

chapter three

SKILLS FOR A KNOWLEDGE ECONOMY

INTRODUCTION

The tertiary education sector is very diverse. Its scope ranges from informal, non-assessed community courses through to undergraduate degrees and advanced, research-based postgraduate degrees. It provides pathways for a wide range of learners, including school leavers, workers, the unemployed, international students, those pursuing an interest or hobby, and people seeking greater social interaction. The tertiary sector has a varied range of learning objectives and is influenced by a most diverse set of people and factors.

Changes in participation and achievement in tertiary education are indicators of the extent to which New Zealanders are developing the skills needed for a modern knowledge economy. This chapter looks at the range of provision of tertiary education in New Zealand in 2003 and provides information on some 430,000 domestic and 47,000 international students enrolled in formal qualifications with tertiary education providers, as well as some 127,000 workers engaged in industry-based training.

2003 saw the continuation of a period of renewed growth in the sector that began in 2000, following a period of low or negative growth from 1996 to 1999.

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

By the end of 2003, an estimated 40 percent of domestic students who commenced qualifications in 1999 had completed, whereas 50 percent of those who started a qualification in 1999 had left without completing, and 10 percent were still studying.

In the wider context, students successfully complete courses at a much higher rate than qualifications, and many leave study, especially in times of higher employment, with one or two courses remaining to be completed for their qualification. Other students will enrol for a qualification, but abandon it once they have met their objectives, which may have been to pass only two or three courses. To that extent, a high proportion of students not completing their qualifications does not necessarily mean a system failure.

New Zealand's lifelong approach to tertiary learning, relatively open access to enrolment and easy access to student loans have tended to increase the number of students with a focus on part-time, course-based study, and those trying to combine work with study. This is borne out in other countries, which have higher academic entry requirements, more full-time study and less access to student support.

In the space of 10 years, New Zealand's tertiary education sector has gone from one characterised largely by formal public institution-based learning in universities, polytechnics and colleges of education, to a sector catering for a more diverse range of people in a much wider variety of settings.

Most noticeable has been the establishment and rise of wānanga and their success in providing an environment and programmes which attract first-time Māori students into tertiary education. Another significant area of growth has been industry training, where the number of trainees reached nearly 127,000 during 2003.

International education was a much bigger component of the tertiary landscape in 2003 than in 1994, with international students contributing \$372 million, or 11.9 percent, to the total revenue of public tertiary education institutions (TEIs). However, growth in international education slowed in 2003, with a decline in students from some Asian and Pacific countries.

Recent years have also seen a major development in e-learning, both intra- and extra-mural, and in 2003 a significant number of learners undertook part or all of their study without face-to-face interaction with a teacher.

THE DIVERSITY OF THE SECTOR

TYPES OF PROVIDERS

Tertiary education has become increasingly diverse, both in terms of the types of learners participating and the types of learning available. In the space of 10 years, the sector has developed from one characterised largely by formal public institution-based learning in universities, polytechnics and colleges of education, to a sector catering for a more diverse range of people in a much wider variety of settings.

Most noticeable has been the establishment and rise of wānanga and their success in providing programmes and an environment which attract first-time Māori students into tertiary education. Around 15 percent of all students and 43 percent of all Māori students were enrolled at wānanga in 2003.

Another significant development has been the growth in industry training. From its inception in the early 1990s, industry training grew to cater for nearly 127,000 trainees in 2003.

The tertiary education sector comprises a range of different types of providers. These are described in detail in chapter 9¹, and include four types of TEIs:

- eight universities whose teaching activities focus largely on research-led, theoretically-based qualifications at bachelors level or higher
- twenty polytechnics or institutes of technology that offer degrees and a large number of sub-degree, practically-oriented qualifications that have a particular focus on serving the interests of local communities and of business and industry
- four colleges of education that specialise in training people for careers as educators, and
- three wānanga whose mission is to provide iwi-based tertiary education at a variety of levels and with a variety of approaches, especially focused on meeting the needs of Māori learners.

In addition to the TEIs described above, New Zealand has an extremely diverse group of private training establishments (PTEs). In December 2003, there were 907 PTEs registered with the New Zealand Qualifications Authority (NZQA). Of these, around 400 provided learning towards formally-assessed qualifications.

The registered PTEs serve a range of interests and receive their income from a variety of sources. During 2003, about 230 received funding through the equivalent full-time students (EFTS)-based Student Component tuition subsidies, or were approved for student loans and allowances. Some PTEs also receive government funding through such programmes as Training Opportunities, Youth Training, Skill Enhancement and industry training. Others are not Crown funded at all and raise their revenue entirely from learner fees. Of this latter group, the largest sub-group is the English language schools that focus on teaching English to international students.

¹ pages 199-202.



There are 16 other tertiary education providers (OTEPEs) that receive funding from the government to provide educational services of national significance which cannot be funded solely through the tertiary funding system². They are funded through a mixture of grants, contracts and EFTS-based tuition subsidies. During 2003, OTEPEs had around 5,700 students enrolled in qualifications totalling nearly 2,500 EFTS.

In addition to the TEIs, PTEs and OTEPEs, an increasing amount of training is now being undertaken in the workplace. Over 29,206 employers took part in industry training in 2003 and were supported by 43 industry training organisations.

Specialised vocational training was also provided by nine government training establishments (GTEs)³. These establishments included specialised training for police, prison, fire service and defence force staff.

RECOGNISING ACHIEVEMENT

In 2003, the New Zealand Register of Quality Assured Qualifications (the Register), Te Āhurutanga, was launched. The Register brought together, for the first time, all formally-recognised, quality-assured qualifications under a single framework. A website, 'KiwiQuals' (www.kiwiquals.govt.nz), was launched in June 2003 and provides access to the information held on the Register.

The key purposes of the Register are to:

- clearly identify all quality-assured qualifications in New Zealand
- ensure that all qualifications have a purpose and relation to each other that students and the public can understand
- maintain and enhance learners' ability to transfer credit by the establishment of a common system of credit, and
- enhance and build on the international recognition of New Zealand qualifications.

The National Qualifications Framework (NQF), comprising unit and achievement standards, is a key subset of the Register. The NQF defines national standards and national qualifications, and facilitates credit accumulation.

The definitions of the names of qualifications in the Register support:

- the comparability of qualifications
- the easy understanding of qualifications, and
- international recognition of qualifications.

The Register assigns each qualification to one of 10 qualification levels. Level 10 represents doctorates, level 9 masters degrees, level 8 postgraduate diplomas and certificates and bachelors degrees with honours, and level 7 bachelor-level qualifications. Certificates range from levels 1 to 7, and diplomas from levels 5 to 7.

The Register plays a significant role in both course-based and work-based education and training in New Zealand. It incorporates quality-assured qualifications developed and delivered by tertiary education providers as well as national certificates and national diplomas.

The range of qualifications offered by the tertiary education sector has increased significantly over recent years. In addition to degrees and postgraduate qualifications that have an academic orientation, many qualifications on the Register have been developed for new or growing industries, while others are designed to develop generic competencies that can be applied in a variety of settings. For example, there has been significant uptake in computing, business administration, hospitality, seafood processing, agriculture, engineering and technology, manufacturing, forestry and fisheries, community and social services, and security qualifications which are offered at a variety of levels, from certificate to degree level. The Register also includes qualifications in sport and recreation, te reo Māori, call centre operations, cleaning and caretaking, crane operations, and film and television.

The modular nature of many qualifications has enabled learners and workers to gain credits outside traditional courses; many workers have had their existing competencies formally assessed on the job and have subsequently received credit towards qualifications. 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 for elderly people.

² See chapter 9, System Capability and Quality, page 201.

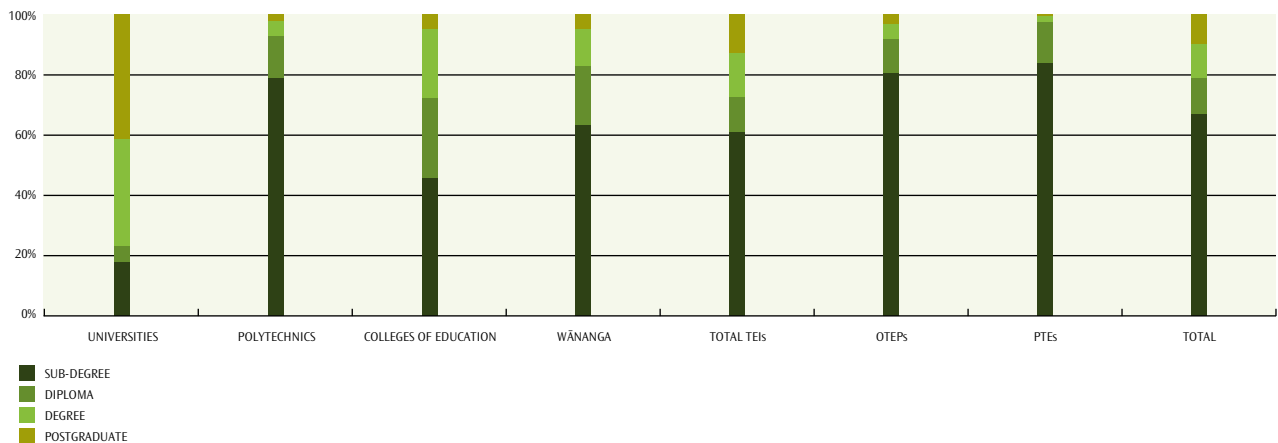
³ See chapter 9, page 201.

There is growing acceptance among tertiary providers that students should have access to assessment of their existing skills and knowledge before they enrol for a course of study.

Over 6,800 qualifications were available in the sector in 2003. However, the number of qualifications is not directly related to the number of students. At postgraduate level, for instance, there are many qualifications that have relatively small numbers of enrolments, as fits that level of study, whereas at bachelors level the number of qualifications on offer is roughly the same, but the number of students is much higher.

In 2003, students achieved a record number of national certificates, national diplomas, and credits for recognised unit standards. NZQA awarded 68,142 national qualifications in the tertiary education sector in 2003, an increase of approximately 40 percent over 2002. This brought the total of national qualifications awarded in the tertiary education sector since the establishment of the NQF to over 169,000.

FIGURE 3.1: DISTRIBUTION OF QUALIFICATIONS BY SUB-SECTOR AND QUALIFICATION LEVEL 2003



Polytechnics were the main providers of level 1 to 4 certificates, providing 59 percent of all such qualifications in 2003. Certificates represented around 73 percent of all qualifications on offer by polytechnics in 2003. PTEs offered 32 percent of all certificates delivered in 2003.

Diplomas often prepare learners for the self-directed application of skills and knowledge. These qualifications recognise the capacity for initiative and judgement across a broad range of educational and vocational areas, often in technical, professional, and/or management roles. Many build on prior qualifications or experience.

Level 5 to 6 diplomas made up around 14 percent of all qualifications on offer. Over half (53 percent) of the level 5 to 6 diplomas were offered by polytechnics, with a further 28 percent offered by PTEs. Level 5 to 6 diplomas were the most common level of qualification taught at colleges of education, comprising 35 percent of qualifications on offer from these providers.

Bachelors degrees are theoretically-based qualifications that require three years or more of full-time study to complete. They were traditionally the preserve of universities, which still offer the majority of undergraduate and postgraduate degrees (63 percent of bachelors degrees and 88 percent of postgraduate qualifications). However, there are now a significant number of non-university providers that offer programmes at the degree or postgraduate level. These providers are the polytechnics, colleges of education, wānanga and some PTEs.

Of the bachelor-level qualifications on offer in 2003, 37 percent were offered by non-university providers, the majority of these being polytechnics. Qualifications at this level represented 6 percent of all polytechnic qualifications, compared with 36 percent of all qualifications offered by universities, 30 percent of college of education qualifications and 15 percent of qualifications at wānanga. Around 50 bachelor-level qualifications were offered by PTEs in 2003, about 4 percent of the qualifications at this level.



Universities continue to provide the substantial majority of qualifications at postgraduate level (about 88 percent in 2003). About two thirds of postgraduate qualifications, that is, postgraduate certificates, diplomas, or bachelors degrees with honours are at level 8 on the Register. A further 28 percent of postgraduate-level qualifications were at masters level. More than 20 percent of the qualifications at masters level were provided in 2003 by non-university providers, including 12 masters degrees offered by PTEs. A total of 52 doctorate-level qualifications were on offer in 2003, 48 from the eight universities, three from two polytechnics, and one from Te Wānanga o Raukawa.

