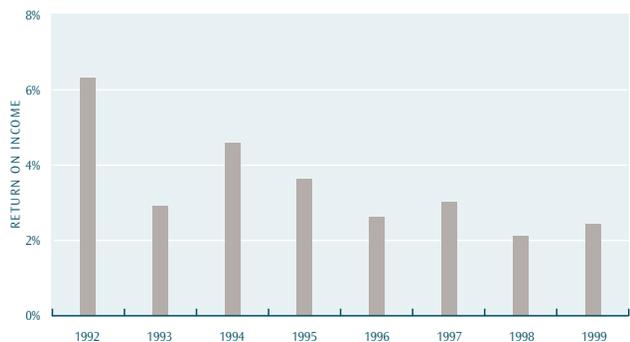
Ten of the 38 institutions recorded a net operating deficit⁵⁷ in 1999, compared with nine TEIs in 1998. The highest average return on income (9.5 percent) was achieved by the wānanga and the lowest (1.7 percent)⁵⁸ by the polytechnics. Comparison with 1998 is presented in Table 6.6.

LIQUIDITY

The level of cash, bank deposits and readily liquifiable assets held by institutions is an important indicator of financial health and viability. A quantity of cash resources is needed as a buffer against variability in performance. Total cash⁵⁹, measured as a percentage of total cash outflows from operations is 13 percent on average, a reasonable capacity throughout the sector to cope with unexpected increases in expenditure or reductions in income.

Another measure of liquidity is the working capital ratio (defined as current assets divided by current liabilities) of an institution. This provides a snapshot of an institution's assets maturing within one year against its obligations maturing within one year. A ratio of less than 100 percent means an institution has fewer current assets than current liabilities, and would normally mean it is relying on cash flow from operations and external sources to settle its short-term debts.

FIGURE 61: TEIs' RETURN ON INCOME, 1992–1999



Overall, the sector working capital declined from 136 percent in 1992 to 98 percent in 1998, and has risen to 105 percent in 1999. Twenty institutions reported a working capital deficit (ie, less than 100 percent) in 1999. Part of the reason for lower levels of working capital compared to 1992 is a decline in financial performance, but for some TEIs this result reflects the funding of capital expenditure from cash reserves.

CAPITAL EXPENDITURE

Capital expenditure across the sector was \$274 million in 1999, up from \$262 million in 1998 and \$208 million in 1992. Major capital expansion across the tertiary sector is evidenced by the fact that capital expenditure over the past eight years has been maintained at approximately \$1,500 per EFTS per annum, twice the level of depreciation. The expansion of EFTS has been one of the main drivers of capital expenditure.

The net worth of the tertiary sector, measured by total equity, has risen from \$2.17 billion in 1992 to \$3.6 billion in 1999.

⁵⁴ The amount remaining when total operating expenditure is subtracted from total income.

⁵⁵ Net of abnormal items.

⁵⁶ Massey University reported a one-off increase in expenditure of \$15 million for employee entitlements; Victoria University of Wellington reported a consolidated gain on the sale of Netlink by Victoria Link Limited of over \$25 million.

⁵⁷ Net of abnormal items.

⁵⁸ Net of abnormal items.

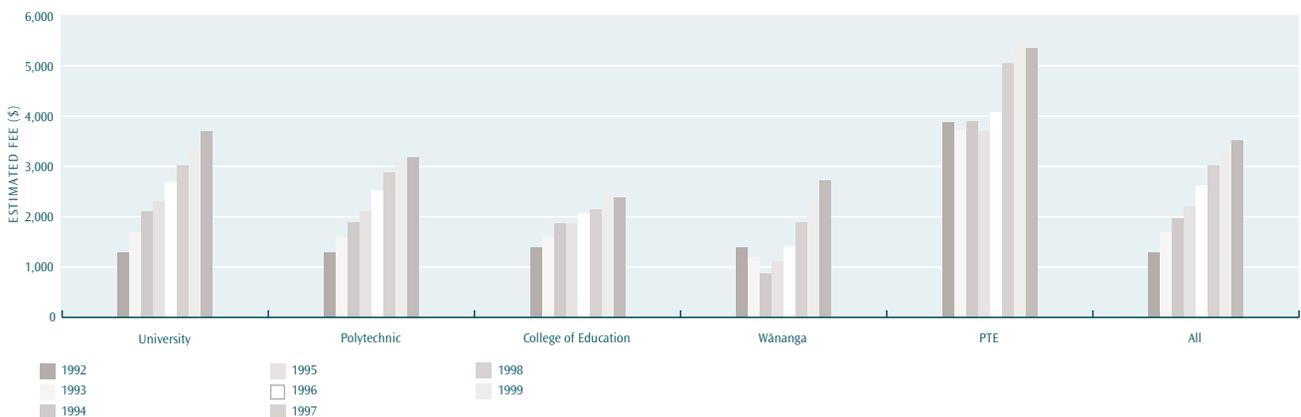
⁵⁹ Includes cash, short term cash investments and long term investments easily converted to cash (eg, government bonds and marketable shares), less overdrafts.

TABLE 6.7: MAJOR FUNDING SOURCE FOR FORMAL TERTIARY AND STAR STUDENTS BY SECTOR, JULY 1999

TYPE OF PROVIDER	MINISTRY EFTS, SPECIAL SUPPLEMENTARY GRANTS, FOREIGN WHOLLY RESEARCH AND TEACHER EDUCATION CONTRACTS %	FULL-FEE-PAYING AND MFAT FOREIGN %	DOMESTIC FULL-FEE-PAYING %	STAR %	SKILL NZ %	ITO OFF-JOB TRAINING %	OTHER %
UNIVERSITY	95.3	4.1	0.2	0.1	0.0	0.0	0.4
POLYTECHNIC	81.3	2.5	0.7	8.4	0.9	4.7	1.6
COLLEGE OF EDUCATION	98.1	0.8	1.1	0.0	0.0	0.0	0.0
WĀNANGA	91.6	0.0	0.0	0.0	3.6	0.0	4.8
PTE	31.8	3.8	10.8	0.0	37.3	14.9	1.5

Note: Excludes revenue not generated by students, eg, research contracts.

FIGURE 6J: ESTIMATED AVERAGE FEES FOR FULL-TIME FULL-YEAR STUDENTS BY SECTOR, 1992–1999



FUNDING SOURCES FOR STUDENTS

The following analysis (see also Table 6.7) is based on tertiary providers' statistical returns to the Ministry of Education, in which providers indicate the major funding source for each student. Funding sources include EFTS funding, student fees, STAR, Skill New Zealand funded training programmes, and ITO off-job training. Institutions may also have income from sources outside this analysis, such as investment income or research contracts. In addition, because the analysis focuses on the major funding source it will not give a complete picture of income as institutions often receive funding from more than one source for a given student (most notably, students funded under the EFTS system will also pay fees).

The proportion of formal PTE students funded through the EFTS system, Ministry of Education supplementary grants or Ministry of Education teacher training contracts doubled between July 1998 and July 1999, from 16 percent to 32 percent, due to the removal of the cap on student numbers funded by the government. Also related to this, the proportion of domestic full-fee-paying students decreased from 21 percent to 11 percent.⁶⁰

In 1999 Skill New Zealand funded programmes (Training Opportunities, Youth Training and Skill Enhancement) were also a significant funding source for PTE students. Students on these

training programmes comprised 37 percent of the formal students enrolled at the end of July. A further 15 percent were funded through ITO off-job training.

College of education students are almost entirely funded through the EFTS system, Ministry of Education supplementary grants, or Ministry of Education teacher training contracts. Over 90 percent of formal university and wānanga students enrolled in July were also funded through the EFTS system.

In polytechnics, 81 percent of all formal tertiary students enrolled in July were funded through the EFTS system. STAR students comprised a further 8 percent, and ITO off-job training was the funding source for nearly 5 percent of students.

The major funding sources summarised in Table 6.7 are for formal tertiary and STAR students enrolled at one point in time, near the end of July 1999. Over a full year, the proportion of wānanga and PTE students funded through Skill New Zealand is likely to be greater than shown in Table 6.7 due to enrolments in courses finishing before or starting after the end of July. If account were also to be taken of students enrolled in non-formal courses, the proportion of domestic full-fee-paying students at polytechnics and PTEs might also increase quite significantly.

TERTIARY FEES

There have been significant increases in fees charged by tertiary education providers over the past few years, with fees for full-time full-year students increasing by an estimated average of 12 percent each year over the past five years.

Figure 6J shows estimates based on full-time full-year student loan clients' entitlement for the fees component of student loans. The figures will be over-estimates if students who have larger fees are more likely to take out loans.

Student loan entitlement data suggests that fees are highest in PTEs, which is likely to be due to fewer of these institutions receiving EFTS funding and/or lower subsidy rates per EFTS unit over the period shown. The figures will under-estimate fees because loan entitlement for PTE students was capped with regard to fees, whereas in the other sectors students in high fees programmes were entitled to borrow the full amount. In 1997 the cap on the amount that PTE students could borrow under the student loan scheme was raised from \$4,500 to \$6,500, which has led to the higher average since 1997 in this

sector. In 1999 the average fee entitlement for full-time full-year PTE students was \$5,300, slightly down from the previous year.

Full-time university and polytechnic students paid higher fees than students in wānanga and colleges of education, with university fees slightly ahead of those of polytechnics over the past five years. In 1999 the average fee for a full-time full-year university student was estimated at \$3,700, whereas the fee for a polytechnic student was estimated at \$3,200. College of education students paid less, and the growth in fees has been smallest in the colleges of education (in fact, stable over the past year), with fees now averaging \$2,400. Full-time wānanga students faced a 15 percent increase in their fees in 1999, paying an average of \$2,700.

TOP ACHIEVERS' DOCTORAL AND ENTERPRISE SCHOLARSHIPS, AND UNIVERSITY BURSARIES MATHS AND SCIENCE AWARDS

In 1999 the Government established tertiary education scholarships to support doctoral research students, promote linkages between enterprises and tertiary education institutions, and encourage students into science and technology subjects. Three scholarship schemes were created: Top Achievers' Doctoral Scholarships, Enterprise Scholarships and University Bursaries Maths and Science Awards. The scholarships were to be awarded from 2000.

TARGETED SCHOLARSHIPS FOR MĀORI AND PACIFIC STUDENTS

MANĀKI TAUIRA

This scheme is targeted to provide financial assistance to Māori with tertiary tuition fees. Eligibility is tied to commitment to kaupapa Māori and financial need. In 1999 there were 6902 eligible applicants receiving partial reimbursement of their fees. Total appropriation for 1999/2000 was \$4.3 million.

60 A domestic full-fee-paying student is a New Zealand citizen or permanent resident who pays the full cost of tuition and does not receive a government subsidy toward tuition fees (as reported by providers). In TEIs these are generally students who attend a course run specifically for one employer and which is not open to anyone other than employees of that employer, where the employer pays full costs for the course. In PTEs, these students have historically been enrolled in courses that did not receive Ministry of Education funding. However, with the extension of government funding for PTEs the proportion of PTE students who are domestic full-fee-paying students has decreased. The figures given for PTEs have been revised since the release of the 1998 edition of this report.

TABLE 6.8: TERTIARY STUDENT ALLOWANCE CLIENTS AT 31 JULY 1999 (ESTIMATED)

TYPE OF PROVIDER	NO.	UPTAKE* %
UNIVERSITY	24 900	38
POLYTECHNIC	15 700	32
COLLEGE OF EDUCATION	2 800	44
WĀNANGA	400	27
PTE	3 400	43
TOTAL	47 100	36

* Percentage of tertiary students with an allowance

TABLE 6.9: TERTIARY ALLOWANCE CLIENTS BY ETHNICITY AND TYPE OF ALLOWANCE

TYPE OF ALLOWANCE	EUROPEAN/ PĀKEHA	MĀORI	PACIFIC	ASIAN	OTHER	TOTAL
	%	%	%	%	%	%
AGE 16-24 AWAY FROM HOME	41.2	32.8	24.6	23.7	27.2	35.3
AGE 16-24 AT HOME	12.5	11.2	31.0	36.1	19.4	16.5
AGE 25 AWAY FROM HOME	21.9	25.7	16.6	9.0	22.5	21.2
AGE 25 AT HOME	2.7	2.6	5.6	2.1	3.1	2.8
WITH DEPENDANTS	6.7	15.6	13.9	23.4	15.9	11.3
COUPLE	1.6	1.0	0.8	2.6	3.3	1.7
INDEPENDENT CIRCUMSTANCES	11.6	8.6	4.4	1.4	6.3	9.1
MARRIED WITH EARNING SPOUSE AWAY FROM HOME	0.2	0.4	0.5	0.1	0.3	0.2
MARRIED WITH EARNING SPOUSE AT HOME	1.6	2.0	2.7	1.6	2.1	1.7
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0

MĀORI AND POLYNESIAN SCHOLARSHIPS FOR HIGHER EDUCATION

These scholarships were established in 1973 and provide for full payment of fees for the length of the course of study, plus subsistence allowances. Up to 15 scholarships are awarded each year from an appropriation of \$0.526 million.