In addition to the types of providers described above, some employers also provide work-based training. The government provides funding through the Industry Training Fund to enable students to work towards national qualifications in specific vocational areas, through on-job training, as well as through education delivered through PTEs and polytechnics. The Modern Apprenticeships scheme provides another vehicle for on-job training in vocational areas in particular industries.

TYPES OF LEARNING

The tertiary education sector also offers diverse types of learning. While the majority of learning is undertaken in recognised tertiary education organisations and is directed towards formally-assessed qualifications, there are other important types of learning that cater for significant numbers of learners. These include, in particular, all on-job work-based training, and all non-formal adult and community education.

Because information is not collected at the student level for all parts of the sector, and individual students may participate in more than one part of the sector, an accurate full count of participation in the tertiary education sector is difficult. However, broad estimates, where available, are provided below.

TABLE 3.1: PARTICIPATION IN DIFFERENT PARTS OF THE TERTIARY EDUCATION SECTOR IN 2003

	Estimated number of students ¹
Formal domestic students in government-funded providers ²	428,100
Formal international students ²	47,100
Industry trainees ³	126,900
Other formal students ⁴	15,000
Students in formal courses of less than 0.03 EFTS	35,500
Training Opportunities programme ⁵	19,000
Youth Training programme ⁵	12,700
Rangatahi Māia, and Tupulaga Le Lumana'i Skill Enhancement programmes ⁵	1,100
STAR programme ⁵	13,900
Gateway programme ⁵	2,700
Workplace and community-based literacy programmes ⁶	<20,000
English for Migrants programme ⁶	1,000
English for Speakers of Other Languages (ESOL) ⁶	20,000
Non-formal adult and community education in schools ⁶	>150,000
Non-formal adult and community education in TEIs ⁶	>276,000

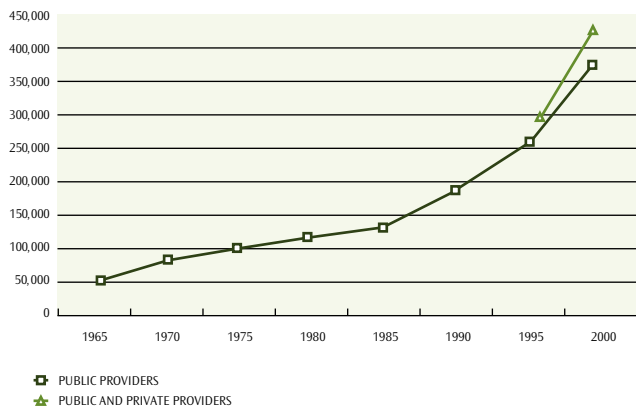
Notes:

- ¹ Students can be counted in more than one category.
- ² Estimated students in programmes of more than 0.03 EFTS duration in government-funded providers. These students are discussed in detail in this chapter.
- ³ These include Modern Apprentices. These students are discussed in detail in this chapter.
- ⁴ Estimate of students in formally-assessed qualifications in those private providers not receiving any government funding during 2003 (based on 13,472 such students at 31 July 2003).
- ⁵ These programmes are discussed further in chapter 2.
- ⁶ Estimates only. These programmes are discussed further in chapter 2.

MAIN SECTOR TRENDS: AN OVERVIEW

Participation in tertiary education in New Zealand in recent years has been characterised by both growth and diversity.

FIGURE 3.2: STUDENTS IN FORMAL TERTIARY EDUCATION 1965-2003



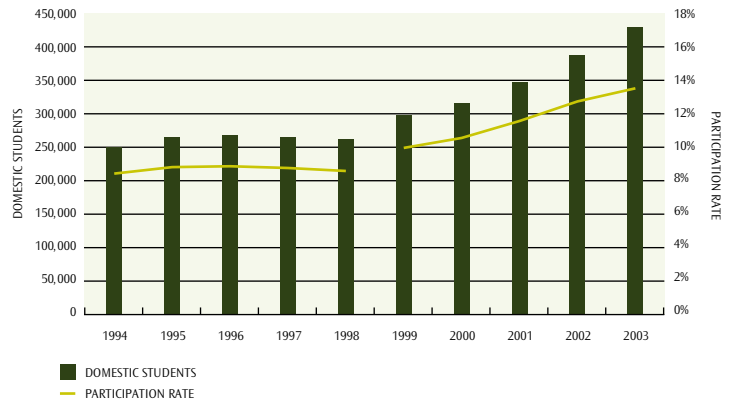
Notes:

- ¹ Data relates to students enrolled with a tertiary education provider in formal qualifications of greater than 0.03 EFTS.
- ² Data for 1994 to 2003 relates to domestic students enrolled at any time during the year.
- ³ Data before 1994 relates to students enrolled at 31 July.
- ⁴ Data excludes all non-formal learning, on-job industry training and PTEs which neither received tuition subsidies nor were approved for student loans and/or allowances.

There were 428,000 domestic students enrolled with tertiary education providers in 2003, an increase of 11 percent over 2002. Around 126,900 New Zealanders also participated in industry training during 2003, including more than 6,200 young people who were training under the Modern Apprenticeships programme.

The percentage of New Zealanders involved in some form of post-compulsory education and training was at its highest rate ever, with 13.4 percent of the population aged 15 years and over enrolled with a tertiary education provider at some time during 2003.

FIGURE 3.3: PARTICIPATION IN TERTIARY EDUCATION 1994-2003



Notes:

- ¹ Data relates to students enrolled at any time during the year with a tertiary education provider in formal qualifications of greater than 0.03 EFTS.
- ² Participation rate is the percentage of the population aged 15 and over who were students that year.
- ³ Data prior to 1999 excludes PTEs and OTEPs.
- ⁴ Excludes industry training, non-government-funded PTEs and all non-formal learning.

In the 10 years since 1994, the number of tertiary students grew by 86 percent, while the percentage of the population 15 and over participating in tertiary education rose from 8.9 percent in 1994 to 13.4 percent in 2003. Over 90 percent of the growth in student numbers occurred since 1999, and most of this was due to increased rates of participation, rather than to population increases.

However, this growth has not been uniform. The proportion of students in PTEs, wānanga, industry training and, more recently, community education has increased compared with other parts of the tertiary education sector.

The success of the wānanga, and of Te Wānanga o Aotearoa in particular, in attracting first-time Māori students into the sector has seen very significant growth in Māori participation, especially at lower levels of the NQF. The Māori participation rate is significantly higher than for other groups, even after accounting for the younger age structure of Māori. At degree level and above, however, the Māori participation rate remains lower than that for non-Māori.



International student numbers continued to grow in 2003, increasing by 8,260 (or 21 percent) over 2002. The number of international students increased from under 6,000 in 1994 to 47,130 in 2003, with over 90 percent of this increase in the last five years. However, the rate of growth in international enrolments slowed in 2003.

With 58,530 students in 2003, PTE student numbers were 11 percent lower than in 2002, while college of education student numbers remained similar to 2002 levels at 13,460. Universities had a modest increase of around 1,000 domestic students (or 1 percent).

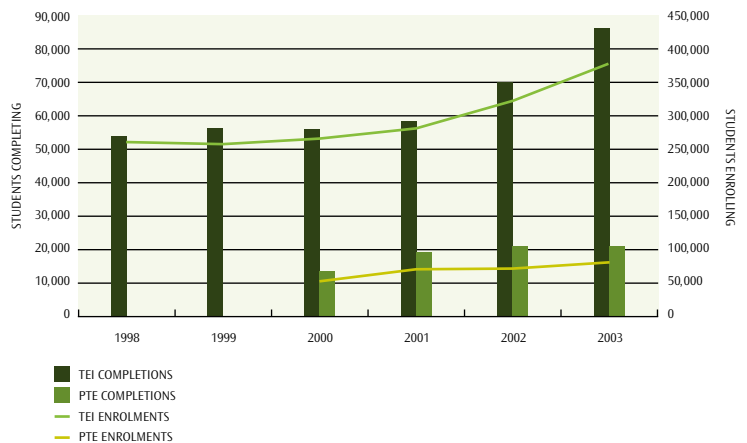
Like many developed countries in recent years, growth in participation rates, rather than growth in population, has predominantly driven increases in enrolment numbers. However, since 2001 the number of people in the core tertiary education age group (18 to 24 years) in New Zealand has begun increasing again after declining in the mid to late 1990s. That group now contributes more to enrolment increases in some parts of the sector than do increased rates of participation.

Over the whole sector, population increase accounted for less than 20 percent of enrolment growth. Much of the rise in participation, however, was due to the impact of Te Wānanga o Aotearoa (TWOA) in increasing participation. When TWOA's students and international students are excluded, the population growth contributed nearly all of the increase in enrolments.

A total of 103,748 domestic students completed 112,229 qualifications in 2003. This represented a 15 percent increase in the number of students who completed qualifications over the previous year, and an increase of 51 percent on the number of students completing in 2000.

Of those completing a qualification in 2003, 85,761 (or 83 percent) did so at a TEI. The rise in the number of students completing qualifications has largely followed growth in student numbers, particularly with the significant rise in certificate and diploma-level qualifications since 2000.

FIGURE 3.4: DOMESTIC STUDENTS ENROLLING AND COMPLETING IN TEIS AND PTEs 1998-2003



Notes:

- 1 Data relates to students enrolled at any time during the year with a tertiary education provider in formal qualifications of greater than 0.03 EFTS.
- 2 Data for private providers excludes those PTEs and OTEPs which neither received tuition subsidies nor were approved for student loans and/or allowances.
- 3 Data excludes all non-formal learning and on-job industry training.
- 4 Students enrolled or completing at both public and private providers have been counted in each group.

An estimated 40 percent of domestic students who started a qualification at a TEI in 1999 had completed after five years. Around 50 percent of those who started a qualification in 1999 had left without completing it five years later, and 10 percent were still studying towards it five years later. These rates were similar to corresponding five-year completion rates for students starting a qualification in 1998.

To put these figures into context, students successfully complete courses at a much higher rate than qualifications, and many leave their studies, especially in times of higher employment, with only one or two courses left to complete for their qualification. Other students will enrol for a qualification, but abandon it once they have met their objectives, which may be passing only two or three courses. To that extent, if a high proportion of students do not complete their qualifications, this cannot necessarily be read as a system failure.

New Zealand's lifelong approach to tertiary learning, relatively open access to enrolment and easy access to student loans have tended to increase the number of students with a focus on part-time, course-based study, and those trying to combine work with study. This is borne out in other countries which have higher academic entry requirements, more full-time study, and less access to student support. Recent statistics in Britain show that the institutions with the highest drop-out rates were also those that generally excelled at attracting students from under-represented groups⁴. Therefore, completion goals cannot be viewed in isolation from access goals.

In addition, the data used in this report does not capture a number of qualification completions where the student has been enrolled at a tertiary institution, but has been awarded the qualification by another body such as an ITO. This will tend to under-represent completion rates, and particularly in polytechnics and private providers.

Of those completing a qualification in 2002, 16 percent went on to study at a higher level in 2003, 17 percent continued to study at the same level, and 6 percent continued study at a lower level, while 62 percent did not continue their studies. These progression rates have remained relatively unchanged since 1998.

Retention, completion and progression rates vary significantly according to the level of the qualification. In general, the higher the level studied, the higher the retention and completion rate. Changes in the proportions studying at different levels will, therefore, have an effect on the overall completion rate for the sector. In New Zealand's case, the significant rise in proportion of students at certificate level since 2000 has acted to reduce the overall completion rate for the sector. Looking at completion rates by *level* can, therefore, provide a more informative picture of performance.

SUB-SECTOR TRENDS

Polytechnics are now the largest type of tertiary education provider in terms of the number of domestic students enrolled, with 42 percent of all students in 2003, compared with 32 percent for universities, 15 percent for wānanga, 14 percent for PTEs and 3 percent for colleges of education. Domestic student numbers grew in polytechnics by 40,400 (or 29 percent) to reach 178,000 in 2003. However, it is important to note that much of the growth in 2003 was in community education courses where individual students may have been enrolled for only a short time during the year. If the number of students was converted to equivalent full-time students (EFTS), the universities, with 39 percent of EFTS in 2003, still constituted the largest type of tertiary education provider.

Wānanga continued their significant growth, with the number of domestic students increasing by over 20,830 to reach 65,420 enrolled during 2003. In terms of head count, wānanga students made up 15 percent of all domestic students enrolled in 2003 and outnumbered the students at private providers for the first time.