STUDENT ALLOWANCES

The current form of the student allowances scheme was introduced in 1989 to provide allowances to New Zealand students aged 16 years or over who were studying in recognised tertiary qualifications, and to some senior secondary school students. The scheme gives every tertiary student a 200-week entitlement to student allowances, subject to their meeting the criteria for eligibility. Since 1992 allowances for single students, without dependants, under the age of 25 years have been subject to a means test on a student's parents' combined income, with allowances abating for parental incomes above \$28,080 to zero at around \$50,750. The intent behind this was to target allowances to students from low-income families.

To be eligible for student allowances in 1999, tertiary students had to be enrolled in a full-time programme of study of at least 12 weeks duration with a recognised tertiary education provider, and hold New Zealand citizenship or permanent residency. Students aged 16-24 who could prove special circumstances were eligible for the independent circumstances allowance.

Total spending on student allowances increased from \$265 million in the year ending June 1995 to \$378 million for the year to June 1999, an increase of 43 percent. Much of this increase is due to greater participation in tertiary education, with consequent increases in the number of eligible students. However, changes in the age mix of students have also contributed. Students aged over 25 are eligible for higher payments and are not subject to parental income tests, and this group has grown more strongly than that of students under the age of 25, leading to increases in average payments per client.

At the end of July 1999⁶¹ an estimated 36 percent of all full-time domestic students (47 100) received a student allowance (Table 6.8). This compares to an estimated 42 percent in 1996. Colleges of education had the highest proportion of students accessing allowances, possibly due to the older age profile of students in this sector.

Asian students are more likely to obtain an allowance than any other group of students, with 38 percent (5900) of all Asian tertiary students receiving an allowance. There is little difference in uptake of allowances between Māori and European/Pākeha students with 33 percent (6400) of Māori and 32 percent (26 000) of European/Pākeha students receiving an allowance. Pacific students were slightly less likely to do so, with 30 percent (2000) receiving an allowance at July 1999.

The most common type of allowance received was 'under-25 away from home', received by 35 percent of allowance clients (Table 6.9). A further 21 percent received the 'over-25 away from home' allowance, 16.5 percent received the 'under-25 at home' and 11 percent received the 'with dependants' allowance. Among allowance recipients who were single or without dependants, around half of Pacific and Asian students were living with their parents, compared to approximately 20 percent of European/Pākeha and Māori students.

Students who receive allowances may also take up student loans, and during the whole of 1998 (the most recent data available), 73 percent of allowance clients also took out loans. Factors likely to affect whether one or both of the schemes are used include the level of a student's family income, their expectations of their own future earnings and their attitude towards going into debt.

Māori and Pacific students who received allowances were far more likely than others to take out loans. While 87 percent of Māori allowance clients and 88 percent of Pacific allowance clients also took a loan, 73 percent of European/Pākeha and 59 percent of Asian students did so.

STUDENT LOANS

In 1992 the Government set up a student loan scheme to assist students studying at tertiary level. The scheme allows New Zealand students to borrow money for course fees and course-related costs, and full-time students to also borrow to cover living costs. When a student receives student allowances, living costs entitlement is reduced to off-set the allowances paid. Loans carry interest and a \$50 administration fee. A key feature of the scheme is that repayments are income contingent. Loans are repayable through the Inland Revenue Department once taxable income exceeds a threshold (\$14,716 for the 1999/2000 income year), with a provision for interest write-off for low income earners.⁶²

Since the inception of the scheme, the number of students borrowing has continued to increase strongly. In 1992, the first year of operation, there were 44 202 students borrowing; by 1999 this had increased to 115 142 students (Figure 6k *see over page*). This increase is mainly due to an increase in the proportion of students taking out loans, although some of the increase can be attributed to increasing student numbers. The proportion of full-time TEI students taking out loans increased steadily from 39 percent in 1992 to 74 percent in 1999, and take-up for part-time TEI students increased from 6 percent to 14 percent over the same period.

While increases in take-up can not be calculated for PTE clients, growth in this sector has been strong. In 1999, 11 percent of loan clients were studying in PTEs compared with only one percent of loan clients in 1992. In 1999 an estimated 57 percent of full-time and 10 percent of part-time students at PTEs took out loans. The low take-up for full-time students in PTEs relative to those in other tertiary settings probably reflects the fact that 31 percent of these students are studying in Training Opportunities or Youth Training programmes. Students on these training programmes receive a training benefit and fees and course costs are covered, and thus they are not eligible for loans.

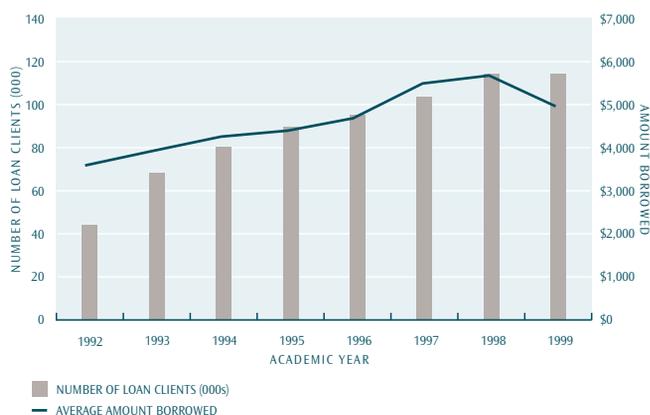
The average sums being borrowed have also increased. In 1992 loan clients borrowed an average of \$3,628 each, but by 1998 the average was \$5,714 (see Figure 6K). In 1999 the average reduced to \$4,917 mostly due to the cut in the course cost entitlement available (reduced to \$500 from \$1000 with the requirement to provide evidence). Students who do borrow tend to borrow close to the maximum entitlement, with full-time student loan clients borrowing on average 79 percent of the maximum entitlement and eligible part-time students borrowing 82 percent of entitlement. This may be, in part, a consequence of part-time students not being entitled to living costs.

Increases in amounts borrowed have largely followed increases in entitlement, and a considerable part of increased borrowing can be attributed to increases in fees. The average fee entitlement for full-time full-year students almost tripled over the period

⁶¹ Statistics for the full 1999 year are not yet available.

⁶² In 1999 this provision was for low income borrowers when they finished studying. From 2000 onwards it is for full-time, full-year students and part-time students earning below \$24,596.

FIGURE 6K: NUMBER OF STUDENT LOAN CLIENTS, WITH AVERAGE ANNUAL AMOUNT BORROWED, 1992–1999.



Note: Borrowed amounts are not adjusted for real dollar terms.

from 1992 (to \$3,507 in 1999), while average borrowing for full-time students increased by 33 percent (to \$5,300 in 1999).

Since the scheme began, women have been less inclined to borrow than men, and the sums they borrow are smaller (Table 6.8).

Pacific students were most likely to take out loans with 76 percent of them borrowing. Māori were also more likely than other students to make use of the loan scheme (Table 6.10). However, only 43 percent of Chinese and Indian students borrowed under the loan scheme in 1999. Māori and Pacific students have consistently borrowed a higher proportion of the maximum entitlement than students from other ethnic groups. In 1999 Māori and Pacific clients borrowed 84 percent and European/Pākehā borrowed 78 percent of entitlement.

As a consequence of higher fees, PTE clients borrowed more on average than students in other sectors. University students borrowed more than students in other TEIs, probably as a result of higher average fees and a lower proportion of students receiving student allowances.

Students aged over 25 years are much less likely to take out loans than younger students. They are more likely to be part-time students, to have an income, or to have made savings from previous earnings. Older students in full-time study have greater access to student allowances than younger students as they are more likely to be independent, married or have dependants.

Since the commencement of the student loan scheme, the accumulated debt has increased as the number of years debtors could have borrowed has increased. Other factors that have led to an increase in student debt have been increasing participation in tertiary education and in the student loan scheme, and increased borrowing per student. Total student debt was calculated at \$2.97 billion at 30 June 1999, and was held by almost 283 000 people. The average cumulative debt per person was \$11,700 in June 1999.

The range of loan balances held by students is illustrated in Figure 6L. At 30 June 1999, 58 percent of student loan balances were under \$10,000 and 11 percent were over \$25,000.

RECENT STUDENT LOAN POLICY CHANGES

There were a number of significant changes to the student loan scheme for 2000 and beyond. These include changes to the following:

Living Costs Component

The living cost component has now been made available in weekly instalments (a change from fortnightly instalments) in arrears. Students studying full-time for not less than 12 weeks can access up to \$150 per week of the course less any net entitlement to student allowances.

Course-related Costs

The course-related component has increased to \$1,000 per year from \$500. The requirement that students provide relevant documentation to support their claim remains in place.

Administration Fee

For students who decide to cancel their loan within seven days of their account being established (and after money has been drawn from their loan account) the \$50 administration fee that is charged to their loan account will be waived.

Students' Association Fees

From this year students' association fees (where compulsory) can be borrowed as part of the compulsory fees loan entitlement; otherwise, students' association fees can be borrowed as part of a student's course-related costs entitlement.

Repayment Obligation

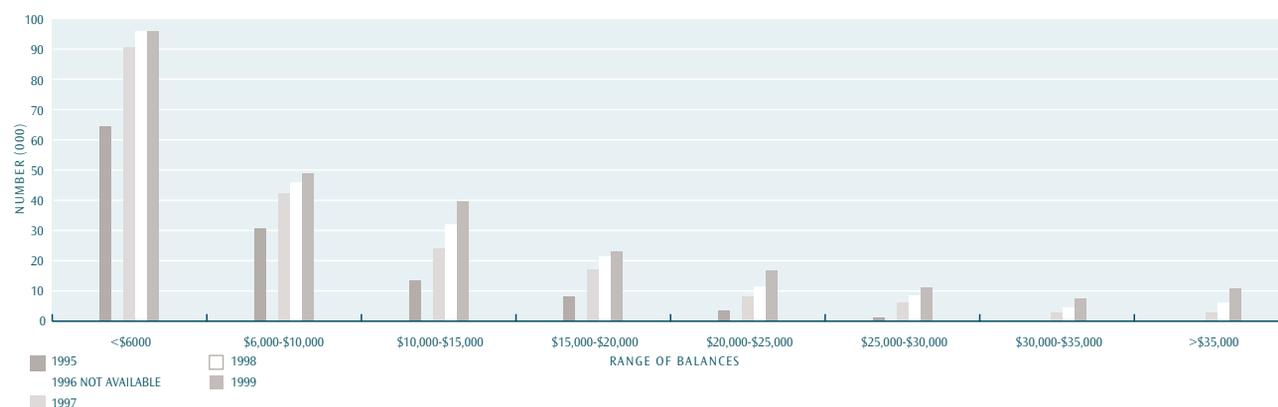
The Government has rescinded the decision of the former Government to increase the student loan repayment rate to 15 cents in the dollar on borrowers' income over \$50,000 per annum.

TABLE 6.10: SELECTED STUDENT LOAN STATISTICS, 1999

STUDENT GROUP	LOAN CLIENTS	UPTAKE	AVERAGE AMOUNT BORROWED	ENTITLEMENT BORROWED
	NO.	%	%	%
EUROPEAN/PĀKEHA	65 131	40.3	\$5,048	77.8
MĀORI	21 866	58.2	\$4,613	84.2
PACIFIC	8 570	75.8	\$5,278	84.3
ASIAN (CHINESE AND INDIAN ONLY)	6 968	42.8	\$4,645	76.3
MALE	49 715	47.0	\$5,221	80.4
FEMALE	62 033	44.7	\$4,734	78.7
FULL-TIME	101 645	71.2	\$5,274	79.4
PART-TIME	13 497	13.2	\$2,228	82.4
ALL GROUPS*	115 142	47.0	\$4,917	79.5

* Includes students whose gender was not known

FIGURE 6L: NUMBER AND VALUES OF OUTSTANDING LOAN BALANCES AS AT 30 JUNE, 1995–1999



Interest Rate for the 2000/01 Income Year

The Government has decided not to follow the formula previously used to determine the student loan scheme interest rate. Instead, it has chosen to freeze the interest rate at 7.0 percent for the 2000/01 income year. This decision was made to further ease the financial burden on borrowers.

Full Interest Write-off Provisions

Full-time, full-year students and low-income students enrolled in approved qualifications will pay no interest on their loans while they are studying in 2000 and beyond.