The vast majority of wānanga students (96 percent) were enrolled at Te Wānanga o Aotearoa, with 2,970 students enrolled at the other two public wānanga during 2003. Unlike other sub-sectors, virtually all enrolments at the wānanga were domestic students.

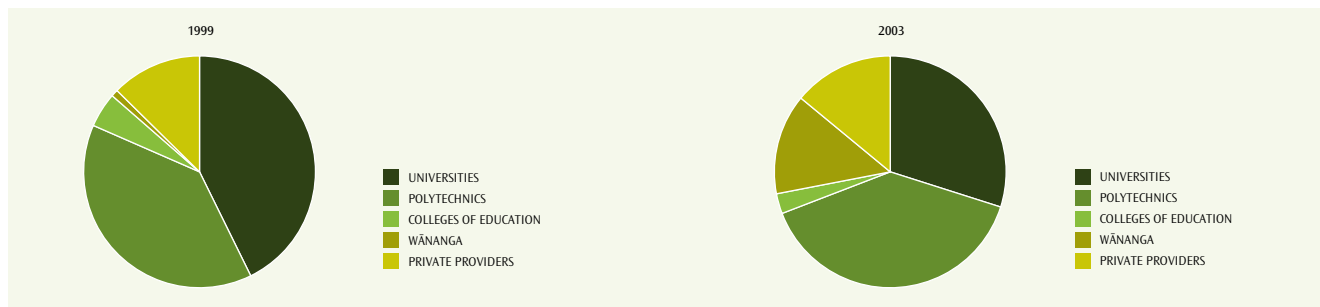
Domestic student numbers in colleges of education in 2003 were about the same as in 2002. There were 13,460 students enrolled during 2003, down about 40 from the number enrolled in 2002. This group made up about 3.1 percent of all tertiary students, down from 4.6 percent in 1999.

There was annual growth of between 30 and 40 percent at PTEs between 1999 and 2001, resulting in the proportion of students at private providers growing from 12.3 percent during 1999 to 18.8 percent during 2001. However, the moratorium on new PTE qualifications introduced in July 2001 resulted in growth of just 1.6 percent in domestic students in 2002. A cap on PTE funding took effect from 2003 and, in that year, PTE domestic student numbers decreased by 7,400 (or 11.6 percent), and the sub-sector's share of domestic students fell to 14 percent of all tertiary students enrolled in 2003.

⁴ *The Times Higher Education Supplement*, No. 1,619, 12 December 2003.



FIGURE 3.5: PERCENTAGE OF DOMESTIC STUDENTS ENROLLED BY SUB-SECTOR 1999 AND 2003



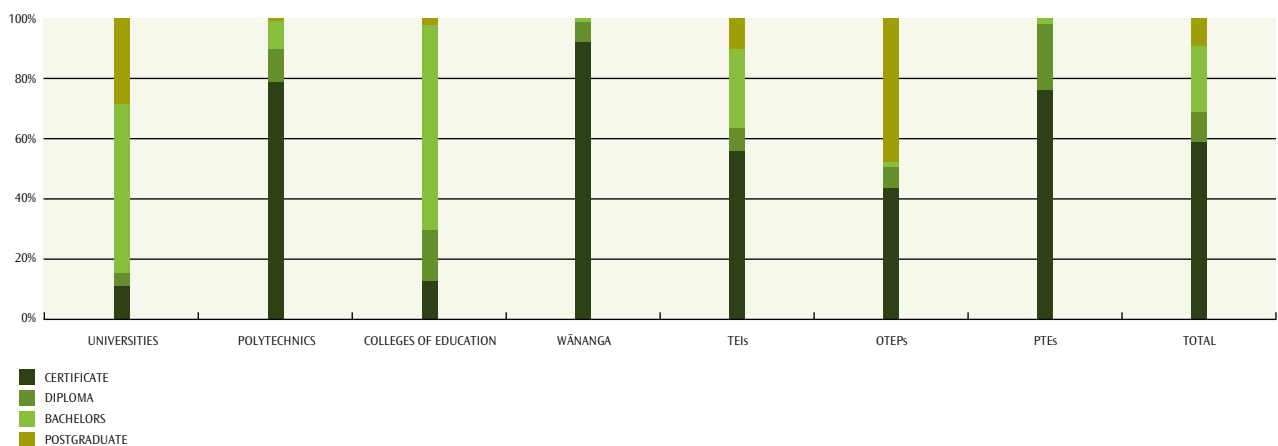
Notes:

- ¹ Data relates to students enrolled at any time during the year with a tertiary education provider in formal qualifications of greater than 0.03 EFTS.
- ² Students who were enrolled in more than one sub-sector have been counted in each sub-sector. Consequently, the sum of each sub-sector adds to more than 100 percent.
- ³ Data excludes all non-formal learning and on-job industry training, and those PTEs and OTEPs which neither received tuition subsidies nor were approved for student loans and/or allowances.

In 2003, 86 percent of students who graduated from a university, and 74 percent of those graduating from colleges of education, achieved a bachelors degree or higher. By contrast, other parts of the sector were more focused on lower-level qualifications such as diplomas and certificates. About 89 percent of students

completing a qualification at a polytechnic in 2003 completed certificates or diplomas below bachelors level. The corresponding figures for wānanga and PTE students were 99 percent and 98 percent, respectively.

FIGURE 3.6: DISTRIBUTION OF DOMESTIC STUDENTS COMPLETING A QUALIFICATION BY SUB-SECTOR AND LEVEL 2003



Notes:

- ¹ Students who completed a qualification in more than one sub-sector or at more than one level have been counted in each sub-sector and level they completed in.
- ² Data relates to students completing formal qualifications of greater than 0.03 EFTS at a tertiary education provider.
- ³ Data excludes all non-formal learning and on-job industry training, and those PTEs and OTEPs which neither received tuition subsidies nor were approved for student loans and/or allowances.

Completion rates were highest at colleges of education. In particular, college of education completion rates were high at degree level, where 71 percent of students starting a qualification completed within five years, nearly 1.8 times the rate for universities.

Polytechnics had the lowest completion rates at sub-degree level, but the highest completion rate for postgraduate certificates and diplomas. The high postgraduate completion rate at polytechnics may be due to the fact that polytechnics, in general, offer fewer and more vocationally-focused postgraduate qualifications than universities⁵, and rates may, therefore, be reflecting a more targeted group of students receiving more specialised training.

TABLE 3.2: FIVE-YEAR COMPLETION RATES BY LEVEL AND SUB-SECTOR 2003

Domestic students starting a qualification in 1999 by sub-sector	Percentage of students successfully completed by the end of 2003 by qualification level				
	Unis	Polys	CoEs	Wān	TEIs
Level 1-3 Certificate	43%	30%	40%	43%	33%
Level 4 Certificate	28%	18%			23%
Level 5-6 Diploma	34%	22%	38%	42%	27%
Level 7 Bachelors	40%	37%	71%	33%	43%
Level 8 Honours/Postgrad Cert/Dip	53%	61%	56%		53%
Level 9 Masters	54%	25%		25%	52%
Level 10 Doctorate	23%				23%
Total	45%	31%	59%	48%	40%

Notes:

- ¹ All rates are estimates.
- ² Five-year completion rate is defined as the percentage of domestic students starting a qualification at a public provider in 1999 who have completed by the end of 2003.
- ³ Any group with fewer than 30 students has been excluded.
- ⁴ Data relates to domestic students enrolled at any time during the year with a tertiary education provider in formal qualifications of greater than 0.03 EFTS.
- ⁵ Data excludes all PTEs, OTEPs, non-formal learning and on-job industry training.
- ⁶ Students who were enrolled at more than one qualification level have been counted in each level.
- ⁷ Students who were enrolled in more than one sub-sector have been counted in each sub-sector.
- ⁸ Totals also include those students whose qualification level is unknown.
- ⁹ Total includes those students who have changed sub-sector or qualification level, whereas rates for individual levels or sub-sector do not.
- ¹⁰ Data excludes qualification completions where the student has been enrolled at a tertiary institution, but where the qualification has been awarded by a non-institution organisation, for example an ITO. This will tend to under-represent completion rates at polytechnics and private providers.

⁵ There are obvious exceptions to this, for example with medical postgraduate courses in universities.

Wānanga have grown significantly since 2000. One-year retention and completion rates for wānanga from 1998 to 2002 have also increased significantly. One-year retention for wānanga students in 1998 was 35 percent. By 2002, this rate had climbed to 77 percent.

TABLE 3.3: ONE-YEAR RETENTION AND COMPLETION RATES BY SUB-SECTOR 2003

Domestic students starting a certificate or still enrolled in 2003 in 2002 by sub-sector	Percentage completed or still enrolled in 2003 1-year retention rate	Percentage completed by end of 2002 1-year completion rate
Universities	43%	36%
Polytechnics	55%	28%
Colleges of Education	39%	22%
Wānanga	77%	32%
Private Providers	48%	34%
Total	61%	28%

Notes:

- ¹ All rates are estimates.
- ² One-year retention rate is defined as the percentage of domestic students starting a qualification at a public provider in 2002 who completed in 2002 or who are still enrolled in 2003.
- ³ One-year completion rate is defined as the percentage of domestic students starting a qualification at a public provider in 2002 who have completed by the end of 2003.
- ⁴ Data relates to domestic students enrolled at any time during the year with a tertiary education provider in formal qualifications of greater than 0.03 EFTS.
- ⁵ Data excludes all PTEs, OTEPs, non-formal learning and on-job industry training.
- ⁶ Students who were enrolled in more than one sub-sector have been counted in each sub-sector.
- ⁷ Total includes those students who have changed sub-sector or qualification level, whereas rates for individual levels or sub-sector do not.

Of all students completing a qualification at a wānanga in 2002, 24 percent were studying at a higher level in 2003. This compares with 29 percent for universities, 18 percent for polytechnics, 34 percent for colleges of education and 12 percent for private providers.

Of those completing level 1-3 certificates in 2002, wānanga had the third highest rate of progression to diploma-level study, at 24 percent, behind universities and colleges of education. Wānanga, at 22 percent, had the highest rate of progression from diplomas to higher levels, although this rate was down from the previous year. The percentage of wānanga students completing certificates or diplomas in 2001 and studying at the same or a lower level in 2003 was also the highest for any sub-sector.



TABLE 3.4: HIGHER-LEVEL PROGRESSION RATES BY LEVEL AND SUB-SECTOR 2003

Domestic students completing a qualification in 2002 by sub-sector	Percentage enrolled in higher level study in 2003 by qualification level completed in 2002						All levels
	Level 1-3 Certificates	Level 4 Certificates	Level 5-6 Diplomas	Level 7 Bachelors Degrees	Level 8 Honours/Postgrad Cert/Dips	Level 9 Masters	
Universities	29%	20%	21%	18%	17%	6%	29%
Polytechnics	18%	17%	18%	5%	13%		18%
Colleges of Education	34%	29%	21%	3%	8%	6%	34%
Wānanga	24%	9%	22%	8%	17%		24%
OTEPs	12%		3%		1%		12%
PTEs	12%	10%	7%	3%			12%
All providers	18%	11%	15%	14%	15%	6%	18%

Notes:

- ¹ All rates are estimates.
- ² Higher-level progression rate is defined as the percentage of students completing a qualification who are enrolled in the following year at a higher qualification level.
- ³ Any group with fewer than 30 students has been excluded.
- ⁴ Data relates to domestic students enrolled at any time during the year with a tertiary education provider in formal qualifications of greater than 0.03 EFTS.
- ⁵ Data for private PTEs and OTEPs excludes those which neither received tuition subsidies nor were approved for student loans and/or allowances.
- ⁶ Data excludes all non-formal learning and on-job industry training.
- ⁷ Students who were enrolled at more than one qualification level have been counted in each level.
- ⁸ Students who were enrolled in more than one sub-sector have been counted in each sub-sector.
- ⁹ Totals also include those students whose qualification level is unknown.

The mix of qualification levels and the nature of qualifications offered varies significantly from one type of provider to another. This needs to be considered when making comparisons between types of providers. For example, a diploma offered at a university may, in many cases, be quite different from a diploma offered at a polytechnic, even though they are at the same level. The same applies to postgraduate certificates or diplomas.

Five-year completion rates are not available for private providers, but after four years the completion rate in this sub-sector was 34 percent, compared with 36 percent for public providers. However, three-year completion rates were higher at private providers than public providers. Students complete more quickly at private providers, but more eventually complete at public providers. This is, in part, because a higher proportion of students study full-time at private providers than at public providers, and so take a shorter time to complete.

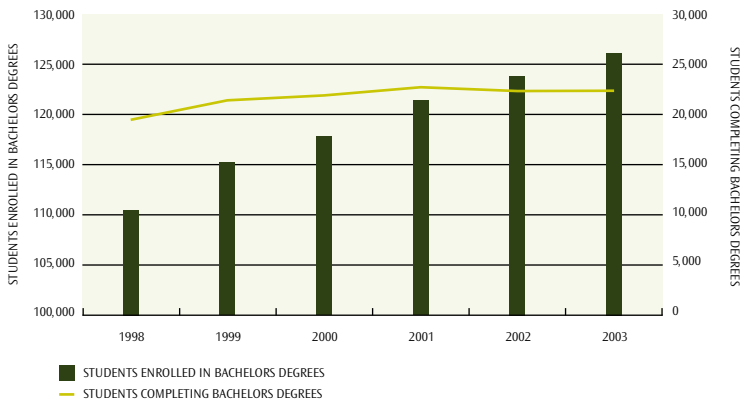
QUALIFICATION LEVEL

While participation increased at all levels of tertiary study in 2003, growth was significant at certificate level, with an increase of 20 percent in the number of students studying at levels 1 to 3 compared with 2002, and an increase of 64 percent in the number of students studying at level 4. Nearly 60 percent of students enrolled in 2003 studied at these levels. Completions at sub-degree level grew 25 percent in 2003. The percentage of the population aged 15 and over studying for certificates rose from 4.1 percent in 1999 to 7.8 percent in 2003.

By contrast, growth at higher levels ranged between 0.5 percent at diploma level to 5 percent at postgraduate certificate and diploma or honours level. About 127,800 (30 percent) of students studied at bachelors level in 2003, a rise of 2 percent over 2002. At 4.1 percent of the population aged 15 and over, the rate of participation at bachelors level has remained relatively constant since 1999.

A total of 22,643 students gained a bachelors degree in 2003, down slightly from 2002. One would expect the number of students completing bachelors degrees to follow a similar trend to enrolments three to four years earlier. The graph below, for example, shows a flattening of numbers of students completing bachelors degrees at public providers in 2002 and 2003. This corresponds to a flattening in enrolments at this level that occurred from 1996 to 1998.

FIGURE 3.7: DOMESTIC STUDENTS ENROLLED IN AND COMPLETING BACHELORS DEGREES AT PUBLIC PROVIDERS 1998-2003



Note: Data relates to domestic students at public providers only.

There were 29,900 students studying at postgraduate level in 2003, including 15,200 students at postgraduate certificate, diploma or honours level, 10,900 studying at masters level and 3,800 at doctorate level. While the number of students studying at these levels rose between 1 and 5 percent, the percentage of the population aged 15 and over studying at these levels has remained relatively constant.

There were 9,328 domestic students who gained postgraduate-level qualifications in 2003, down slightly from 2002. A total of 499 domestic students gained a doctorate in 2003, an increase of 7 percent over 2002. Of those students starting a doctorate in 1998, an estimated 34 percent had completed by 2003, while a further 17 percent were still studying towards their qualification. Long-term completion rates at doctorate level are estimated to be between 54 and 58 percent.

TABLE 3.5: FIVE-YEAR RETENTION AND COMPLETION RATES BY QUALIFICATION LEVEL 2003

Domestic students starting a qualification at public providers in 1999 by qualification level	By end of 2003 (5 years later) percentage that		
	successfully complete	still studying	leave without completing
Level 1-3 Certificate	33%	5%	62%
Level 4 Certificate	23%	2%	75%
Level 5-6 Diploma	27%	5%	68%
Level 7 Bachelors	43%	9%	48%
Level 8 Honours/Postgrad Cert/Dip	53%	2%	45%
Level 9 Masters	52%	4%	44%
Level 10 Doctorate	23%	37%	40%
Total	40%	9%	51%

Notes:

- 1 All rates are estimates.
- 2 Five-year rates are based on the enrolment and completion status in 2003 of the cohort of domestic students starting at a public tertiary education provider in 1999.
- 3 Any group with fewer than 30 students has been excluded.
- 4 Data excludes all PTEs, OTEPs, non-formal learning and on-job industry training.
- 5 Students who were enrolled at more than one qualification level have been counted in each level.
- 6 Totals also include those students whose qualification level is unknown.
- 7 Total includes those students who have changed qualification level, whereas rates for individual levels do not.

Retention and completion rates by qualification level improve the higher the level studied. A five-year completion rate is defined as the percentage of students who start a qualification and have successfully completed it five years later, while a five-year retention rate is defined as the percentage of students who start a qualification and have either successfully completed or are still enrolled five years later. Despite requiring the shortest time to complete, certificate completion rates are the lowest of any level studied. This may, in part, reflect differing academic abilities of students at different levels. It may also reflect the fact that proportionately more students at sub-degree level are studying part-time, and have work, family or other commitments. Further, a number of students start a certificate, but transfer to, and complete, a diploma or degree.



TABLE 3.6: PROGRESSION RATES BY QUALIFICATION LEVEL 2003

Domestic students completing a qualification in 2002 by level completed	Percentage in 2003 enrolled at a		
	higher level	same level	lower level
Level 1-3 Certificate	18%	20%	0%
Level 4 Certificate	11%	30%	17%
Level 5-6 Diploma	15%	12%	13%
Level 7 Bachelors	14%	13%	8%
Level 8 Honours/Postgrad Cert/Dip	15%	7%	13%
Level 9 Masters	6%	6%	17%
Level 10 Doctorate		4%	15%
Total	18%	20%	16%

Notes:

- ¹ All rates are estimates.
- ² Progression rate is the percentage of students completing a qualification who are enrolled in the following year. Type of progression relates to the highest level of any qualification enrolled in, compared with the highest level of any qualification completed in the year before.
- ³ Any group with fewer than 30 students has been excluded.
- ⁴ Data excludes all PTEs, OTEPs, non-formal learning and on-job industry training.
- ⁵ Students who were enrolled at more than one qualification level have been counted in each level.
- ⁶ Totals also include those students whose qualification level is unknown.

Progression to higher-level study is highest for students completing level 1 to 3 certificates (at 18 percent). About 14 percent of students completing degrees progress to higher-level study, while 15 percent of students completing a diploma go on to higher-level study. About 6 percent of students completing an honours or masters degree go on to doctorate study.

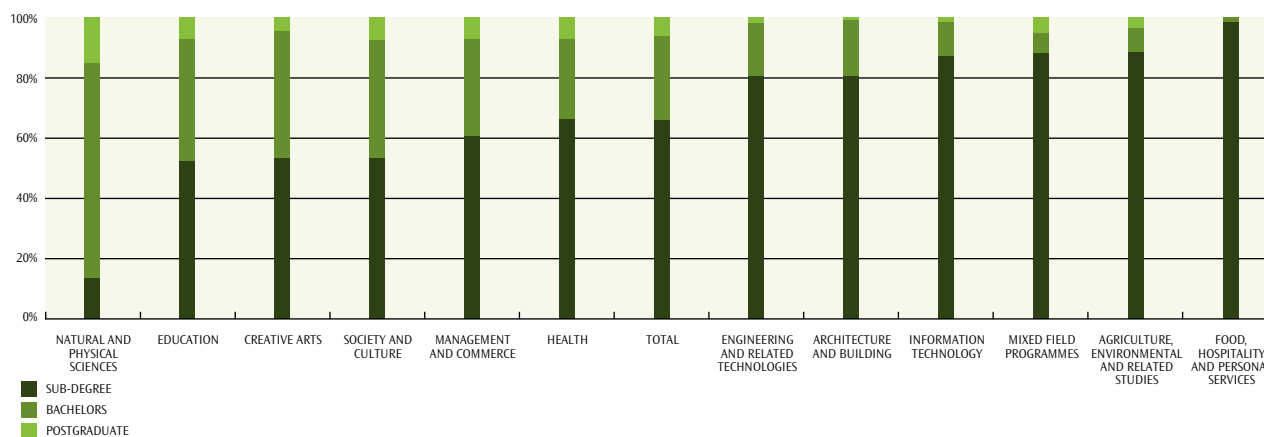
FIELD OF STUDY

Study in society and culture-related, and management and commerce-related fields was the most popular in 2003, each with around 86,000 students (or 20 percent each of all domestic students in 2003). Study in the broad field of society and culture includes, for example, law, economics, philosophy, sociology, history, language studies, human welfare support and services, and sport and recreation.

Study in those fields broadly grouped as mixed field programmes continued to grow. These programmes include a number of foundation-related programmes, including literacy and numeracy, employment-related skills training, and social and life skills-related training. During 2003, nearly 78,400 students, or more than 18 percent of all domestic students, studied at this level. Other popular broad fields of study were health (12 percent), information technology, engineering (8 percent) and education (7 percent).

Study at sub-degree level was more common than study at bachelors level and above for all fields of study except natural and physical sciences, where 87 percent of students were at degree level and above, and for education, creative arts and society and culture, where enrolments were split almost half at degree level and above, and half below.

FIGURE 3.8: DISTRIBUTION OF DOMESTIC STUDENTS BY FIELD OF STUDY AND QUALIFICATION LEVEL 2003



Notes:

- ¹ Data relates to domestic students enrolled at any time during the year with a tertiary education provider in formal qualifications of greater than 0.03 EFTS.
- ² Data excludes all non-formal learning and on-job industry training, and those PTEs and OTEPs which neither received tuition subsidies nor were approved for student loans and/or allowances.
- ³ Students who studied in more than one field of study or qualification level have been counted in each field and level.

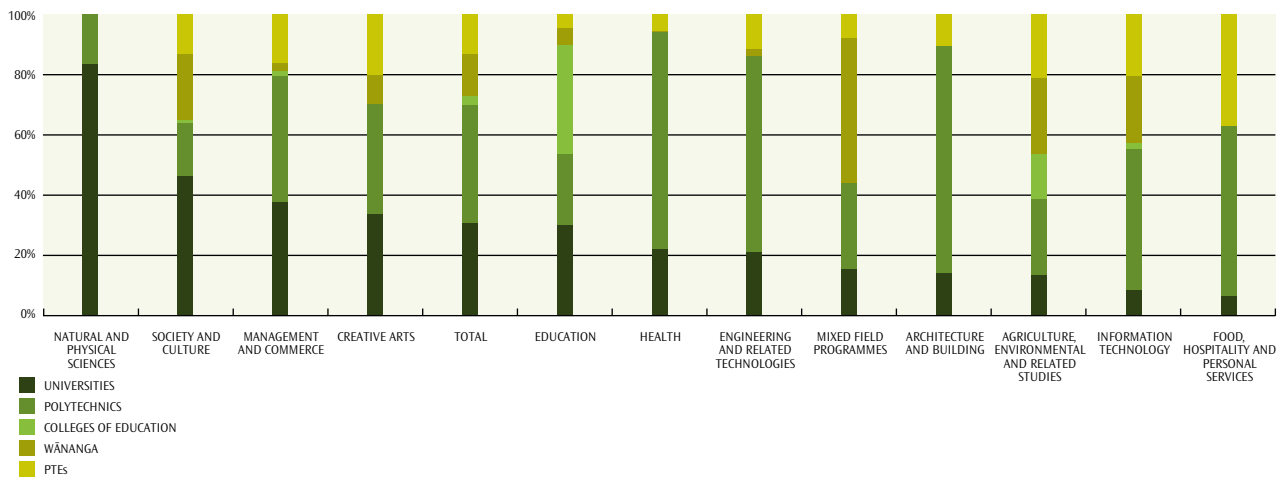
Not surprisingly, most studies (80 percent) at colleges of education were in education-related fields, while study in the colleges of education made up 33 percent of all tertiary study in education.

Private providers were popular for study in food, hospitality and personal services (with 38 percent of students), and in agriculture and related studies (25 percent). Study in both these fields,

however, was more common at polytechnics, which were also the most popular places to study health, architecture and building, information technology, engineering, and creative arts.

Wānanga provided for almost half (49 percent) of the students studying in mixed field programmes. Study in this broad group accounted for 59 percent of all wānanga students, with a further 30 percent studying in society and culture-related fields.

FIGURE 3.9: DISTRIBUTION OF DOMESTIC STUDENTS BY FIELD OF STUDY AND SUB-SECTOR 2003



Notes:

- ¹ Data relates to domestic students enrolled at any time during the year with a tertiary education provider in formal qualifications of greater than 0.03 EFTS.
- ² Data excludes all non-formal learning and on-job industry training, and those PTEs and OTEPs which neither received tuition subsidies nor were approved for student loans and/or allowances.
- ³ Students who studied in more than one field of study or sub-sector have been counted in each field and sub-sector enrolled in.