To qualify for a full interest write-off a borrower must have undertaken an approved programme of study and have been:

- a full-time, full-year student (studying for 32 weeks and at least 0.8 EFTS); or
- any other student whose income for the income year in which the write-off occurs is \$24,596 or less; and
- a New Zealand resident for income tax purposes.

New Repayment Provisions

For any current student who does not qualify for a full interest write-off and all former borrowers, new repayment provisions will mean that, from the 2000/01 income year, 50 percent of the compulsory repayment obligation will be credited to the base interest charged, with any excess being written off. The other 50 percent (together with any amount from the first 50 percent that exceeds the base interest charged) will be credited to the interest adjustment interest (CPI) charged and principal. This will not only reduce the length of time that it will take to repay a loan, but will also ensure that the loan principal never increases by more than the interest adjustment amount.

For additional information on student loans refer to Work and Income New Zealand and Inland Revenue (see p.92 for contact details).

COMMUNITY WAGE – TRAINING AND TRAINING INCENTIVE ALLOWANCE⁶³

In 1999 Work and Income New Zealand also provided support for some tertiary students through Community Wage – Training (known as the Training Benefit before 1 October 1998). This is available to people aged over 18 who are undertaking approved employment-related training. The rates of Community Wage – Training are similar to those paid to people receiving the Community Wage – Job Seeker (the Unemployment Benefit before 1 October 1998). Over 17 700 people⁶⁴ received Community Wage – Training payments in 1999, and around 83 percent of these were enrolled in Training Opportunities or Youth Training programmes.

The training incentive allowance provides assistance to domestic purposes, widows and invalid beneficiaries to undertake training or study that will develop their work skills and improve their prospects of gaining sustainable paid employment. The allowance contributes toward fees, course costs and associated costs (eg, childcare and transport) faced by trainees/students. The allowance may be paid either as a lump sum, an ongoing entitlement, or a combination of the two. The allowance contributes up to \$75 per week or up to \$3,000 per year. In 1999, 22 672 students received a training incentive allowance, half of these (49.5 percent) being enrolled in polytechnics and 14 percent in universities.

⁶³ Information in this section was provided by the Ministry of Social Policy.

⁶⁴ Work and Income New Zealand advises that the number of people receiving Community Wage – Training understates the number of people involved in employment-related training. Systems problems resulted in some people not being transferred from Community Wage – Job Seeker to Community Wage – Training. It is difficult to determine the extent of the problem, as the raising of the age of entitlement for Community Wage – Training from 16 to 18 on 1 January 1998 would have accounted for some of the decrease from earlier years.

7 INNOVATION AND PARTNERSHIPS IN TERTIARY EDUCATION

SEVEN

INTRODUCTION

THIS CHAPTER PROVIDES AN INDICATION OF THE CONSIDERABLE DYNAMISM AND INNOVATION WITHIN THE SECTOR. IT SUMMARISES INFORMATION OFFERED BY TERTIARY EDUCATION PROVIDERS ON VARIOUS INNOVATIVE APPROACHES TO EDUCATION AND TRAINING WHICH OPERATED DURING 1999. THIS IS NOT BY ANY MEANS A COMPREHENSIVE SURVEY OF SUCH INITIATIVES BUT IS INDICATIVE OF THE EXCITING WORK BEING UNDERTAKEN TO BENEFIT STUDENTS AND THE WIDER COMMUNITY. PARTNERSHIPS BETWEEN PROVIDERS AND OTHER BODIES AND ORGANISATIONS ARE FEATURED IN PARTICULAR.

PARTNERSHIPS WITH INDUSTRY

WHITIREIA COMMUNITY POLYTECHNIC WITH DAPHNE BRASELL ASSOCIATES LTD

Since 1993 Whitireia Community Polytechnic in Porirua has delivered the Whitireia Certificate in Publishing, a full-time one-year qualification in association with a commercial publishing house, Daphne Brasell Associates Ltd.

Under a formal agreement between the two parties, company staff provide most of the tuition. Some specialist input such as Māori and web page development is provided by colleagues. Whitireia ensures that all academic standards and criteria are met and that qualification delivery is in accordance with the polytechnic's quality management system.

From its first year, the programme of study has attracted highly motivated students. Most have been university graduates, many with honours or masters degrees, though this is not a prerequisite.

The programme of study seeks to impart a solid knowledge of the industry with both the theoretical and practical skills needed to work in it. Work placements and project work provide opportunities for students to apply the knowledge gained.

From 1993 to 1996 the qualification was delivered only at Whitireia's main Porirua campus. In 1997 and 1998, though most students remained at Porirua, a few were located at Lincoln University where Daphne Brasell Associates was operating the Lincoln University Press in association with the university. In 1999 and 2000, students have been divided between the polytechnic's central Wellington campus (Midland Park) and Auckland. These locations have facilitated very close relationships with the publishing industry, particularly for student work placements.

The partnership approach has been instrumental in establishing and maintaining particularly close links with the industry. The qualification's active advisory committee has helped to ensure that content is relevant and up-to-date, to monitor performance and to set up work placements. Each semester, each student spends one day a week with an employer. Generally, staff select the first semester's placements but, by the second semester, placement will usually reflect a student's interest in a particular facet of publishing.

Members of the advisory committee act as guest speakers and an industry-based subcommittee undertakes a moderation role by assessing the portfolios which students prepare as a summation of their year's work. These close links with industry provide students with a good network of industry contacts to complement their new knowledge on completion of the programme of study.

The employment record of these students is particularly strong. There are few, if any, established publishing houses in New Zealand which do not employ one or more graduates from the Whitireia publishing programme of study. By May 2000, 10 of the 20 graduates from 1999 had full-time jobs in the industry in New Zealand, and three had jobs overseas. Five had either contract or part-time work in the industry. The remaining two were not, at that time, seeking work.

CHRISTCHURCH POLYTECHNIC WITH THE CARDINAL GROUP

Christchurch Polytechnic has a multidimensional relationship with the Cardinal Group, based on a common understanding of New Zealand's information technology (IT) future and the polytechnic's role as a skill and knowledge developer. In 1999 the two entities formalised their activities with the signing of a Polytechnic-Cardinal partnership agreement.

The Cardinal Group has created JADE, an innovative, flexible, object-oriented programming language that is an integral part of the curriculum of Christchurch Polytechnic's Bachelor of Business Computing (BBComp). Students use JADE to write real-project applications. Close collaboration between teaching and Cardinal staff has led to student scholarships and work experience and staff development placements with Cardinal. Cardinal also contributes to the Computing Advisory Group. In 1999 all graduates from the BBComp were quickly employed in the IT industry or continued further study.

During 1999, a number of commercial ventures with Cardinal were initiated. The Christchurch Polytechnic team and Cardinal worked together on research into JADE-based technology to support remote learning. Similarly, a specification for JASPER, a flexible, web-enabled, innovative student management information system, was scoped, specified and launched in 1999 as a major Christchurch Polytechnic/Cardinal joint venture and development project.

UNIVERSITY OF CANTERBURY: MARKETING STUDENT RESEARCH PLACEMENTS IN INDUSTRY

The University of Canterbury's Department of Management has recognised the growing student need for sector experience prior to graduation. As a result they have implemented a four-month practical research component into their stage three Marketing paper. The objective is to place students within companies and have them solve real commercial problems. The students provide both quantitative (survey data) and qualitative (consumer discussion) services for their businesses to achieve this. Students can gain exposure in one of many fields, including Consumer Perception, Customer Satisfaction (Retail and Services), Internet Marketing, New Product Development and Recreation and Sport.

Past research projects have effected real change for the sponsoring businesses. For example, a photo shop changed its affiliation from one manufacturer to another, and a local sports team was assisted to identify and address a number of problems it faced.

With a high workload and small classes, student enrolment is screened. Graduate job placement is excellent, with graduates having joined Unilever, Telecom, Carter Holt Harvey and district councils, and further offers have been received from Arthur Andersen, New Zealand Dairy Board and Air New Zealand.

APPAREL TECHNOLOGY TRAINING

The sewn products industry has suffered many layoffs as tariffs have progressively been lifted, but there are many segments of the industry that are thriving. Furniture, home furnishing, canvas goods and the high fashion area have been growing strongly in recent years and have developed an urgent need for skilled and flexible staff. Many staff employed in the industry were only trained to do repetitive production work and are not meeting present needs.

Apparel Technology Training, a private training establishment, has filled a vital niche by training production operators who can handle the range of practical work skills required in workplaces

from factories to top international designers. While polytechnics have moved away from the education of production operators, they are producing designers who ultimately generate sales.

The PTE's partnership with industry has been an important part of its success. Both the Apparel and Textile ITO and the Apparel and Textile Federation of New Zealand have strongly supported the training approach, which includes:

- offering short courses, evening programmes of study or workplace training
- meeting regional needs through smaller satellite sites
- coping with poor English skills and other learning needs amongst students
- responding urgently to industry needs.

This approach has allowed Apparel Technology Training to work effectively with long-term unemployed, new entrants to the industry and workers laid off as factories closed. For example, Apparel Technology Training played a role in upskilling some of Bendon's production operators and preparing them for new jobs doing short-run, higher value work after the closure of Bendon's New Zealand plants. For some, this involved short courses in specific skills, while for others there was a longer period of retraining. The PTE has also developed an informal role as an employment consultant for the industry, enabling it to refer some staff to new work opportunities.

Apparel Technology Training has worked very closely with the ITO, employers and polytechnics to develop its programmes and assist many long-term unemployed people through training and into jobs.

INNOVATIONS IN EDUCATION FOR MĀORI AND PACIFIC STUDENTS

THE UNIVERSITY OF AUCKLAND'S HIKITIA TE ORA PROGRAMME

Hikitia te Ora is an innovative foundation programme of study for Māori and Pacific students who are interested in pursuing careers in health. The qualification is administered by the Division of Māori and Pacific Health in the Faculty of Medical and Health Sciences and overseen by a board of studies. Staff include a full-time director and four course coordinators. The year-long qualification incurs relatively modest fees.

Students study towards five health-oriented papers: Introduction to Māori and Pacific Health, Human Biology, Physical Sciences for Health, Social Sciences for Health, and one other paper at first-year level.

Establishment of the qualification has been funded through a Vote Health allocation for Māori health workforce development. The programme of study has been widened to include Pacific students since they share similar health concerns and a similar wish to develop their own appropriate health services.

Each student's whānau is involved at the beginning of the year, participating in discussions of student expectations and exploring further academic pathways. A careers day in the second half of the year provides information on myriad health occupations available to the students.

The qualification began in February 1999 with 37 students, half of whom would not otherwise have gained entry to the university. Of those, 35 completed the year with 27 gaining passes in all papers. Those who passed all papers were awarded the Certificate in Health Sciences at a graduation ceremony in March 2000. At present, 23 of those graduates are continuing their education in health or related disciplines. Nine students are enrolled in medicine (BHB), three in pharmacy (BPharm), one in science (BSc), two in nursing (BNurs), one in physiotherapy (BHSc, Physio) and seven in health sciences (BHSc).

CHRISTCHURCH POLYTECHNIC, CHRISTCHURCH COLLEGE OF EDUCATION, LINCOLN UNIVERSITY AND UNIVERSITY OF OTAGO WITH NGĀI TAHU DEVELOPMENT CORPORATION

Te Tapuāe o Rehua is a joint venture company between Ngāi Tahu Development Corporation, Christchurch Polytechnic, Christchurch College of Education, Lincoln University and University of Otago. It is based on the principles of the Treaty of Waitangi and reflects the members' aspirations to enhance both linkages with the Māori community and academic achievement by ensuring that local tertiary education opportunities are relevant and accessible to Māori.

The company represents the interests of the tertiary partners and their Treaty partner, Ngāi Tahu. The partnership's collaborative approach has the potential to add value to Māori tertiary education opportunities. The draft business plan of Te Tapuāe o Rehua proposes a wide range of strategies to realign, and thereby add value to, the associated tertiary education qualifications. Te Tapuāe o Rehua's vision is to produce graduates taught under the principles of tohungatanga, which follows both the traditions of the whare wānanga and modern academic convention:

Me whakatūria he tohungatanga e whai ana i Te Ara o Tawhaki i raro i te kaupapa tāhuhu o Te Whare Wānanga o Te Ao Tawhito me Te Ao Hurihuri kia puta ai tātau ki Te Ao Mārama.

Te Tapuāe o Rehua's mission statement is: 'Te Tapuāe o Rehua will facilitate the provision of high quality education opportunities to encourage scholarship, personal development and leadership by drawing on the collective skills and resources of the Partnership. Rehua shall establish a reputation for excellence in the fields of mātauranga Māori, te reo, Māori education and in the professional and technical fields of industry to meet the needs of iwi, the region and nation.'