ETHNIC GROUP

In 1994, 76 percent of tertiary students were of European ethnicity. By 2003, this share had fallen to 66 percent, despite the number of domestic students of European ethnicity having increased by 91,000 over this period.

Māori student numbers increased significantly between 1994 and 2003. There were 91,600 Māori students in 2003, up 240 percent on 1994. Over all levels of study, and when adjusted for age differences, over 20 percent of Māori aged 15 and over participated in tertiary education in 2003, the highest rate of any ethnic group (and compared with 13.4 percent for all groups). Much of this participation was by first-time students enrolled in lower-level qualifications. Participation by Māori at bachelors level and higher, however, remained lower than the average for the tertiary education sector.

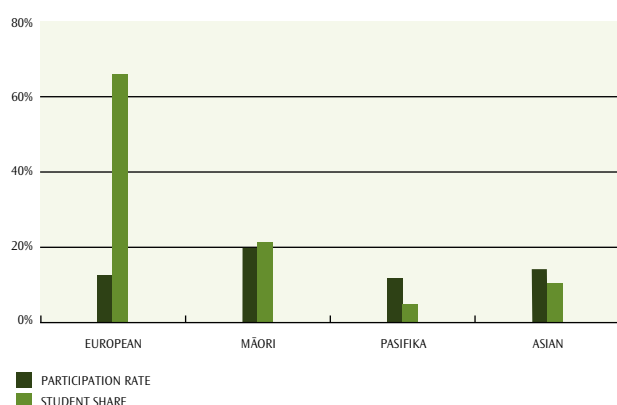
During 2000 and 2001, Māori were the fastest-growing group in the tertiary education sector. In 2003, however, the number of domestic Asian students grew at a faster rate (32 percent) than any other group to reach 44,880. This group now represents more than one in 10 domestic tertiary students. When adjusted for the younger profile of New Zealand’s Asian population, participation in tertiary education by Asian New Zealanders aged 15 and over was 13.8 percent, similar to the overall rate of 13.4 percent for the population as a whole.

Consistent with the growth in wānanga at sub-degree level was the higher propensity of Māori to be studying at lower levels of the NQF (70 percent). This was in contrast to students of Asian and European ethnicity, where 43 percent and 46 percent, respectively, were studying towards certificates or diplomas during 2003.



There were over 25,400 Pasifika domestic students in 2003, up 13 percent from 2002. When adjusted for age differences, Pasifika people participated at a lower rate than other groups (11.6 percent compared with 13.4 percent).

FIGURE 3.10: PARTICIPATION IN TERTIARY EDUCATION BY ETHNIC GROUP 2003



Notes:

- ¹ A student identifying with more than one ethnic group has been counted in each group.
- ² Participation rate is the percentage of the population aged 15 and over who were students.
- ³ Student share is the percentage of all tertiary students who belong to each ethnic group.
- ⁴ Data excludes all non-formal learning and on-job industry training, and those PTEs and OTEPs which neither received tuition subsidies nor were approved for student loans and/or allowances.

Of domestic students, Asian students had the highest overall five-year completion rates (46 percent), while, at 33 percent, Pasifika students had the lowest rate of completion after five years.

At certificate and diploma levels, Asian and Māori students had the highest rates of completion. However, at bachelors level and postgraduate level, Māori students completed at a rate lower than those for students of European and Asian ethnicity. Māori had the highest rates of retention and, therefore, lowest attrition, at levels below degree level. This was, in part, because of the higher proportion of part-time Māori students. At degree level, however, Māori retention remained low (47 percent compared with 52 percent for the sector as a whole). Pasifika completion rates remained the lowest over all levels of study.

TABLE 3.7: FIVE-YEAR COMPLETION RATES BY QUALIFICATION LEVEL AND ETHNIC GROUP 2003

Domestic students starting a qualification in 1999 at a public provider	Percentage of students successfully completed by the end of 2003 by qualification level				Total
	European	Māori	Pasifika	Asian	
Level 1-3 Certificate	31%	39%	32%	39%	33%
Level 4 Certificate	22%	24%	13%	25%	23%
Level 5-6 Diploma	27%	28%	24%	27%	27%
Level 7 Bachelors	46%	36%	30%	45%	43%
Level 8 Honours/Postgrad Cert/Dip	56%	47%	39%	49%	53%
Level 9 Masters	52%	35%	40%	65%	52%
Level 10 Doctorate	24%	17%		24%	23%
Total	41%	41%	33%	46%	40%

Notes:

- ¹ All rates are estimates.
- ² Five-year completion rate is defined as the percentage of domestic students starting a qualification at a public provider in 1999 who have completed by the end of 2003.
- ³ Any group with fewer than 30 students has been excluded.
- ⁴ Data relates to domestic students enrolled at any time during the year with a tertiary education provider in formal qualifications of greater than 0.03 EFTS.
- ⁵ Data excludes all PTEs, OTEPs, non-formal learning and on-job industry training.
- ⁶ Students who were enrolled at more than one qualification level have been counted in each level.
- ⁷ Students who identify with more than one ethnic group have been counted in each group.
- ⁸ Totals also include those students whose qualification level or ethnic group is unknown.
- ⁹ Total includes those students who have changed qualification level, whereas rates for individual levels do not.

Over all qualification levels, Māori had the highest rates of progression: 49 percent of those completing a qualification in 2002 continued studying (to higher, the same or lower-level qualifications) in 2003. This compared with 38 percent for all ethnic groups. About 19 percent of Māori students completing a qualification in 2002 progressed to a higher level in 2003. This was the highest level for any ethnic group. Pasifika students had rates

of progression to higher-level study that were similar to the sector average, whereas for students of European ethnicity, progression to higher-level study was less than for other groups. While Māori were equally likely to progress to higher-level study from a university, wānanga or polytechnic (20 percent), Pasifika students were noticeably more likely to progress to higher study from a polytechnic (24 percent compared with 17 percent for all provider types).

TABLE 3.8: HIGHER-LEVEL PROGRESSION RATES BY QUALIFICATION LEVEL 2003

Domestic students completing a qualification in 2002 by qualification level completed	Percentage enrolled in higher-level study in 2003				Total
	European	Māori	Pasifika	Asian	
Level 1-3 Certificate	16%	22%	18%	16%	18%
Level 4 Certificate	14%	10%	18%	19%	12%
Level 5-6 Diploma	13%	19%	18%	20%	15%
Level 7 Bachelors	14%	13%	13%	18%	14%
Level 8 Honours/Postgrad Cert/Dip	13%	19%	13%	21%	15%
Level 9 Masters	6%	7%	7%	5%	6%
Total	14%	19%	17%	17%	16%

Notes:

- ¹ All rates are estimates.
- ² Higher-level progression rate is defined as the percentage of students completing a qualification who are enrolled in the following year at a higher qualification level.
- ³ Data excludes all non-formal learning and on-job industry training, and those PTEs and OTEPs which neither received tuition subsidies nor were approved for student loans and/or allowances.
- ⁴ Students who were enrolled at more than one qualification level have been counted in each level.
- ⁵ Students who identify with more than one ethnic group have been counted in each group.
- ⁶ Totals also include those students whose qualification level or ethnic group is unknown.

AGE

In 1994, the average age of a tertiary student was 27.6, with 51 percent of students aged under 25. By 2003, the average age was 30.9 with 38 percent of students under 25. The number of students aged 25 to 39 has grown 82 percent since 1994 and those over 40 have increased 180 percent. While students aged 18 to 24 continued to have the highest rates of participation (at 36.3 percent), 25 to 39 year olds outnumbered that age group for the first time in 2003, becoming the largest age group represented in tertiary education in New Zealand.

Over one in three students, 34.5 percent, were aged 25 to 39 during 2003. This was similar to the proportion aged 18 to 24 (34.3 percent), while one in four (27 percent) were aged 40 and over, with the remaining 4 percent aged under 18.

During 2003, there were about 113,280 students aged 40 and over in tertiary education, approximately 6.6 percent of all people aged 40. Participation by this age group increased 138 percent in the six years from 1998, the largest increase both

in absolute and percentage terms of any age group. While part of this gain was due to population increases in this age group, there were also noticeable increases in rates of participation, which doubled in the six years from 1998. The growth in older Māori students contributed about a third of the total growth in older student numbers. The growth of older student numbers has occurred across all levels of study. The participation and achievement rates of older students are discussed further in chapter 8 of this report.

The post-war baby boom population bulge is now aged in their late 40s to mid-50s. The population blip that resulted from the children of the baby boomers is currently at secondary school level. While the main effects of that blip are expected to be felt around 2007 and 2008, they can already be seen in the 15 to 17 age group, where numbers began increasing again in 2000. More recently, the number of students in the 18 to 24-year-old group began increasing in 2001, after being in decline since 1994.

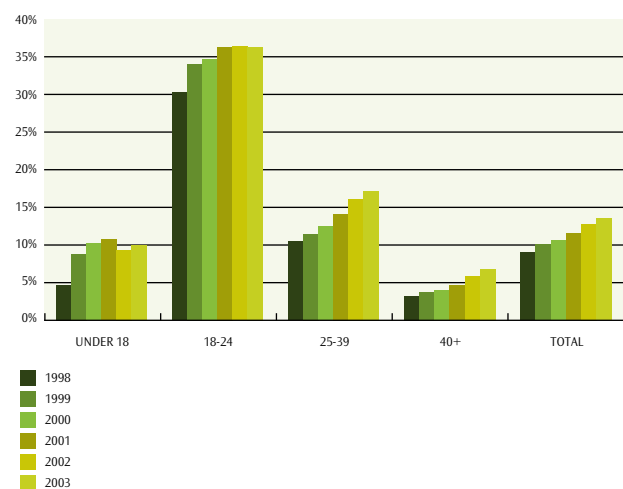


In 2002, there was a significant increase in the number of 18 to 24 year olds, up over 15,000 or 4 percent from 2001. This increase was, in part, also due to migration, where the majority of international students were aged between 18 and 24.

While the number of 18 to 24 year olds has been increasing only since 2001, their participation rate has been relatively constant since that year, having grown steadily between 1998 and 2001. During 2003, 36.3 percent of 18 to 24 year olds were in tertiary study, compared with 26.4 percent in 1994.

By contrast, the population aged 25 to 39 has been declining in recent years, down 47,000 since 1998. However, the number of students in this age group increased by 52,700 between 1998 and 2003. The rate of participation for students in this age group rose from 10.3 percent in 1998 to 17.1 percent in 2003.

FIGURE 3.11: PARTICIPATION RATES BY AGE GROUP 1998-2003



Notes:

- ¹ Participation rate is the percentage of the population aged 15 and over who were enrolled at any time during the year.
- ² Data relates to domestic students enrolled at any time during the year with a tertiary education provider in formal qualifications of greater than 0.03 EFTS.
- ³ Data for private providers excludes those PTEs and OTEPs which neither received tuition subsidies nor were approved for student loans and/or allowances.
- ⁴ Data excludes all non-formal learning and on-job industry training.
- ⁵ Data before 1999 excludes PTE and OTEP students.
- ⁶ Totals also include those students whose age is unknown.

University is the most popular place to study for 18 to 24 year olds, with 50 percent of all domestic students aged 18 to 24 studying in that sub-sector in 2003. Polytechnics were more popular for older and younger age groups, enrolling 43 percent of 25 to 39-year-old students, 45 percent of all students aged 40 and over and 50 percent of students aged under 18.

Students at wānanga were much older than in other sub-sectors. In the wānanga, 85 percent were aged over 25, compared with 64 percent in polytechnics, 57 percent at private providers, and 46 percent in universities.

Māori made up about a quarter of all students outside the 18 to 24-year-old group. They represented around 17 percent of 18 to 24-year-old students, compared with 18 percent in the general population aged 18 to 24. When study below degree level is excluded, the difference is even more marked, with 10 percent of 18 to 24 year olds who identify as Māori studying at bachelors level or higher.

While Māori students were both older and younger than the core 18 to 24 age group, Asian students were more likely to be aged 18 to 24. Around 38 percent of domestic Asian students were aged 18 to 24 during 2003, compared with a sector-wide average of 34 percent.