To achieve this, the company's comprehensive business plan outlines strategies to be pursued by each partner to meet targeted goals. These include:

- to increase Māori participation in tertiary education
- to ensure quality of course content, delivery and environment for Māori
- to establish mātauranga Māori as a recognised discipline
- to broaden the influence of Ngāi Tahu throughout all tertiary institutions in the South Island
- to present Te Tapuāe o Rehua as a professional and viable organisation committed to long term sustainability and effectiveness.

The key outcomes within the partnership to date include:

- the appointment of Māori academic leaders within Christchurch Polytechnic and Lincoln University
- appointment of a Kaiarahi to the Christchurch Polytechnic Executive
- development and implementation of He Tohu Pōkairua (the Diploma in Māori Studies) at Christchurch Polytechnic
- appointment of a language coordinator (Te Reo) across the Te Tapuāe o Rehua partnership
- development of the annual Tū Mai Rangatahi (Senior Māori Leadership Hui) for senior secondary school students
- establishment of the Te Tapuāe o Rehua Board of Studies consisting of senior academic staff from each partner institution, that meets regularly to consider operational issues within the partner institutions
- implementation of the Te Tapuāe o Rehua and Rangatahi Māia Scholarship programme (25 awarded at Christchurch Polytechnic in 1999; 66 awarded throughout the partnership in 2000).

Te Tapuāe o Rehua will work to strengthen these achievements during 2000/2001. In future the partnership will focus on

establishment of a Foundation Studies Programme at University of Otago and a Diploma in Iwi Development at Christchurch Polytechnic. It will further strengthen the partners' ability to deliver high quality mātauranga Māori and build the necessary human resource capabilities to achieve this. Te Tapuāe o Rehua also seeks to create more opportunities and entry points for Māori in the tertiary sector and to build on the Te Tapuāe o Rehua Scholarship programme.

TERTIARY EDUCATION COMMUNITY OUTREACH WANGANUI COMMUNITY EDUCATION SERVICE IN PARTNERSHIP WITH WANGANUI REGIONAL COMMUNITY POLYTECHNIC

From its foundation, the Wanganui Community Education Service (CES) has been committed to encouraging continuing and community education in the Wanganui region. Its primary objective was to promote the establishment and growth of a Community College for the Wanganui region.

While this was achieved, CES recognised a continuing need for provision of life-long learning in a flexible and affordable environment. This was achieved through a partnership between CES and the Wanganui Regional Community Polytechnic. Though autonomous and independent, CES liaises with the polytechnic's customer services team. A member of senior polytechnic staff also maintains a liaison role on the CES management committee. CES offers a wide range of leisure and general interest courses including areas such as arts and crafts, cooking, computers, health and well-being, and languages. In the last five years the number of courses has risen from 70 to 111, while student enrolments have grown by more than 200 to 1065 in 1999.

THE UNIVERSITY OF WAIKATO'S ONLINE LEARNING SERVICE

The University of Waikato has been offering formalised online learning for the past three years, meeting a demand by students living in remote locations around New Zealand. A working group was formed following demand from primary school teachers in areas such as Northland who sought to improve their skills and gain further tertiary qualifications.

Many university staff have been involved in the Online Learning operations, including academics from most schools, the Teaching Technology Group, campus media, Waikato Print and the library.

Following a pilot programme in September 1996, the Online Learning Service began in 1997 and served approximately 70 students in its first year. Over 1400 students now use the service

for a variety of subjects. The first group of 'cyber' students will graduate in 2000, among the first in the world to complete a degree programme of study fully online.

UNIVERSITY OF OTAGO: MULTIMEDIA STUDENTS WORKING WITH COMMUNITY ORGANISATIONS

For some years the University of Otago's Department of Information Science has offered papers that require students to work on projects of direct use to community organisations. One example is Multimedia Systems, a level four paper which requires students to develop multimedia programmes that meet real needs within community organisations. In turn, the organisations secure low cost, state of the art, virtual reality and multimedia programmes for selected audiences.

Multimedia Systems students have extended the concept of an extensible multimedia systems engine to build two projects for Otago Museum's Discovery World. The first, 'Journey to the Moon' was installed in early 1999. The second, 'Bathysphere', completed at the end of 1999, allows visitors to make a virtual ocean descent in a bathysphere, revealing marine life from near the ocean surface to the ocean depths. Another successful multimedia programme allows history enthusiasts to make a virtual tour of Olveston, the historic Dunedin mansion managed by the Dunedin City Council.

Students are working on three further multimedia, web-based projects for the Otago Museum in 2000 which are intended to provide primary school children with remote access to museum education resources in the fields of natural history, human history and interactive science.

Another community-oriented project is being undertaken by students in the level two Interactive Systems Design course. The simple information system which they have developed for evaluating and testing the usability of a surgical audit system is currently being used by Dunedin Public Hospital and the Dunedin School of Medicine.

In a complementary initiative, the university is supporting the Classroom 21 Project, Masters level research into how 8-to 10-year-olds in two Dunedin primary schools use information and communication technology to enhance their learning. The project tracks the children's learning processes and their interaction with and assimilation of technology as they build a virtual reality environment. On publication of the results on the web, other children will be invited to contribute to the project by adding further insights.

LINCOLN UNIVERSITY'S REGIONAL EDUCATION PROGRAMME

Lincoln University expanded its qualification delivery modes in 1997 with the development of a Regional Education Programme, a partnership initiative to serve local communities with unmet tertiary education needs. Over the past three years, the programme has delivered Lincoln University papers and degree and diploma study opportunities to some 30 off-campus urban and rural communities around the South Island.

Students of the regional education programme come from a range of education circumstances:

- students not currently participating in any tertiary education
- adult participants in local community education centres
- adult day students at community colleges and other similar institutions
- students who make a direct request for distance education
- Year 13 secondary students and gifted students.

During 1999 there was an increase in the number of Year 13 secondary students taking regional education subjects. Some are using the programme's subjects as extension work while others are taking a subject not available to them at school.

Mature students are also strongly represented and this group particularly appreciates the regional education programme's many course support mechanisms. These include the provision of learning coordinators (for three to five hours per subject per week) and weekly study group sessions at convenient locations, plus regular contact with the university base via teleconferencing, fax and email. All these, coupled with student motivation, have contributed to a higher percentage of passes in most subjects. Regional education students also tend to achieve bimodal subject results with more As and Bs than on-campus students (Table 7.1).

COLLABORATION AMONG TERTIARY EDUCATION PROVIDERS

THE TERTIARY ALLIANCE

The Tertiary Alliance (TTA) is a group of tertiary institutions which have developed programmes of study that reflect a cooperative approach to education. The group includes:

- Bay of Plenty Polytechnic
- Northland Polytechnic
- Tairāwhiti Polytechnic

- Taranaki Polytechnic
- The University of Waikato
- Waiāriki Institute of Technology.

These institutions have registered agreed recognition of each other's qualifications. The *TTA Recognition of Credit Principles and Guidelines* summarises the processes involved in the recognition of credit between the TTA institutions. The TTA Credit Database documents two types of credit: credit awarded on transfer between TTA institutions and credit gained under the articulation agreements in place between many of the institutions. The system also allows students greater flexibility within their tertiary education and greater control over planning both the academic and financial aspects of their study.

TAURANGA UNIVERSITY COLLEGE

A joint initiative between The University of Waikato and Bay of Plenty Polytechnic, Tauranga University College (TUC) offers the residents of the Bay of Plenty access to university degrees. Housed in the Polytechnic's Bongard Centre, TUC offers an expanding range of University of Waikato degrees taught by university lecturers in one of New Zealand's most sought-after locations. The Bongard Centre has fully equipped computer suites, a student learning centre, tutorial facilities and student recreational areas.

SIR GEORGE SEYMOUR NATIONAL COLLEGE OF TOURISM AND TRAVEL

The Sir George Seymour National College of Tourism and Travel is the largest provider of tourism education in New Zealand, with over 400 EFTS per year. It has campuses in Auckland, Hamilton, Wellington and Christchurch. It has achieved this position through a mix of meeting student needs, being closely aligned to industry, and forging links with the secondary school and university sectors.

The College has maintained a 90 percent employment rate for its graduates over the last 10 years (91 percent in 1999). Its students study towards national certificates in travel and computing which prepare them for a wide range of jobs. The College also maintains close liaison with industry, with an annual survey of industry needs and consultative committees with industry representatives. The managing director also sits on the industry councils of the ITO and the Tourism Industry Association of New Zealand.

TABLE 7.1: LINCOLN UNIVERSITY REGIONAL EDUCATION AND ON-CAMPUS EXAMINATION RESULTS, 1999

SUBJECT	REGIONAL EDUCATION PROGRAMME		ON-CAMPUS	
	AVERAGE MARK %	PASS RATE %	AVERAGE MARK %	PASS RATE %
COMPUTING	80	71	86	62
LEGAL ENVIRONMENT OF BUSINESS	80	63	80	56
PRINCIPLES OF ECONOMICS	55	55	70	55
BUSINESS FINANCIAL ADMINISTRATION	67	62	65	56
FOOD AND HEALTH	88	64	89	68
BIOCHEMISTRY	67	70	84	62
INTRODUCTION TO PSYCHOLOGY	64	61	75	55
INTRODUCTION TO SOCIAL PSYCHOLOGY	61	58	53	51

Over the past five years the College and industry have developed the Youth Tourism Awards for secondary school students, which are now administered by the Tourism Industry Association of New Zealand and sponsored by the College, Lincoln University and Air New Zealand.

The College has also worked with Lincoln University over the last three years to offer a 12-week summer programme linked to degrees in Parks, Recreation and Tourism Management. Students gain competence on Galileo (international computer reservation system) and other practical tourism subjects including ticketing, accounts and customer service. In the past three years there has been a 100 percent employment rate from this programme of study, and the College may link with other universities in future.



POSTSCRIPT: THE YEAR 2000

INTRODUCTION

IN 2000, IN ORDER TO DEVELOP A WIDELY SHARED STRATEGIC DIRECTION AND UNDERSTANDING ABOUT TERTIARY EDUCATION WITH EDUCATORS, THE RESEARCH SECTOR, INDUSTRY, AND COMMUNITIES, GOVERNMENT ESTABLISHED THE TERTIARY EDUCATION ADVISORY COMMISSION (TEAC). MEMBERSHIP HAS BEEN DRAWN FROM THE TEI SECTOR, CROWN RESEARCH INSTITUTES, PRIVATE TRAINING ESTABLISHMENTS AND INDUSTRY TRAINING.

The work of the Commission will link with, and be informed by, wider government economic, social and regional development policy initiatives, including the contribution of the tertiary education sector to Closing the Gaps for Māori and Pacific peoples. The Commission has been asked to give advice on 'how the opportunities for increased collaboration and cooperation across the sector can be maximised, and how the links with the wider economy and community can be strengthened'. The first report of the Commission was released in August 2000. It can be viewed at www.teac.govt.nz.

IMPROVING ACCESS AND AFFORDABILITY

Government's new policy initiatives in 2000 have included:

- *Changes to the student loan scheme* – to realise a fairer student loan scheme for both current and former students. Changes include:
 - full-interest write-offs for full-time students and low income part-time students while borrowing
 - freezing the maximum student loan interest rate charged (to those who are required to pay interest) at 7.0 percent
 - allowing students' association fees to be borrowed through the student loan scheme
 - doubling the course cost component entitlement of the scheme
 - ensuring that 50 percent of any repayment, after adjustment for inflation, is directed towards the repayment of principal.

Government has initiated a review of all aspects of the student loan scheme and wider tertiary resourcing issues.

- *Fee Stabilisation* – a 2.3 percent increase in EFTS-based funding from 1 January 2001 for tertiary institutions that agree to maintain their fees at the same level as in 2000.
- *Increased Dentistry Funding* – increased funding for dentistry tuition subsidies to place dentistry tuition fees on a par with medical tuition fees.
- *Modern Apprenticeships* – new, standards-based, vocational education and training targeted to youth. A mentored and supported training pathway into highly valued skills and qualifications, Modern Apprenticeships will assist individuals to develop their capabilities in industry, and receive industry-recognised, nation-wide certification. Pilot programmes are under way, preceding the nation-wide expansion of the project in 2001. The programme aims to provide training for 3000 modern apprentices by 2002.
- *Gateway* – the Gateway pilot for a two-year programme which will test methods of improving the transition from school to work by supporting work-based education and training for senior secondary school students.
- *Training Incentive Allowance* – up to 100 percent payment of fees and course costs for domestic purposes, widows, and invalid beneficiaries. An annual inflation adjustment has been introduced, and the allowance has been restored to beneficiaries who have completed a degree course within the previous five years, if they are undertaking a short-term employment-related training course.
- *Student Job Search* – increased resourcing to Student Job Search to better enable it to match students with work over summer, to extend operations to Timaru, Gisborne and Nelson, and to enable direct computer links with Work and Income New Zealand.

Government has established a Working Group on Adult Education and Community Learning, recognising the contribution of adult education and community learning to both personal and community development. The group will provide advice on a new policy and funding framework for adult education and community learning, and on how the adult and community learning sector will work with others to achieve government objectives. This advice will contribute to durable solutions to the current issues facing the adult and community learning sector, and to the development of a long-term plan for the proper organisation and effective resourcing of the sector.

Work has begun on a comprehensive, long-term adult literacy strategy to address the barriers confronting those who need improved access to learning. The strategy will establish and sustain a sense of direction and purpose, and support effective literacy coordination and resourcing.

CLOSING THE GAPS

Budget 2000 contained several special equity initiatives to enable Māori, Pacific and other under-represented groups to overcome barriers to participation and achievement at all levels of education.

Funding has been provided for the development of a Māori tertiary education strategy to develop coordinated approaches to raise the participation and achievement of Māori. Government intends also to fund new initiatives to enable Māori and Pacific people to overcome barriers to tertiary education achievement.

9 FINDING OUT MORE

NINE

RANGE OF SOURCES

There are numerous sources of additional information on New Zealand's tertiary education sector. They include:

- various agencies involved in the tertiary education sector; these are listed later in this section, along with contact details and email/internet addresses
- various representative bodies involved in the tertiary sector, which are also listed later in this section
- the Ministry of Education's web site which contains supporting documents, publications, statistics and links to other education-related sites: www.minedu.govt.nz
- the web sites of many providers which are accessible through the web sites of either the Ministry of Education or KiwiCareers
- the annual reports and prospectuses of individual institutions.

KEY AGENCIES IN THE TERTIARY EDUCATION SECTOR

Government has a number of distinct but interrelated roles in the tertiary education sector in New Zealand. It provides resources for the delivery of education and operates as a regulator by administering educational legislation, promulgating regulations and guidelines, monitoring compliance, and monitoring the effectiveness and efficiency of educational delivery. Government policy is developed within a framework which aims to create an environment for learning as the basis for New Zealand's future economic and social well-being. The following government agencies are involved in the tertiary education sector.

MINISTRY OF EDUCATION

The Ministry of Education provides policy advice to the government on all aspects of education from early childhood and compulsory education to post-compulsory education and training. The Ministry:

- oversees the implementation of approved policies and advises on the best use of resources allocated by the government to education
- allocates government funding to early childhood services, schools, tertiary institutions (universities, polytechnics, colleges of education, wānanga), recognised private training establishments and other providers of education services
- approves charters of early childhood services, schools and tertiary institutions
- collects, analyses and disseminates education statistics
- ensures the delivery of education advisory, special education, curriculum development and early childhood development services, and funding for industry training and entry level training programmes through contractual arrangements with other agencies and providers.

General Contact:

Ministry of Education
45-47 Pipitea Street
Private Box 1666, Wellington
phone: (04) 463 8000
fax: (04) 463 8001
web site: www.minedu.govt.nz

Within the Ministry of Education, divisions working with the tertiary sector include:

Tertiary Education Policy

The Tertiary Education Policy division (TEP) undertakes policy work across the tertiary sector, including adult and community education and the tertiary education interface with schools and industry.

Senior Managers (Joint):

Jane von Dadelszen

phone: (04) 463 8709

fax: (04) 463 8713

mobile: 025 546 589

email: jane.vondadelszen@minedu.govt.nz

Paul Sutcliffe

phone: (04) 463 8707

fax: (04) 463 8713

mobile: 025 940 418

email: paul.sutcliffe@minedu.govt.nz

Tertiary Ownership Monitoring Unit

The Tertiary Ownership Monitoring Unit (TOMU) of the Ministry of Education is responsible for managing the Government's interest in the 38 public tertiary education institutions designated as Crown entities. Recently it has also taken over responsibility for the ownership monitoring of four Crown education agencies (ie, the New Zealand Qualifications Authority, Skill New Zealand, the Teacher Registration Board and Career Services – rapuara).

Senior Manager:

Allan Sargison

phone: (04) 463 8562

fax: (04) 463 8564

email: allan.sargison@minedu.govt.nz

Tertiary Resourcing

Tertiary Resourcing is responsible for determining, allocating and delivering tuition subsidies and supplementary grants to tertiary education providers. It is responsible for the approval of programmes by all tertiary education providers for which student allowances and loans may be paid.

Senior Manager

phone: (04) 463 8644

fax: (04) 463 8655

Tertiary Information Project

New information requirements for the tertiary sector include electronic methods of collecting student-based data and a national register of quality-assured providers, qualifications and courses. The role of the Tertiary Information Project is to ensure that

these requirements are met within specified timeframes and with minimal cost to providers. Several sub-projects contribute to development of a cohesive information base for the tertiary sector to inform future funding and statistical requirements:

- the new Tertiary Funding System (TFS) delivers funding and processes the Single Data Return (SDR); institutional funding is determined according to the SDR submitted to the Ministry three times a year
- the new Quality Register will replace the Prospectus Database and Course Register; it will consolidate external quality approval bodies' provider, qualification and course approvals data into a central, standardised and accessible register.

Project Manager:

Murray Leach

phone: (04) 463 8719

fax: (04) 463 8727

email: murray.leach@minedu.govt.nz

- the Data Management Warehouse project involves the centralised collation of a range of data currently collected by various organisations, to enable data comparison and analysis and the measurement and monitoring of sector events and trends. The data warehouse will eventually be accessible to various organisations from central agencies to individual tertiary providers.

Project Manager:

Warren Whitcher

phone: (04) 463 8716

fax: (04) 463 8727

email: warren.whitcher@minedu.govt.nz

Data Management and Analysis

The Data Management and Analysis Division is part of the Ministry of Education's Strategic Information and Resourcing Group. It is responsible for the collection and processing of data from tertiary education providers, monitoring trends in educational processes and outcomes, reporting on indicators of educational performance, roll projections and financial forecasting.

Senior Manager:

Marion Norris

phone: (04) 463 8067

fax: (04) 463 8088

email: marion.norris@minedu.govt.nz

WORK AND INCOME NEW ZEALAND**TE HIRANGA TĀNGATA – STUDENT SERVICES**

From 1 January 1999 Work and Income New Zealand became responsible for administering the student allowances scheme and, from 1 January 2000, the administration of student loans.

Contact:

FreePost 113907

National Student Services Centre

P O Box 4055, Manawatū Mail Service Centre

Palmerston North 5315

freephone: 0800 88 99 00

freefax: 0800 88 33 88

web site: www.winz.govt.nz

email: student.services@winz.govt.nz

INLAND REVENUE TE TARI TAAKE

Inland Revenue administers the repayment of student loans.

Contact:

Inland Revenue

National Office

P O Box 2198, Wellington

phone (student loans help line): 0800 377 778

web site: www.ird.govt.nz

THE NEW ZEALAND QUALIFICATIONS AUTHORITY (NZQA)

The New Zealand Qualifications Authority (NZQA) is a Crown agency that reports directly to the Minister of Education.

Its functions are to:

- coordinate all qualifications in post-compulsory education and training from senior secondary to degree level so that their purpose and interrelationships are comprehensible to students and the public
- oversee the setting and regular review of standards as they relate to qualifications
- ensure New Zealand qualifications are recognised overseas and overseas qualifications are recognised in New Zealand
- administer national examinations, both secondary and tertiary.

Contact:

New Zealand Qualifications Authority

P O Box 160, Wellington

phone: (04) 802 3004

fax: (04) 802 3115

web site: www.nzqa.govt.nz

SKILL NEW ZEALAND PŪKENGA AOTEAROA

The primary agency leading the Government's strategy for developing New Zealand's skilled workforce potential is Skill New Zealand Pūkenga Aotearoa (originally established and known as the Education and Training Support Agency)⁶⁵. Skill New Zealand is a specialist purchaser of education and training services, in training pathways that focus on individuals' learning needs, as a cost effective and relevant alternative to institution-based training. Its focus is on the transition from education and training to work and on increasing access to training in the workplace.

It promotes a variety of training opportunities suitable for different types of people, and provides access to national qualifications for many people who would not otherwise be involved in tertiary education and training. Particular attention is given to those under-represented in training, including Māori, Pacific peoples, women, those with low or no qualifications, older workers with redundant or unrecognised skills, and to reducing education and employment disparities for Māori learners.

Contact:

Skill New Zealand

34-42 Manners Street

P O Box 27-048, Wellington

phone: (04) 801 5588

fax: (04) 801 5598

web site: www.skillnz.govt.nz

CAREER SERVICES – RAPUARA

Career Services – rapuara is a Crown entity that was established in 1990 to assist the achievement of government education, training and employment goals. It does this through the provision of information, advice and guidance services that are designed to help people make informed career choices.

Key clients include the Minister and Associate Minister (Tertiary Education), Work and Income New Zealand, Accident Compensation Corporation (ACC), and a range of individuals and organisations that pay fees for services. The Minister of Education purchases various information and advisory services, which include:

- development and provision of career information
- promotion of the development and accessibility of career information to training and other organisations
- advice to individuals on how best to use career information
- provision of career planning services to target client groups who are unlikely to access such assistance through other channels.

Contacts:

Career Services – rapuara
 4th floor, CMC Building
 89 Courtenay Place
 P O Box 9446, Te Aro
 Wellington
 phone: (04) 801 5177
 fax: (04) 801 5161
 web site: www.careers.govt.nz (includes KiwiCareers)

Career Information Resources Unit
 phone: (04) 801 5177
 fax: (04) 801 5745

TEACHER REGISTRATION BOARD

The Teacher Registration Board (TRB) is a Crown entity established under the Education Act (1989) with responsibilities for:

- maintaining a register of teachers and determining policies under which teachers will be able to be registered and retain registration
- approving registrations and issuing practising certificates and limited authorities to teach
- establishing policy for removal from the register, deciding whether a teacher's name should be removed from the register, and informing school boards of trustees of the names of teachers with cancelled registrations or limited authorities to teach
- ensuring that teachers are satisfactorily trained through the accreditation and approval of teacher education providers and programmes.

All schools and kindergartens may only appoint to permanent positions teachers who are registered and hold a current practising certificate (kura kaupapa Māori are exempt from this provision under the Education Act [1989]). Legislating for a registration system reflects a public concern for maintaining acceptable minimum standards of character, fitness, training and satisfactory teaching in order to practise as a teacher. The Teacher Registration Board also represents the interests of employers and teachers.

Contact:

Teacher Registration Board
 Level 7, 93 The Terrace
 P O Box 5326, Wellington
 phone: (04) 471 0852
 fax: (04) 471 0870
 email: teacher@trb.govt.nz
 web site: www.trb.govt.nz

STUDENTS' ASSOCIATIONS**AOTEAROA TERTIARY STUDENTS' ASSOCIATION****Contact:**

David Penney, National President
 Aotearoa Tertiary Students' Association (ASTA)
 P O Box 10-191, Wellington
 phone: (04) 498 2501
 fax: (04) 499 6554

NEW ZEALAND UNIVERSITY STUDENTS' ASSOCIATION**Contact:**

Sam Huggard / Tanja Schutz, Co-Presidents
 New Zealand University Students' Association
 P O Box 10-191, Wellington
 phone: (04) 498 2500
 fax: (04) 473 2391

TE MANA AKONGA, NATIONAL MĀORI UNIVERSITY STUDENTS' ASSOCIATION**Contact:**

Kaitūhono Danica Waiti
 Te Mana Akonga
 National Māori University Students' Association
 P O Box 10-191, Wellington
 phone: (04) 498 2500
 fax: (04) 473 2391

⁶⁵ The change in trading name was approved in September 1998, although the legislation establishing the organisation as the Education and Training Support Agency has not been changed.

SECTOR REPRESENTATIVE GROUPS

NEW ZEALAND VICE-CHANCELLORS' COMMITTEE

The New Zealand Vice-Chancellors' Committee (NZVCC) was established by the Universities Act (1961). Its role is confirmed in the Education Act (1989). The Committee represents the interests of New Zealand's universities.

The Vice-Chancellors' Committee works through a permanent secretariat based in Wellington and has delegated a number of functions to a range of standing committees generally consisting of a representative from each university. In addition, the Committee convenes ad hoc working parties to address specific issues confronting universities. The NZVCC standing committees are: Committee on University Academic Programmes (CUAP); Research; Copyright; Computing; Libraries; Graduate Employment; Scholarships; and Staff Relations.