Students under 25 had higher completion rates across all levels, particularly at degree level, where students under 25 were nearly 1.4 times as likely to complete as students over 25. This was partly because older students were more likely to be studying part-time, and combining study with work or family commitments. However, the difference was less for diploma qualifications – both undergraduate and postgraduate – where students under 25 were only slightly more likely (1.1 times) to complete than older students.

TABLE 3.9: FIVE-YEAR QUALIFICATION COMPLETION RATES BY QUALIFICATION LEVEL AND AGE GROUP 2003

Domestic students starting a qualification at a public provider in 1999	Percentage completed by the end of 2003				Total
	Under 18	18-24	25-39	40+	
Level 1-3 Certificate	39%	39%	30%	26%	33%
Level 4 Certificate	11%	20%	21%	29%	23%
Level 5-6 Diploma	30%	30%	24%	26%	27%
Level 7 Bachelors	52%	50%	35%	34%	43%
Level 8 Honours/Postgrad Cert/Dip		57%	50%	52%	53%
Level 9 Masters		60%	52%	43%	52%
Level 10 Doctorate		29%	24%	19%	23%
Total	43%	48%	35%	33%	40%

Notes:

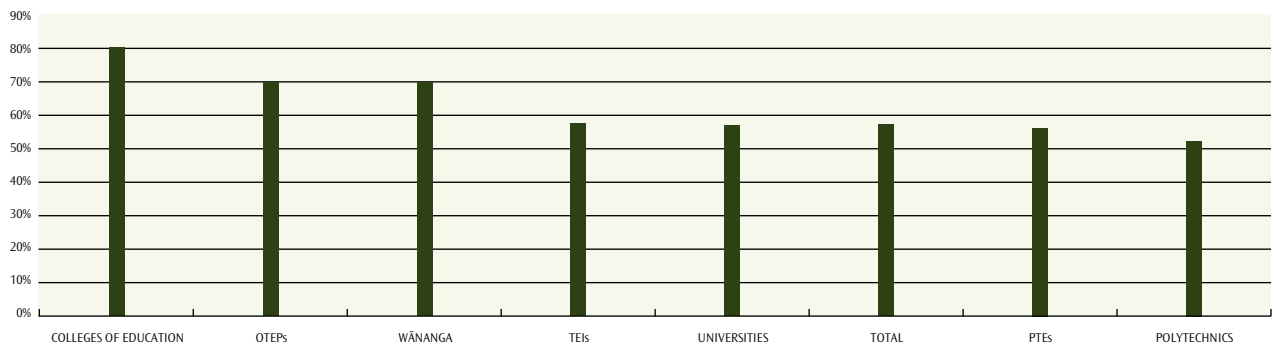
- ¹ All rates are estimates.
- ² Five-year completion rate is defined as the percentage of domestic students starting a qualification at a public provider in 1999 who have completed by the end of 2003.
- ³ Any group with fewer than 30 students has been excluded.
- ⁴ Data relates to domestic students enrolled at any time during the year with a tertiary education provider in formal qualifications of greater than 0.03 EFTS.
- ⁵ Data excludes all PTEs, OTEPs, non-formal learning and on-job industry training.
- ⁶ Students who were enrolled at more than one qualification level have been counted in each level.
- ⁷ Totals also include those students whose qualification level or age is unknown.

GENDER

The share of women in tertiary education increased from 52 percent in 1994 to 57 percent in 2003. In 2003, 15 percent of all women aged 15 and over participated in tertiary education, compared with 12 percent of men. However, for the first time in recent years, the increase in male students was larger than the increase in female students in 2003. The number of women in tertiary study grew by 19,600 (or 9 percent), compared with 22,100 (or 14 percent) for men.

While women made up 52 percent of polytechnic students, 56 percent of PTE students, and 57 percent of university students, 80 percent of college of education students were women, and around 70 percent of wānanga and other tertiary education providers (OTEP) students were women.

FIGURE 3.12: PERCENTAGE OF DOMESTIC STUDENTS WHO ARE FEMALE BY SUB-SECTOR 2003



Notes:

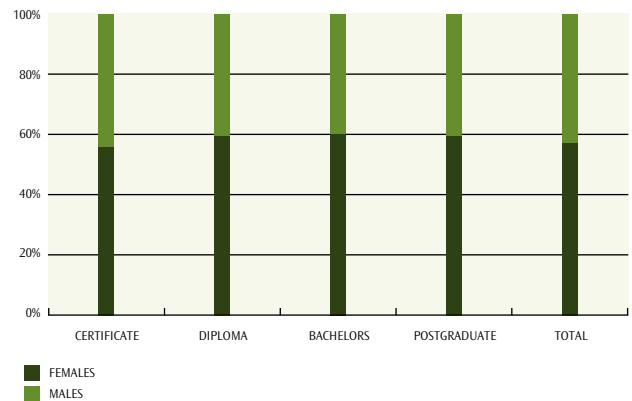
- ¹ Data relates to domestic students enrolled at any time during the year with a tertiary education provider in formal qualifications of greater than 0.03 EFTS.
- ² Students who were enrolled in more than one sub-sector have been counted in each sub-sector enrolled in.
- ³ Data for OTEPs and PTEs excludes those providers which neither received tuition subsidies nor were approved for student loans and/or allowances.
- ⁴ Data excludes all non-formal learning and on-job industry training.



Nearly a quarter (24 percent) of all female students were Māori. Even adjusting for the younger age distribution of Māori women, over one in four Māori women aged 15 and over were enrolled in tertiary education at some time during 2003, compared with 13 percent nationally. Much of this participation was at sub-degree level, but participation by Māori women studying at degree level or higher was about 6 percent, similar to the rate nationally.

There were more women than men across all levels of study, but the split between men and women studying at different levels was broadly similar. There were differences at bachelors level where 31 percent of women studied, compared with 28 percent of men, and in level 1 to 3 certificates, where 54 percent of men studied, compared with 49 percent of women. About 7 percent of women studied at postgraduate level, about the same proportion as men.

FIGURE 3.13: DISTRIBUTION OF DOMESTIC STUDENTS BY GENDER AND QUALIFICATION LEVEL 2003

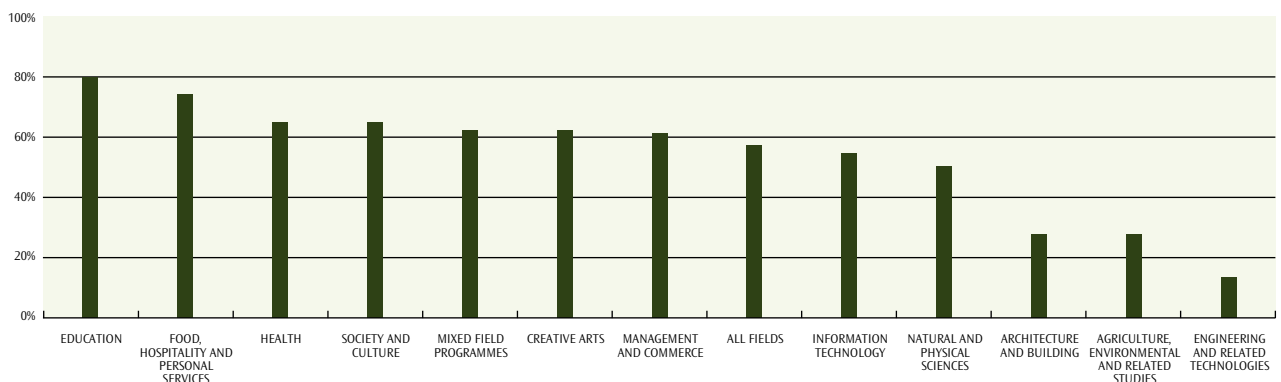


Notes:

- ¹ Data relates to domestic students enrolled at any time during the year with a tertiary education provider in formal qualifications of greater than 0.03 EFTS.
- ² Students who were enrolled in more than one qualification level have been counted in each level enrolled in.
- ³ Data for OTEPs and PTEs excludes those providers which neither received tuition subsidies nor were approved for student loans and/or allowances.
- ⁴ Data excludes all non-formal learning and on-job industry training.

There continues to be a marked difference in the gender split in some fields of study as shown in the table below.

FIGURE 3.14: PERCENTAGE OF FEMALE DOMESTIC STUDENTS BY FIELD OF STUDY 2003



Notes:

- ¹ Data relates to domestic students enrolled at any time during the year with a tertiary education provider in formal qualifications of greater than 0.03 EFTS.
- ² Students enrolled in more than one field of study have been counted in each field enrolled in.
- ³ Data for OTEPs and PTEs excludes those providers which neither received tuition subsidies nor were approved for student loans and/or allowances.
- ⁴ Data excludes all non-formal learning and on-job industry training.

Women were more likely to complete a tertiary qualification than men. For levels below masters degrees, the rate at which men completed was between 7 and 9 percent lower than the rate for women. This pattern was reversed at masters level where men completed at a rate 6 percent higher than women. At doctorate level, completion rates were similar. Progression rates for men and women were similar across most sub-sectors and qualification levels.

TABLE 3.10: FIVE-YEAR QUALIFICATION COMPLETION RATES BY GENDER AND QUALIFICATION LEVEL 2003

Domestic students starting a qualification at a public provider in 1999	Percentage completed by the end of 2003		
	Female	Male	Total
Level 1-3 Certificate	37%	29%	33%
Level 4 Certificate	33%	13%	23%
Level 5-6 Diploma	30%	23%	27%
Level 7 Bachelors	46%	38%	43%
Level 8 Honours/Postgrad Cert/Dip	57%	48%	53%
Level 9 Masters	49%	55%	52%
Level 10 Doctorate	23%	24%	23%
Total	45%	35%	40%

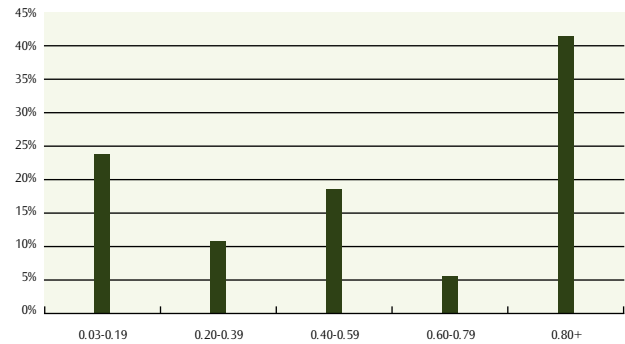
Notes:

- ¹ All rates are estimates.
- ² Five-year completion rate is defined as the percentage of domestic students starting a qualification at a public provider in 1999 who have completed by the end of 2003.
- ³ Any group with fewer than 30 students has been excluded.
- ⁴ Data relates to domestic students enrolled at any time during the year with a tertiary education provider in formal qualifications of greater than 0.03 EFTS.
- ⁵ Data excludes all PTEs, OTEPs, non-formal learning and on-job industry training.
- ⁶ Students who were enrolled at more than one qualification level have been counted in each level.
- ⁷ Totals also include those students whose qualification level is unknown.
- ⁸ Total includes those students who have changed qualification level, whereas rates for individual levels do not.

STUDY LOAD

In 2003, 42 percent of students were enrolled in qualifications with an equivalent full-time student (EFTS) value of 0.8 or more, with around a further quarter of students enrolled in qualifications of less than 0.2 EFTS. The average EFTS study load for students in 2003 was 0.65 EFTS. The distribution of students by qualification EFTS value remained relatively constant over the last six years.

FIGURE 3.15: DISTRIBUTION OF DOMESTIC STUDENTS BY STUDY LOAD 2003

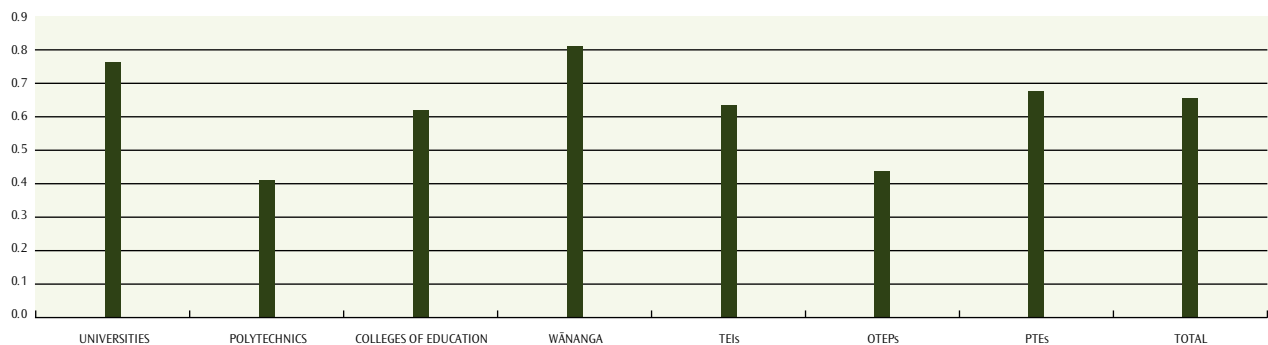


Notes:

- ¹ Study load relates to the total equivalent full-time student value of all qualifications enrolled in during the year.
- ² Data relates to domestic students enrolled at any time during the year with a tertiary education provider in formal qualifications of greater than 0.03 EFTS.
- ³ Data excludes those PTEs and OTEPs which neither received tuition subsidies nor were approved for student loans and/or allowances.
- ⁴ Data excludes all non-formal learning and on-job industry training.