Contact:

Lindsay Taiaroa, Executive Director
NZVCC
Level 11, 94 Dixon Street
P O Box 11-915, Wellington
phone: (04) 381 8500
fax: (04) 381 8501
web site: www.nzvcc.ac.nz

ASSOCIATION OF POLYTECHNICS IN NEW ZEALAND

The Association of Polytechnics in New Zealand (APNZ) represents the interests of its member polytechnics. It develops policy on key issues, provides advocacy, provides accreditation and course approval services through its independently operated New Zealand Polytechnic Programmes Committee (NZPPC), supports communication networks and encourages international links.

Contact:

Jim Doyle, Executive Director
APNZ
P O Box 10-344, Wellington
phone: (04) 471 1162
fax: (04) 473 2350
web site: www.apnz.ac.nz

ASSOCIATION OF COLLEGES OF EDUCATION IN NEW ZEALAND

The Association of Colleges of Education in New Zealand (ACENZ) represents the interests of the four colleges of education in New Zealand.

Contact:

Graeme Oldershaw, Executive Director
ACENZ
Level 15, 115 The Terrace
P O Box 10-298, Wellington
phone: (04) 472 7162
fax: (04) 472 9562
email: admin@acenz.ac.nz
web site: www.nzvcc.ac.nz

TE TAUIHU O NGĀ WĀNANGA - THE NATIONAL ASSOCIATION OF WĀNANGA

Contact:

Bentham Ohia, Secretary
Te Taiuhu o Ngā Wānanga
The National Association of Wānanga
P O Box 151, Te Awamutu
phone: (07) 871 4257
fax: (07) 871 3224
email: bentham.ohia@twoa.ac.nz

NEW ZEALAND ASSOCIATION OF PRIVATE EDUCATION PROVIDERS

Contact:

Kevin Smith, President
P O Box 6411, Wellington
phone: 0800 NZAPEP (692 737)
fax: 0800 NZAPEP (692 737)

ASSOCIATION OF MĀORI PRIVATE TRAINING ESTABLISHMENTS

Contact:

Jane Cairns, Secretary
20 Bull Avenue
Wainuiomata
phone: (04) 802 0060
fax: (04) 802 0065
email: teatahou@xtra.co.nz

ASSOCIATION OF PRIVATE PROVIDERS OF TRAINING AND EDUCATION

Contact:

Professor Greg Whitecliffe, Chairman
P O Box 8192, Symonds Street
Auckland
phone: (09) 309 5970
fax: (09) 302 2957

INDUSTRY TRAINING FEDERATION

Contact:

Paul Williams, Executive Director
Level 1, 28 Grey Street
P O Box 24-194, Wellington
phone: (04) 801 9591
fax: (04) 801 6412
mobile: 021 708 510
email: itofed@learning.co.nz

NEW ZEALAND UNIVERSITIES ACADEMIC AUDIT UNIT

The New Zealand Universities Academic Audit Unit (AAU) was established by the NZVCC in 1994. Its core task is to carry out quality audits of the academic activities of the universities and publish reports on its findings. It is also required to identify and disseminate information about good practice in tertiary education, and act as an advisor on quality in tertiary education to the universities, other TEIs, and other organisations nationally and internationally.

Contact:

Dr David Woodhouse, Director
Academic Audit Unit
P O Box 9747, Wellington
phone: (04) 801 7924
fax: (04) 801 7926
email: director@aau.ac.nz
web site: www.aau.ac.nz



APPENDIX TABLES

These tables contain the data represented by the figures within this report.

Appendix tables are numbered to correspond with the figure they support, for example, the data in Appendix Table 5G supports Figure 5G on p.59 of the report.

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APPENDIX TABLE 2A: SIZE DISTRIBUTION OF PTEs WITH FORMAL STUDENTS

RANGE OF ENROLMENTS	NO. OF PTEs
0-25	186
26-50	101
51-100	84
101-200	38
201-300	13
301-400	9
401-500	2
>500	8
TOTAL PTEs	441

Note: A formal student is one enrolled for a course of more than one week's full-time duration.

APPENDIX TABLE 3C: ESTIMATED PROPORTION OF THE POPULATION ENROLLED IN TERTIARY EDUCATION BY AGE AND STATUS, 1999

AGE	FULL-TIME		PART-TIME		TOTAL		POPULATION NO.
	NO.	%	NO.	%	NO.	%	
17-19	44 182	27.1	7 704	4.7	51 886	31.8	163 090
20-24	54 749	21.1	18 901	7.3	73 650	28.4	259 280
25-29	16 072	5.9	16 160	5.9	32 232	11.8	272 670
30-34	10 484	3.6	15 288	5.3	25 772	8.9	288 040
35-39	8 688	2.8	15 258	4.9	23 946	7.7	310 390
40+	11 989	0.8	30 129	2.0	42 118	2.7	1 534 240
TOTAL*	146 164	5.2	103 440	3.7	249 604	8.8	2 827 710

Note: Includes enrolments at TEIs and PTEs.

* Total excludes students under 17 years or with age not stated.

APPENDIX TABLE 3A: SOURCE OF FIRST YEAR FORMAL TERTIARY STUDENTS, JULY 1999

SOURCE/TYPE OF ENTRANT	PTE		TEI		ALL	
	NO.	%	NO.	%	NO.	%
SCHOOL	6 844	33.1	22 129	45.9	28 973	42.0
BENEFICIARY	9 725	47.0	8 674	18.0	18 399	26.7
EMPLOYED	2 912	14.1	13 216	27.4	16 128	23.4
HOUSE PERSON/ RETIRED	297	1.4	1 379	2.9	1 676	2.4
OVERSEAS	616	3.0	2 585	5.4	3 201	4.6
OTHER	283	1.4	255	0.5	538	0.8
TOTAL	20 677	100.0	48 238	100.0	68 915	100.0

APPENDIX TABLE 3E: ESTIMATED NUMBER OF STUDENTS ENROLLED IN FORMAL PROGRAMMES OF STUDY AT TEIs, JULY 1994-1999

TYPE OF PROVIDER	1994	1995	1996	1997	1998	1999
	TEI	196 981	210 935	213 635	218 006	222 317
PTE	-	-	-	28 598	28 712	33 064
TOTAL	196 981	210 935	213 635	246 604	251 029	253 773

Note: PTE figures only available from 1997.

APPENDIX TABLE 3D: ESTIMATED PROPORTION OF THE POPULATION ENROLLED BY AGE, STATUS, AND TYPE OF PROVIDER, 1999

AGE	PTE				TEI				1999 ESTIMATED POPULATION NO.
	FULL-TIME		PART-TIME		FULL-TIME		PART-TIME		
	NO.	%	NO.	%	NO.	%	NO.	%	
17	2 380	4.4	398	0.7	3 384	6.3	977	1.8	53 880
18	2 250	4.1	607	1.1	16 036	29.1	2 080	3.8	55 190
19	1 862	3.4	683	1.3	18 270	33.8	2 959	5.5	54 020
20	1 314	2.5	523	1.0	17 348	32.4	3 307	6.2	53 500
21	880	1.7	493	1.0	13 611	26.4	3 589	7.0	51 470
22	748	1.4	389	0.7	9 315	17.8	3 566	6.8	52 260
23	649	1.3	410	0.8	5 917	11.6	3 153	6.2	50 800
24	577	1.1	377	0.7	4 390	8.6	3 094	6.0	51 250
25	518	1.0	389	0.7	3 571	6.8	2 891	5.5	52 170
26	535	1.0	333	0.6	3 009	5.7	2 763	5.3	52 560
27	451	0.8	380	0.7	2 701	4.9	2 894	5.3	54 890
28	464	0.8	365	0.6	2 328	4.1	2 967	5.2	56 560
29	421	0.7	320	0.6	2 074	3.7	2 858	5.1	56 490
30-34	1 909	0.7	1 464	0.5	8 575	3.0	13 824	4.8	288 040
35-39	1 700	0.5	1 275	0.4	6 988	2.3	13 983	4.5	310 390
40+	2 668	0.2	2 329	0.2	9 321	0.6	27 800	1.8	1 534 240
TOTAL	22 086	0.8	10 978	0.4	127 653	4.5	93 056	3.3	2 827 710

Note: Total includes students under 17 years or with age not stated.

APPENDIX TABLE 3F: PERCENTAGE OF 1999 TEI ENROLMENTS AND 1996 CENSUS POPULATION BY ETHNICITY AND AGE GROUP

AGE GROUP	MĀORI		PACIFIC	
	TEI ENROLMENTS	POPULATION	TEI ENROLMENTS	POPULATION
	JULY 1999 %	1996 %	JULY 1999 %	1996 %
16-19	11.1	19.7	3.6	6.4
20-24	10.6	17.4	4.0	5.8
25-29	15.0	15.8	4.4	5.8
30-34	14.6	14.3	4.1	5.1
35-39	15.8	12.8	3.2	4.2

APPENDIX TABLE 3G: PROJECTED NUMBER OF FORMAL STUDENTS ENROLLED IN TEIs, JULY 1999 – JULY 2003

YEAR	LOW	MEDIUM	HIGH
1999*	220 709	220 709	220 709
2000	216 846	221 520	227 958
2001	210 255	222 077	234 112
2002	200 951	222 687	241 923
2003	188 911	223 349	251 409

* 1999 figures are actual enrolments.
Projections are as at December 1999.

APPENDIX TABLE 4A: FORMAL STUDENTS BY TYPE OF PROVIDER AND LEVEL OF QUALIFICATION, JULY 1999

TYPE OF PROVIDER	POSTGRADUATE		DEGREE		DIPLOMA		CERTIFICATE		ALL QUALIFICATIONS NO.
	NO.	%	NO.	%	NO.	%	NO.	%	
UNIVERSITY	23 528	22.2	79 267	74.8	2 145	2.0	1 056	1.0	105 996
POLYTECHNIC	562	0.6	22 996	23.0	24 380	24.4	52 099	52.1	100 037
COLLEGE OF EDUCATION	217	1.7	6 784	53.0	4 928	38.5	864	6.8	12 793
WĀNANGA	112	5.9	464	24.6	500	26.6	807	42.9	1 883
PTE	292	0.9	559	1.7	5 951	18.0	26 262	79.4	33 064
TOTAL	24 711	9.7	110 070	43.4	37 904	14.9	81 088	32.0	253 773

APPENDIX TABLE 4B: TEI STUDENTS ENROLLED BY FIELD OF STUDY, 1995 AND 1999

FIELD OF STUDY	1995		1999	
	NO.	%	NO.	%
COMMERCIAL AND BUSINESS	54 083	23.9	53 992	23.1
HUMANITIES	31 631	14.0	27 323	11.7
EDUCATION SCIENCE/TEACHER TRAINING	21 071	9.3	24 347	10.4
NATURAL AND APPLIED SCIENCES	16 235	7.2	18 943	8.1
MEDICAL AND HEALTH	13 206	5.8	14 038	6.0
SOCIAL, BEHAVIOURAL AND COMMUNICATION	11 843	5.2	11 428	4.9
INDUSTRIAL TRADES AND CRAFTS	15 832	7.0	10 726	4.6
ENGINEERING	10 920	4.8	9 749	4.2
ART, MUSIC AND HANDCRAFTS	6 558	2.9	8 764	3.8
SERVICE TRADES	8 308	3.7	8 618	3.7
LAW	7 533	3.3	8 162	3.5
GENERAL EDUCATION	5 402	2.4	8 126	3.5
COMPUTING	2 638	1.2	7 376	3.2
AGRICULTURE/HORTICULTURE/FORESTRY/FISHING	7 377	3.3	6 574	2.8
ARCHITECTURAL AND TOWN PLANNING	3 974	1.8	4 023	1.7
SPORT AND RECREATION	2 805	1.2	3 521	1.5
MASS COMMUNICATION	1 272	0.6	2 124	0.9
LITERACY AND NUMERACY	1 878	0.8	1 881	0.8
GENERAL FOUNDATION PROGRAMMES	684	0.3	1 221	0.5
TRANSPORT AND COMMUNICATION	936	0.4	704	0.3
RELIGION AND THEOLOGY	428	0.2	410	0.2
MATHEMATICS	515	0.2	207	0.1
PARAPROFESSIONAL OCCUPATIONS	0	0.0	88	0.0
OTHER	876	0.4	945	0.4
TOTAL	226 005	100.0	233 290	100.0

Note: These figures include students enrolled in multiple qualifications.