Wānanga and universities had the highest share of students studying in high EFTS qualifications, with an average qualification study load of 0.81 EFTS for wānanga and 0.76 EFTS for university students, compared with a sector average of 0.65 EFTS. Polytechnics and OTEPs had the lowest, with average study loads of 0.40 EFTS and 0.43 EFTS, respectively.

FIGURE 3.16: AVERAGE STUDY LOAD PER DOMESTIC STUDENT BY SUB-SECTOR 2003



Notes:

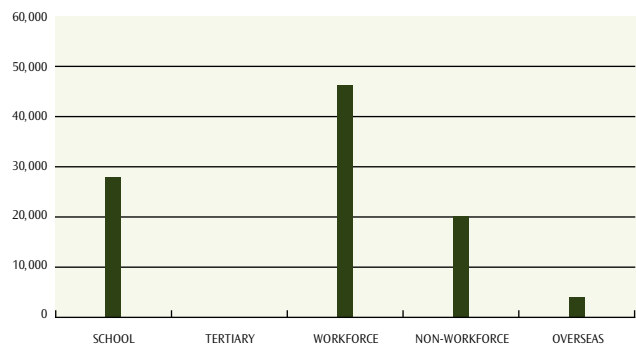
- ¹ Study load relates to the total equivalent full-time student value of all qualifications enrolled in during the year.
- ² Data relates to domestic students enrolled at any time during the year with a tertiary education provider in formal qualifications of greater than 0.03 EFTS.
- ³ Data excludes those PTEs and OTEPs which neither received tuition subsidies nor were approved for student loans and/or allowances.
- ⁴ Data excludes all non-formal learning and on-job industry training.
- ⁵ Students who were enrolled in more than one sub-sector have been counted in each sub-sector.

FIRST-TIME STUDENTS, PRIOR ACTIVITY AND SCHOOL LEAVERS

There were 98,100 domestic students enrolled for the first time during 2003. This represented around 23 percent of all domestic students. This proportion has remained about the same over the last five years.

Of all first-time students enrolled during 2003, 28 percent came directly from school⁶. Forty-seven percent of first-time tertiary students were previously employed, and 21 percent were either non-employed, retired or beneficiaries. A growing minority (4 percent) stated their prior activity as being overseas.

FIGURE 3.17: DISTRIBUTION OF FIRST-TIME DOMESTIC STUDENTS BY PRIOR ACTIVITY AT 31 JULY 2003



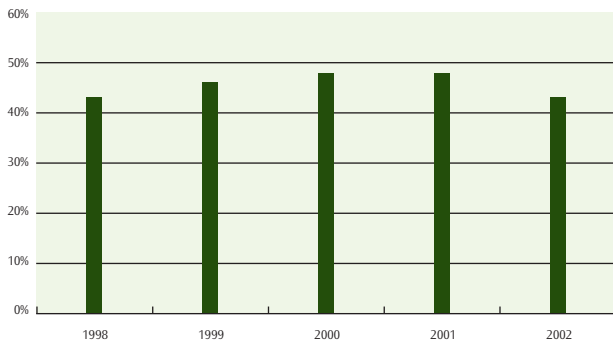
Notes:

- ¹ Prior activity relates to the student's main activity at 1 October in the year prior to formal enrolment.
- ² Data relates to domestic students enrolled at any time during 2003 with a tertiary education provider in formal qualifications of greater than 0.03 EFTS.
- ³ Data excludes those PTEs and OTEPs which neither received tuition subsidies nor were approved for student loans and/or allowances.
- ⁴ Data excludes all non-formal learning and on-job industry training.

⁶ Prior activity refers to a student's main activity at 1 October in the previous year. Care is needed in interpreting trends, as many students' predominant activity in the previous year may be different from what they were doing at 1 October. In addition, data on whether a student is new to tertiary education or not has traditionally been less reliable than other fields.

In recent years, there has been a shift away from first-time students coming directly from school towards first-time students coming from being employed. The proportion of school leavers going directly to tertiary study in the following year fell in 2000. Of the 52,546 school leavers in 2002, 43 percent went on to tertiary study in the following year, down from 48 percent for 2001 school leavers.

FIGURE 3.18: PROPORTION OF SCHOOL LEAVERS THAT PROCEEDED DIRECTLY TO TERTIARY EDUCATION BY SCHOOL YEAR IN THE FOLLOWING YEAR 1998-2002



Notes:

- ¹ Excludes international and adult students.
- ² Data relates to domestic students enrolled at 1 July with a tertiary education provider in formal qualifications of greater than 0.03 EFTS.
- ³ Data excludes those PTEs and OTEPs which neither received tuition subsidies nor were approved for student loans and/or allowances.
- ⁴ Data excludes all non-formal learning and on-job industry training.

There was a marked difference in the percentage of first-time students across sub-sectors. Around 28 percent of students at PTEs and wānanga, and 23 percent of students at polytechnics, were enrolled for the first time in 2002, compared with 14 percent at universities, and 9 percent of college of education students. This is consistent with generally longer qualifications undertaken at universities and colleges of education.

The average age of first-year students has been increasing. The number of first-year students aged 40 and over has increased by more than 100 percent since 1994, compared with 30 to 40 percent growth in other age groups over the same period.

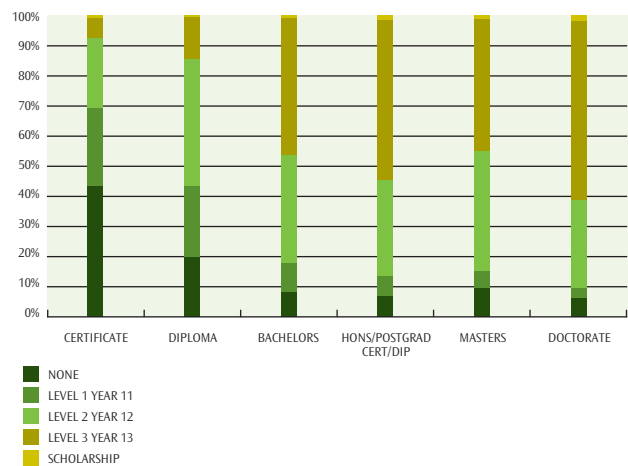
HIGHEST SCHOOL QUALIFICATION

The proportion of students entering tertiary with no previous school qualification has risen noticeably in recent years. Students without school qualifications numbered 19,370 in 1999 (around 10 percent of students with known domestic school qualifications). By 2003, the number of students with no previous school qualifications had risen to 99,800, an increase of over 400 percent, which represented 29 percent of all domestic students in 2003.

Although the number of students with school qualifications increased across all levels, students with year 13 school qualifications⁷ increased the least, and hence the increase in the proportion of students with no school qualification was complemented by decreases in the proportion of students with year 13 (or level 3) school qualifications, falling from 36 percent of all domestic students in 1998 to 21 percent in 2003.

Not surprisingly, there is a relationship between highest school qualification and level of qualification studied: the lower the school qualification, the lower the level of qualification studied.

FIGURE 3.19: DISTRIBUTION OF DOMESTIC STUDENTS BY QUALIFICATION LEVEL AND HIGHEST SCHOOL QUALIFICATION 2003



Notes:

- ¹ Excludes students with unknown or overseas school qualifications.
- ² Data relates to domestic students enrolled at any time during the year with a tertiary education provider in formal qualifications of greater than 0.03 EFTS.
- ³ Data excludes those PTEs and OTEPs which neither received tuition subsidies nor were approved for student loans and/or allowances.
- ⁴ Data excludes all non-formal learning and on-job industry training.
- ⁵ Students who were enrolled at more than one qualification level have been counted in each level. Consequently, the sum of the students in each qualification level may not add to the total number of students.

⁷ In 2004, NCEA level 3 replaced the University Bursaries qualification.

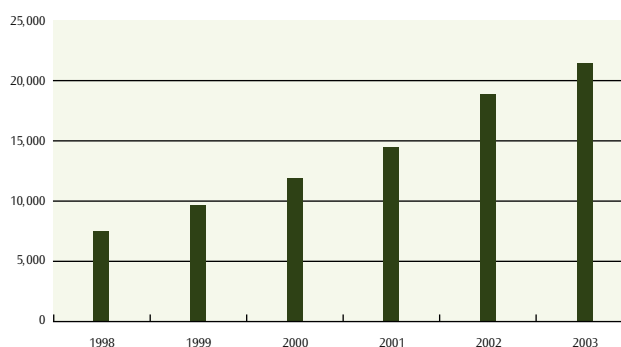


Students entering tertiary with no school qualifications were more likely to be Māori (48 percent), or Pasifika (31 percent), aged 40 and over (30 percent), or under 18 (47 percent). By contrast, just 8 percent of Asian students and 15 percent of 18 to 24 year olds had no school qualification. The proportion of female students with school qualifications was about the same as for men.

STUDENTS WITH DISABILITIES

There are increasing numbers of students with disabilities participating in the sector. Since information on disability was first collected in 1998, the number of students with disabilities has grown from 7,500 (excluding private providers) in 1998 to over 21,400 during 2003. In that year, students with disabilities represented 5 percent of all students, up from 3 percent in 1998.

FIGURE 3.20: DOMESTIC STUDENTS WITH DISABILITIES 1998-2003



Notes:

- ¹ Data relates to domestic students enrolled at any time during the year with a tertiary education provider in formal qualifications of greater than 0.03 EFTS.
- ² Data before 1999 excludes PTE and OTEP students.
- ³ Data excludes those PTEs and OTEPs which neither received tuition subsidies nor were approved for student loans and/or allowances.
- ⁴ Data excludes all non-formal learning and on-job industry training.

Information on disability status is collected by providers through their enrolments process, with students identifying themselves as having a disability. The 2001 Disability Survey, run by Statistics New Zealand, is the best source for information on the population with disabilities. This survey also asked a number of education-related questions, including whether respondents were enrolled in formal education. However, for Table 3.11 below, 'students with/without disabilities' refers to information collected by providers and passed on to the Ministry of Education. 'Population with/without disability' is from the Disability Survey. Because of the different survey instruments, the following rates are estimates only.

TABLE 3.11: ESTIMATED PARTICIPATION RATE OF STUDENTS WITH DISABILITIES IN 2001

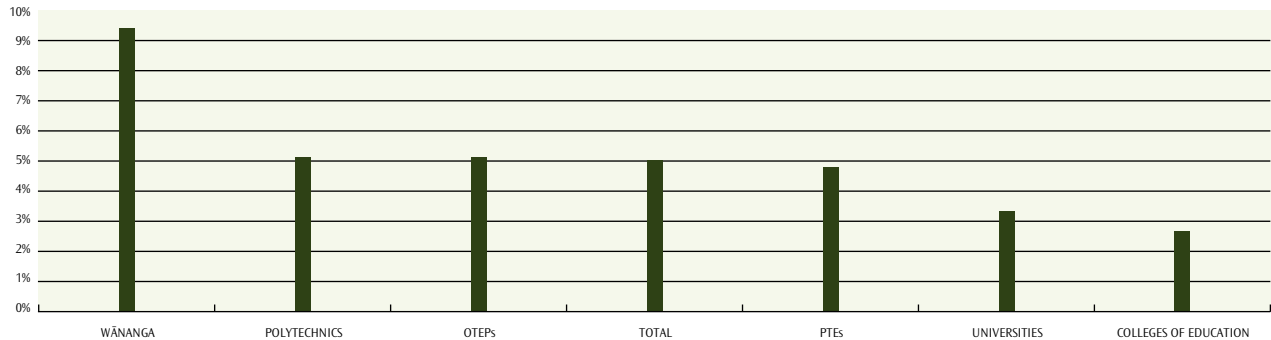
	With disabilities			Without disabilities		
	Students	Population	Participation rate	Students	Population	Participation rate
15-44	12,120	202,600	6.0%	323,910	1,364,900	23.7%
45-64	2,870	210,600	1.4%	41,590	629,400	6.6%
65+	170	240,600	0.1%	1,510	205,400	0.7%
Total 15+	15,160	653,800	2.3%	367,000	2,199,700	16.7%

Notes:

- ¹ Source for student information is the Ministry of Education. This data relates to students enrolled at any time during 2001 with a tertiary education provider in formal qualifications of greater than 0.03 EFTS.
- ² Source for population information is Statistics New Zealand, 2001 Disability Survey.