APPENDIX TABLE 4C: STUDENT ETHNICITY IN TEIs BY LEVEL OF QUALIFICATION, 1995–1999

EUROPEAN/PĀKEHA	POSTGRADUATE		DEGREE		DIPLOMA		CERTIFICATE		ALL QUALIFICATIONS NO.
	NO.	%	NO.	%	NO.	%	NO.	%	
1995	14 506	9.6	64 675	42.6	29 752	19.6	42 741	28.2	151 674
1996	15 088	10.1	66 452	44.3	28 053	18.7	40 364	26.9	149 956
1997	15 467	10.3	69 114	46.1	26 781	17.9	38 639	25.8	150 001
1998	15 461	10.4	73 036	49.1	24 145	16.2	36 007	24.2	148 649
1999	16 584	11.4	73 282	50.5	21 607	14.9	33 753	23.2	145 226
MĀORI	POSTGRADUATE		DEGREE		DIPLOMA		CERTIFICATE		ALL QUALIFICATIONS NO.
	NO.	%	NO.	%	NO.	%	NO.	%	
1995	1 006	4.4	8 336	36.7	4 180	18.4	9 187	40.5	22 709
1996	1 190	5.1	9 050	38.6	4 329	18.5	8 882	37.9	23 450
1997	1 336	5.4	9 430	38.4	4 643	18.9	9 152	37.3	24 561
1998	1 435	5.3	11 056	40.7	4 747	17.5	9 895	36.5	27 133
1999	1 675	6.0	11 307	40.6	4 776	17.2	10 079	36.2	27 837
PACIFIC	POSTGRADUATE		DEGREE		DIPLOMA		CERTIFICATE		ALL QUALIFICATIONS NO.
	NO.	%	NO.	%	NO.	%	NO.	%	
1995	276	4.1	2 796	41.1	1 486	21.8	2 244	33.0	6 802
1996	355	4.8	3 387	45.9	1 515	20.5	2 129	28.8	7 386
1997	394	5.3	3 123	42.3	1 551	21.0	2 319	31.4	7 388
1998	449	5.5	3 490	43.0	1 533	18.9	2 647	32.6	8 119
1999	510	6.2	3 678	44.6	1 395	16.9	2 658	32.3	8 241
ASIAN	POSTGRADUATE		DEGREE		DIPLOMA		CERTIFICATE		ALL QUALIFICATIONS NO.
	NO.	%	NO.	%	NO.	%	NO.	%	
1995	1 047	10.0	5 880	56.1	1 194	11.4	2 367	22.6	10 488
1996	1 670	11.5	8 082	55.6	1 565	10.8	3 206	22.1	14 523
1997	2 193	12.4	9 486	53.8	2 152	12.2	3 791	21.5	17 623
1998	2 490	12.8	11 101	57.0	2 145	11.0	3 740	19.2	19 476
1999	2 940	14.7	11 753	58.8	1 994	10.0	3 307	16.5	19 994
OTHER	POSTGRADUATE		DEGREE		DIPLOMA		CERTIFICATE		ALL QUALIFICATIONS NO.
	NO.	%	NO.	%	NO.	%	NO.	%	
1995	1 023	13.2	3 521	45.3	1 004	12.9	2 216	28.5	7 765
1996	1 005	14.1	2 933	41.3	1 092	15.4	2 078	29.2	7 108
1997	1 057	15.5	3 115	45.6	1 024	15.0	1 639	24.0	6 834
1998	1 090	15.4	3 383	47.8	941	13.3	1 658	23.4	7 072
1999	1 191	16.9	3 449	48.9	826	11.7	1 586	22.5	7 052
INTERNATIONAL	POSTGRADUATE		DEGREE		DIPLOMA		CERTIFICATE		ALL QUALIFICATIONS NO.
	NO.	%	NO.	%	NO.	%	NO.	%	
1995	810	15.9	3 001	58.8	476	9.3	819	16.0	5 106
1996	916	15.0	3 918	64.1	491	8.0	783	12.8	6 108
1997	1 023	13.6	4 357	57.9	758	10.1	1 386	18.4	7 524
1998	1 006	13.9	4 271	58.8	698	9.6	1 285	17.7	7 260
1999	1 232	15.8	4 279	55.0	767	9.9	1 508	19.4	7 786
TOTAL	POSTGRADUATE		DEGREE		DIPLOMA		CERTIFICATE		ALL QUALIFICATIONS NO.
	NO.	%	NO.	%	NO.	%	NO.	%	
1995	18 861	8.9	89 331	42.4	39 165	18.6	63 578	30.1	210 935
1996	20 464	9.6	95 290	44.6	37 684	17.6	60 197	28.2	213 635
1997	21 716	10.0	100 071	45.9	37 438	17.2	58 782	27.0	218 006
1998	22 262	10.0	107 805	48.5	34 936	15.7	57 314	25.8	222 317
1999	24 419	11.1	109 511	49.6	31 953	14.5	54 826	24.8	220 709

APPENDIX TABLE 4D: UNIT STANDARDS REGISTERED BY FIELD OF STUDY BY YEAR

FIELD	<1999	1999
MANUFACTURING	2 366	940
HUMANITIES	982	652
ENGINEERING AND TECHNOLOGY	2 695	620
SERVICE SECTOR	1 043	336
MĀORI	165	244
SCIENCES	553	192
PLANNING AND CONSTRUCTION	451	160
COMMUNITY AND SOCIETY	818	155
AGRICULTURE, FORESTRY, FISHING	1 259	154
BUSINESS AND FINANCE	575	101
HEALTH	222	73
LAW AND SECURITY	97	53
ARTS AND CRAFTS	716	31
CORE GENERIC	166	1
COMPUTING AND IT	236	0
EDUCATION	392	0
SOCIAL SCIENCES	296	0

APPENDIX TABLE 4E: NATIONAL QUALIFICATIONS REGISTERED BY FIELD OF STUDY BY YEAR

FIELD	<1999	1999
MANUFACTURING	181	72
ENGINEERING AND TECHNOLOGY	104	44
ARTS AND CRAFTS	17	23
AGRICULTURE, FORESTRY, FISHING	61	21
SERVICE SECTOR	71	16
BUSINESS AND FINANCE	12	10
HEALTH	8	9
COMMUNITY AND SOCIETY	34	6
MĀORI	5	6
PLANNING AND CONSTRUCTION	22	5
LAW AND SECURITY	13	2
EDUCATION	11	1
SCIENCES	3	1
COMPUTING AND IT	6	0
CORE GENERIC	1	0
HUMANITIES	0	0
SOCIAL SCIENCES	1	0

APPENDIX TABLE 5A: TEI GRADUATES BY LEVEL OF QUALIFICATION AND GENDER, 1995–1999

MALE	1995		1996		1997		1998		1999	
	NO.	%								
POSTGRADUATE	3 310	16.1	3 582	16.7	3 756	15.9	4 269	17.7	4 397	17.6
DEGREE	6 451	31.4	7 469	34.8	8 549	36.2	8 357	34.6	8 697	34.7
DIPLOMA	2 790	13.6	2 246	10.5	2 361	10.0	2 560	10.6	2 388	9.5
CERTIFICATE	7 964	38.8	8 193	38.1	8 956	37.9	8 995	37.2	9 567	38.2
TOTAL	20 515	100.0	21 490	100.0	23 622	100.0	24 181	100.0	25 049	100.0
FEMALE	1995		1996		1997		1998		1999	
	NO.	%								
POSTGRADUATE	3 001	11.1	3 424	12.2	3 837	11.9	4 246	12.0	4 874	12.9
DEGREE	8 533	31.6	10 194	36.3	12 315	38.0	13 157	37.3	14 980	39.8
DIPLOMA	5 414	20.1	4 612	16.4	4 375	13.5	5 306	15.0	4 631	12.3
CERTIFICATE	10 048	37.2	9 869	35.1	11 851	36.6	12 575	35.6	13 177	35.0
TOTAL	26 996	100.0	28 099	100.0	32 378	100.0	35 284	100.0	37 662	100.0
TOTAL	1995		1996		1997		1998		1999	
	NO.	%								
POSTGRADUATE	6 311	13.3	7 006	14.1	7 593	13.6	8 515	14.3	9 271	14.8
DEGREE	14 984	31.5	17 663	35.6	20 864	37.3	21 514	36.2	23 677	37.8
DIPLOMA	8 204	17.3	6 858	13.8	6 736	12.0	7 866	13.2	7 019	11.2
CERTIFICATE	18 012	37.9	18 062	36.4	20 807	37.2	21 570	36.3	22 744	36.3
TOTAL	47 511	100.0	49 589	100.0	56 000	100.0	59 465	100.0	62 711	100.0

Note: These tables include students graduating with multiple qualifications.

APPENDIX TABLE 5B: MĀORI, PACIFIC AND OTHER DOMESTIC TEI GRADUATES BY AGE, 1999

AGE	MĀORI		PACIFIC		OTHER	
	NO.	%	NO.	%	NO.	%
<17	75	0.9	12	0.6	312	0.7
17	266	3.3	48	2.4	1 159	2.5
18	529	6.5	131	6.6	2 104	4.6
19	405	5.0	124	6.2	1 812	4.0
20	434	5.4	149	7.5	3 659	8.0
21	529	6.5	158	7.9	5 400	11.8
22	470	5.8	138	6.9	4 297	9.4
23	356	4.4	105	5.3	2 852	6.2
24	317	3.9	87	4.4	1 921	4.2
25	272	3.4	65	3.3	1 525	3.3
26	273	3.4	76	3.8	1 276	2.8
27	263	3.3	52	2.6	1 176	2.6
28	238	2.9	45	2.3	1 034	2.3
29	197	2.4	48	2.4	1 016	2.2
30-34	961	11.9	250	12.6	4 513	9.9
35-39	955	11.8	199	10.0	4 178	9.2
40+	1 545	19.1	303	15.2	7 421	16.3
TOTAL	8 085	100.0	1 990	100.0	45 655	100.0

Note: These figures exclude multiple enrolments

APPENDIX TABLE 5E: ANNUAL LEARNER REGISTRATIONS BY TYPE OF PROVIDER, 1995–1999

PROVIDER	1995	1996	1997	1998	1999
ITO	2 772	16 729	18 010	22 021	19 002
POLYTECHNIC	5 878	21 131	24 612	23 777	20 892
PTE	12 829	28 468	31 061	29 692	29 012
SCHOOL	17 495	19 646	40 643	35 602	38 655
REMAINDER	653	2 743	2 318	1 459	5 677

Note: ITOs are not themselves providers of training, but most assess for NQF credits.

APPENDIX TABLE 5C: MĀORI AND NON-MĀORI, PACIFIC AND NON-PACIFIC TEI GRADUATES BY TYPE OF PROVIDER, 1999

TYPE OF PROVIDER	MĀORI		NON-MĀORI		PACIFIC		NON-PACIFIC	
	NO.	%	NO.	%	NO.	%	NO.	%
UNIVERSITY	1 957	24.2	22 197	46.6	532	26.7	23 622	44.0
POLYTECHNIC	5 071	62.7	22 118	46.4	1 248	62.7	25 941	48.3
COLLEGE OF EDUCATION	443	5.5	3 277	6.9	177	8.9	3 543	6.6
WĀNANGA	614	7.6	54	0.1	33	1.7	635	1.2
TOTAL	8 085	100.0	47 646	100.0	1 990	100.0	53 741	100.0

Note: These figures exclude multiple enrolments

APPENDIX TABLE 5D: MĀORI AND NON-MĀORI, PACIFIC AND NON-PACIFIC TEI GRADUATES BY LEVEL OF QUALIFICATION, 1999

AWARD	MĀORI		NON-MĀORI		PACIFIC		NON-PACIFIC	
	NO.	%	NO.	%	NO.	%	NO.	%
POSTGRADUATE	513	6.3	8 056	16.9	154	7.7	8 415	15.7
DEGREE	2 089	25.8	19 297	40.5	537	27.0	20 849	38.8
DIPLOMA	1 066	13.2	5 446	11.4	303	15.2	6 209	11.6
CERTIFICATE	4 417	54.6	14 847	31.2	996	50.1	18 268	34.0
TOTAL	8 085	100.0	47 646	100.0	1 990	100.0	53 741	100.0

Note: These figures exclude multiple enrolments

APPENDIX TABLE 5F: DESTINATIONS OF UNIVERSITY GRADUATES, 1985–1998

YEAR	UNEMPLOYED (SEEKING FULL-TIME EMPLOYMENT)		EMPLOYED (FULL-TIME)		FURTHER STUDY (FULL-TIME)		OTHER		RESPONDENTS
	NO.	%	NO.	%	NO.	%	NO.	%	NO.
1985	572	6.3	5 607	61.9	1 867	20.6	1 014	11.2	9 060
1986	552	6.3	5 424	61.7	1 741	19.8	1 067	12.1	8 784
1987	613	6.7	5 560	60.4	1 897	20.6	1 132	12.3	9 202
1988	923	9.8	5 421	57.4	1 952	20.7	1 141	12.1	9 437
1989	979	9.7	5 565	55.1	2 245	22.2	1 307	12.9	10 096
1990	1 202	10.7	6 045	53.6	2 457	21.8	1 578	14.0	11 282
1991	1 653	13.7	5 930	49.3	2 899	24.1	1 542	12.8	12 024
1992	2 208	15.9	6 223	44.9	3 513	25.4	1 905	13.8	13 849
1993	2 144	13.8	7 375	47.3	4 354	27.9	1 710	11.0	15 583
1994	2 144	12.6	8 466	49.6	4 629	27.1	1 839	10.8	17 078
1995	2 371	13.1	9 274	51.4	4 615	25.6	1 795	9.9	18 055
1996	2 413	12.2	10 479	53.0	4 811	24.3	2 077	10.5	19 780
*1997	669	8.6	4 184	53.7	1 933	24.8	1 011	13.0	7 796
**1998	540	5.4	4 973	49.8	2 672	26.8	1 800	18.0	9 985

* Earlier reports by the New Zealand Vice-Chancellors' Committee, Graduate Employment in New Zealand, on students who graduated in the years ending May 1985 to 1996, used a different methodology and generally represented a far higher proportion of graduating university students.

** A change in the methodology and questionnaire between 1997 and 1998 influenced the number of respondents recorded as 'not entered' or 'seeking employment'. Therefore, no comparison can be made between 1997 and 1998 in respect of respondents seeking employment.

APPENDIX TABLE 5G: AVERAGE INCOME BY QUALIFICATION
(25-34 AGE GROUP), BY GENDER, 1999

TYPE OF QUALIFICATION	MALE	FEMALE
NO QUALIFICATION	\$28,900	\$19,600
SCHOOL CERTIFICATE	\$32,000	\$21,800
6TH OR 7TH FORM QUALIFICATION	\$38,000	\$30,500
OTHER TERTIARY	\$36,000	\$25,500
DEGREE INCLUDING POSTGRADUATE	\$47,500	\$36,900
TOTAL	\$36,600	\$27,000

APPENDIX TABLE 6A: GOVERNMENT APPROPRIATIONS FOR
TERTIARY EDUCATION, 1999/2000

	AMOUNT	%
TERTIARY EDUCATION AND TRAINING SUBSIDIES	\$1,225,229	45.8
STUDENT LOANS	\$717,005	26.8
STUDENT ALLOWANCES	\$386,162	14.4
TRAINING FOR DESIGNATED GROUPS	\$136,257	5.1
TRAINING INCENTIVE ALLOWANCE AND COMMUNITY WAGE – TRAINING	\$83,311	3.1
NON-MINISTRY OF EDUCATION ADMINISTRATION OF RESOURCING	\$62,807	2.3
COMMUNITY EDUCATION	\$37,016	1.4
OTHER	\$17,164	0.6
MINISTRY OF EDUCATION ADMINISTRATION OF RESOURCING	\$12,604	0.5
TOTAL FUNDING	\$2,677,555	100.0

APPENDIX TABLE 6B: BULK FUNDED EFTS FUNDING AND AVERAGE SUBSIDY PER EFTS ACHIEVED, 1991–1999

EFTS FUNDING (GST INCLUSIVE)									
TYPE OF PROVIDER	1991	1992	1993	1994	1995	1996	1997	1998	1999
UNIVERSITY	\$571,810,864	\$615,238,898	\$637,262,885	\$641,987,668	\$655,490,180	\$669,612,118	\$672,736,551	\$684,758,187	\$693,372,519
POLYTECHNIC	\$367,901,848	\$385,316,466	\$402,432,529	\$402,056,598	\$401,757,711	\$398,992,337	\$399,896,994	\$403,482,230	\$405,124,150
COLLEGE OF EDUCATION	\$53,543,079	\$58,849,041	\$57,078,104	\$54,635,339	\$54,452,687	\$47,370,637	\$48,638,205	\$50,925,870	\$54,837,256
WĀNANGA	-	-	\$366,563	\$2,169,717	\$3,399,417	\$3,820,803	\$5,752,341	\$6,884,879	\$10,244,051
PTE	-	\$1,900,000	\$2,700,000	\$4,900,000	\$5,900,000	\$7,000,000	\$7,000,000	\$7,000,000	\$16,802,141
TOTAL	\$993,255,791	\$1,061,304,405	\$1,099,840,081	\$1,105,749,322	\$1,120,999,995	\$1,126,795,895	\$1,134,024,091	\$1,153,051,166	\$1,180,380,117
BULK FUNDED EFTS PLACES									
TYPE OF PROVIDER	1991 FUNDED	1992 FUNDED	1993 FUNDED	1994 FUNDED	1995 FUNDED	1996 FUNDED	1997 FUNDED	1998 FUNDED	1999 ACTUAL
UNIVERSITY	63 234	68 521	72 142	75 702	77 976	80 809	81 981	83 705	89 115
POLYTECHNIC	45 141	49 044	52 565	54 213	54 370	55 229	56 198	57 297	61 507
COLLEGE OF EDUCATION	5 735	6 560	6 758	7 028	7 097	6 333	6 652	6 955	8 019
WĀNANGA	0	0	54	281	473	591	855	1 021	1 641
PTE	0	363	1 435	2 703	2 362	1 969	2 123	2 178	9 187
TOTAL	114 110	124 488	132 954	139 927	142 278	144 931	147 809	151 156	169 469
FUNDING (GST INCLUSIVE) PER BULK FUNDED EFTS PLACE									
TYPE OF PROVIDER	1991	1992	1993	1994	1995	1996	1997	1998	1999
UNIVERSITY	\$9,043	\$8,979	\$8,833	\$8,480	\$8,406	\$8,286	\$8,206	\$8,181	\$7,781
POLYTECHNIC	\$8,150	\$7,856	\$7,656	\$7,416	\$7,389	\$7,224	\$7,116	\$7,042	\$6,587
COLLEGE OF EDUCATION	\$9,336	\$8,971	\$8,446	\$7,774	\$7,673	\$7,480	\$7,312	\$7,322	\$6,839
WĀNANGA	-	-	\$6,788	\$7,721	\$7,187	\$6,465	\$6,728	\$6,743	\$6,242
PTE	-	\$5,234	\$1,882	\$1,813	\$2,498	\$3,555	\$3,297	\$3,214	\$1,829
TOTAL	\$8,704	\$8,525	\$8,272	\$7,902	\$7,879	\$7,775	\$7,672	\$7,628	\$6,965

APPENDIX TABLE 6C/6D: EFTS PLACES BY FUNDING CATEGORY, 1991–1999

FUNDING CATEGORY	TEIs									DISTRIBUTION BY CATEGORY
	1991	1992	1993	1994	1995	1996	1997	1998	1999	1999 %
A	49 519	55 604	58 779	61 249	63 449	64 745	65 456	66 750	71 617	44.6
B	36 034	41 894	43 811	39 189	38 639	38 655	38 943	39 389	43 369	27.0
C	10 319	11 266	13 169	13 318	13 968	14 590	15 107	15 565	15 665	10.0
D	1 966	2 224	2 556	3 006	3 364	3 480	3 676	4 144	4 564	3.0
E	968	1 065	1 376	1 431	1 597	1 498	1 537	1 614	1 882	1.0
G	1 595	1 613	1 584	1 616	1 487	1 588	2 161	2 179	2 241	1.0
H	369	357	368	359	377	393	50	39	44	0.0
I	0	0	0	6 624	6 630	7 195	7 987	8 399	10 118	6.0
X	10 012	9 873	9 646	10 204	10 195	10 592	10 769	10 762	11 098	6.9
TOTAL	110 783	123 895	131 289	136 996	139 706	142 736	145 686	148 841	160 596	100.0

APPENDIX TABLE 6E: GROWTH IN EFTS IN POSTGRADUATE STUDY, 1992–1999

YEAR	TOTAL
1992	7 916
1993	9 600
1994	10 821
1995	11 821
1996	12 343
1997	13 123
1998	14 120
1999	14 453

APPENDIX TABLE 6F: FUNDED STUDY RIGHT RATIOS, 1992–1999

YEAR	STUDY RIGHT RATIO %
*1992	59.9
1993	58.6
1994	57.5
1995	56.0
1996	54.2
1997	53.0
1998	51.7
1999	51.9

* 1992 figure is estimated
 Note: Ratios prior to 1999 are based on August of the previous year. 1999 ratios are based on 31 December 1999

APPENDIX TABLE 6I: TEIs' RETURN ON INCOME, 1992–1999

YEAR	AVERAGE TEIs %
1992	6.3
1993	2.9
1994	4.6
1995	3.6
1996	2.6
1997	3.0
1998	2.1
1999	2.4

APPENDIX TABLE 6G: ESTIMATED TERTIARY EDUCATION EXPENDITURE ON MĀORI AND PACIFIC STUDENTS, 1999/2000

	EXPENDITURE	%
MĀORI	\$231,597	15.7
PACIFIC	\$60,874	4.1
OTHER	\$1,178,632	80.1
TOTAL	\$1,471,103	100.0

APPENDIX TABLE 6H: TOTAL TEI SECTOR SOURCES OF INCOME, 1992 AND 1999

YEAR	GOVERNMENT FUNDING %	FEES %	OTHER %
1992	76.4	11.2	12.4
1999	51.1	25.8	23.1

APPENDIX TABLE 6J: ESTIMATED AVERAGE FEES FOR FULL-TIME, FULL-YEAR STUDENTS BY TYPE OF PROVIDER, 1992–1999

TYPE OF PROVIDER	1992	1993	1994	1995	1996	1997	1998	1999
UNIVERSITY	\$1,300	\$1,700	\$2,100	\$2,300	\$2,689	\$3,038	\$3,331	\$3,661
POLYTECHNIC	\$1,300	\$1,600	\$1,900	\$2,100	\$2,529	\$2,888	\$3,127	\$3,179
COLLEGE OF EDUCATION	\$1,400	\$1,600	\$1,900	\$1,900	\$2,073	\$2,187	\$2,448	\$2,393
WĀNANGA	\$1,400	\$1,200	\$900	\$1,100	\$1,431	\$1,900	\$2,360	\$2,724
PTE	\$3,900	\$3,700	\$3,900	\$3,700	\$4,081	\$5,057	\$5,473	\$5,343
AVERAGE FEE	\$1,300	\$1,700	\$2,000	\$2,200	\$2,631	\$3,001	\$3,319	\$3,507

Note: Based on full-time, full-year student loan clients' entitlement data.

APPENDIX TABLE 6K: NUMBER OF STUDENT LOAN CLIENTS AND AVERAGE AMOUNT BORROWED, 1992–1999

YEAR	NO.	AVERAGE AMOUNT BORROWED
1992	44 202	\$3,628
1993	68 411	\$3,979
1994	79 338	\$4,309
1995	89 817	\$4,432
1996	95 411	\$4,649
1997	105 038	\$5,494
1998	114 387	\$5,714
1999	115 142	\$4,945

Note: Borrowed amounts are not adjusted for real dollar terms.

APPENDIX TABLE 6L: NUMBER AND VALUE OF OUTSTANDING LOAN BALANCES AS AT JUNE, 1995 AND 1997–1999

RANGE OF BALANCES	1995	NUMBER IN RANGE		
	1997	1998	1999	
<\$6,000	63 740	89 948	94 944	95 035
\$6,000-10,000	30 130	41 707	45 388	48 170
\$10,000-15,000	12 821	23 400	31 517	38 865
\$15,000-20,000	7 620	16 400	20 260	22 716
\$20,000-25,000	2 996	7 769	10 986	15 485
\$25,000-30,000	647	5 441	8 207	9 909
\$30,000-35,000	128	2 295	4 001	6 834
OVER \$35,000	50	2 365	5 610	10 354
TOTAL	118 132	189 325	220 913	247 368

Note: 1996 loan data not available.

COMMENT SHEET

AN INVITATION TO COMMENT ON NEW ZEALAND'S TERTIARY EDUCATION SECTOR: PROFILE AND TRENDS 1999

Please complete this brief questionnaire, fold as directed and place in the mail (no stamp required). All responses received before the end of February 2001 will be carefully considered in planning the next edition of this report. We look forward to your feedback.

1. Please comment on the format of the report (eg, ease of finding information of interest, clarity of presentation of information, etc).

2. Please comment on the overall value of the report to you and your organisation.

3. Are there any aspects of tertiary education in New Zealand which you would like to see addressed in more detail in future reports?

4. Are there any areas which you feel are covered in too much detail? If so, which?

5. Are there any other ways in which future editions might be improved?

6. Please indicate your interest in tertiary education: (*tick appropriate boxes*):

<input type="checkbox"/> Tertiary education provider	<input type="checkbox"/> School
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