The table above indicates a significant difference in participation rates, with, for example, students aged 15 to 44 with disabilities participating at about a quarter of the rate of people aged 15 to 44 without disabilities.

FIGURE 3.21: PERCENTAGE OF DOMESTIC STUDENTS WHO HAVE DISABILITIES BY SUB-SECTOR 2003



Notes:

- ¹ Data relates to domestic students enrolled at any time during the year with a tertiary education provider in formal qualifications of greater than 0.03 EFTS.
- ² Data excludes those PTEs and OTEPs which neither received tuition subsidies nor were approved for student loans and/or allowances.
- ³ Data excludes all non-formal learning and on-job industry training.
- ⁴ Students who were enrolled in more than one sub-sector have been counted in each sub-sector. Consequently, the sum of each sub-sector may not add to the total number of students.

Students with disabilities were under-represented at universities and colleges of education, and over-represented at wānanga. Although 21 percent of students with a reported disability were at a university, those with a disability made up just 3.3 percent of all university students, compared with 5.0 percent for the sector overall. The largest numbers of students (9,100 or 42 percent) with a disability were at a polytechnic, where students with disabilities represented 5.1 percent of all polytechnic students.

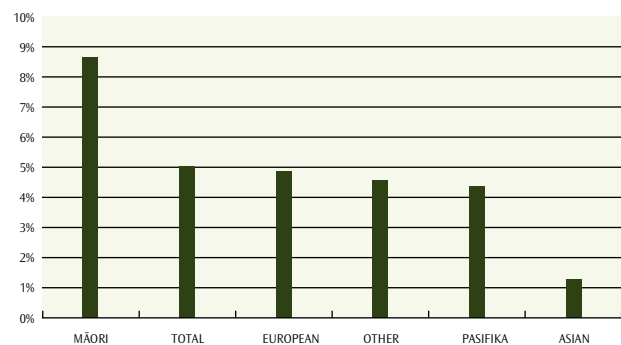
Wānanga have proven successful in attracting students with disabilities in recent years. While wānanga students made up 15 percent of all domestic students in 2003, they included 29 percent of all students with a disability. About 9.4 percent of all wānanga students had a disability, compared with 5.0 percent for the rest of the sector.

The success of wānanga in attracting students with disabilities was also reflected in ethnic comparisons, where Māori students made up 37 percent of all students with disabilities, compared with 21 percent of students with no disability. Similarly, around 8.6 percent of all Māori students were reported as having a disability, compared with an average of 4.8 percent for the sector. There were an estimated 7,855 Māori students with disabilities in tertiary education during 2003.

By contrast, Asian students were far less likely to report having a disability: only 1.3 percent (508) of all Asian students did so.

There were 686 Pasifika students reported as having a disability in 2003, which was about 4.1 percent of all Pasifika students, and 4.7 percent of all students with disabilities.

FIGURE 3.22: PERCENTAGE OF DOMESTIC STUDENTS WHO HAVE DISABILITIES BY ETHNIC GROUP 2003



Notes:

- ¹ Data relates to domestic students enrolled at any time during the year with a tertiary education provider in formal qualifications of greater than 0.03 EFTS.
- ² Data excludes those PTEs and OTEPs which neither received tuition subsidies nor were approved for student loans and/or allowances.
- ³ Data excludes all non-formal learning and on-job industry training.
- ⁴ Students who identify with more than one ethnic group have been counted in each group. Consequently, the sum of the students in each group may not add to the total number of students.
- ⁵ Totals also include those students whose ethnic group or age is unknown.



Given both the rising participation in wānanga and the increase in the incidence of disability with age, it is not surprising that students with disabilities were more likely to be older than the general student body. About 40 percent of all students with disabilities were aged 40 and over, compared with 26 percent for students with no disability. Correspondingly, students with disabilities were less represented at ages 18 to 24, with 3.3 percent of all students at this age reporting a disability, compared with the sector average of 5.0 percent.

Students with disabilities were also more likely to be women. Over 60 percent were women, compared with the non-disability share of 56 percent.

Students with disabilities were more likely to be studying at certificate or diploma level (84 percent compared with 71 percent), and noticeably more were enrolled in mixed field programmes. These included, for example, foundation-related programmes, including literacy and numeracy, employment-related skills training and social and life skills-related training.

INTERNATIONAL STUDENTS

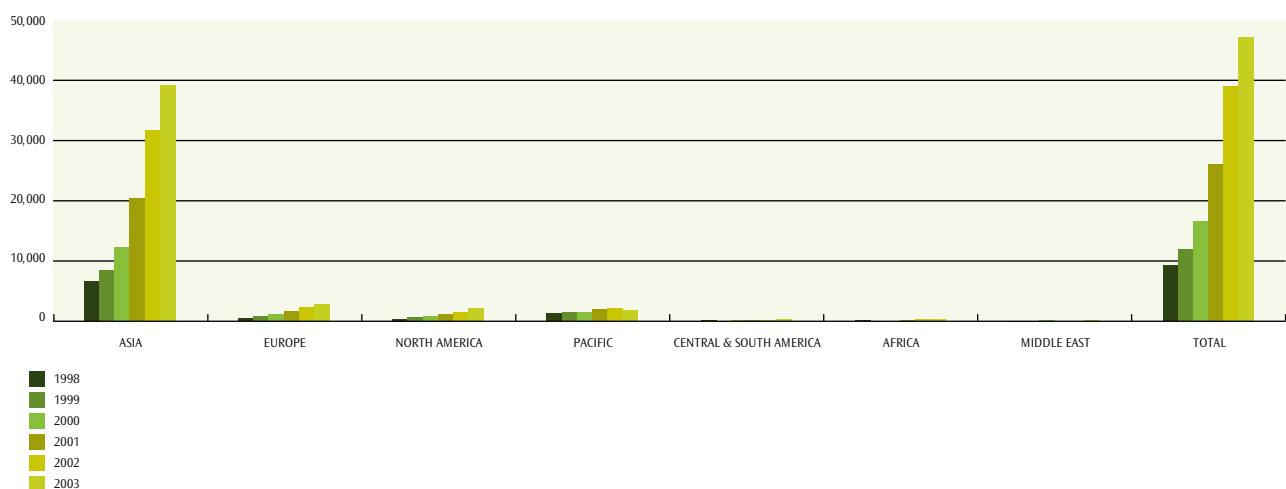
International education was a much bigger part of the tertiary landscape in 2003 than in 1994, with export education being a significant, income-earning industry. International students contributed \$372.7 million in fees to the revenue of the public tertiary education institutions in 2003, or 11.9 percent of their total revenue.

There were 47,130 international students enrolled in a formal qualification with a tertiary education provider during 2003, an increase of 8,260 (or 21 percent) over 2002. This continued the trend of growth in international students that began in 2000, although this growth slowed in 2003. 2003 saw the lowest increase since 2000.

In the five years from 1994 to 1999, international student numbers doubled from 5,990 to 11,935. Between 1999 and 2003, numbers tripled again, increasing by 35,200. International students were about 10 percent of all students, up from 3 percent in 1994 and 5 percent in 2000.

The increase of 21 percent, or 8,260 international students in 2003, was the smallest numerical gain since 2000. Despite publicity relating to negative experiences for some Asian students, the numbers of international students from Asian countries grew by 7,400 or 23 percent. This growth, however, represented the lowest increase since 2000.

FIGURE 3.23: INTERNATIONAL STUDENTS BY REGION 1998-2003



Notes:

¹ Data relates to students enrolled at any time during the year with a tertiary education provider in formal qualifications of greater than 0.03 EFTS.

² Data before 1999 excludes PTE and OTEP students.

³ Data excludes those PTEs and OTEPs which neither received tuition subsidies nor were approved for student loans and/or allowances.

⁴ Data excludes all non-formal learning and on-job industry training.

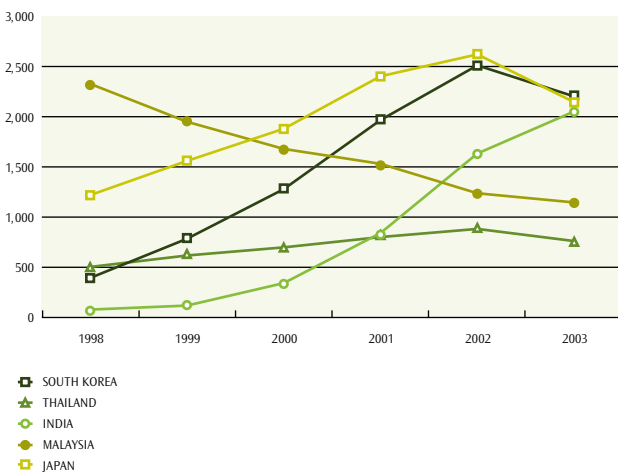
The growth in Chinese student numbers has been the single dominating feature in recent years. Chinese students increased from just 142 in 1998 (around 2 percent of all international students) to over 27,300 in 2003 and made up over half (58 percent) of all international students.

However, while students from China continued to increase in 2003, students from most other major Asian countries fell. Student numbers from South Korea (the second most popular country for international students) fell by 13 percent and those from Japan by 18 percent.

The exception was India. Student numbers from India rose 26 percent to reach 2,050, making students from India the fourth largest group of international students. After China, students from India had the greatest increase in both absolute and percentage gain terms. Despite the falls in student numbers from many Asian countries, the increase in students from China helped to increase the Asian proportion of all international students from 81 percent in 2002 to 83 percent in 2003.

After China, the countries where most Asian students came from were South Korea (2,180, or 5 percent), Japan (2,150, or 5 percent), India (2,050, or 4 percent) and Malaysia (1,130, or 2 percent).

FIGURE 3.24: TOP FIVE ASIAN COUNTRIES (EXCLUDING CHINA) FOR INTERNATIONAL STUDENTS 1998-2003

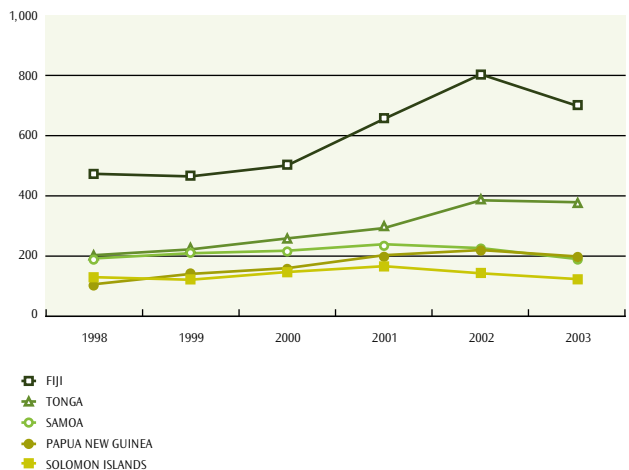


Notes:

- ¹ Data relates to students enrolled at any time during the year with a tertiary education provider in formal qualifications of greater than 0.03 EFTS.
- ² Data before 1999 excludes PTE and OTEP students.
- ³ Data excludes those PTEs and OTEPs which neither received tuition subsidies nor were approved for student loans and/or allowances.
- ⁴ Data excludes all non-formal learning and on-job industry training.

Student numbers from the Pacific region fell by 400, or 17 percent to 1,890 in 2003. The region's share of all international students fell also from 6 percent in 2002 to 4 percent in 2003. The region has slipped from second to fourth most popular for recruitment of international students for New Zealand, behind Europe and North America. Student numbers from all Pacific region countries, apart from Tuvalu, experienced a decline. Students from Fiji (700), Tonga (380), and Samoa (195) made up over two thirds of all international students coming to New Zealand from the Pacific region.

FIGURE 3.25: TOP FIVE PACIFIC COUNTRIES FOR INTERNATIONAL STUDENTS 1998-2003



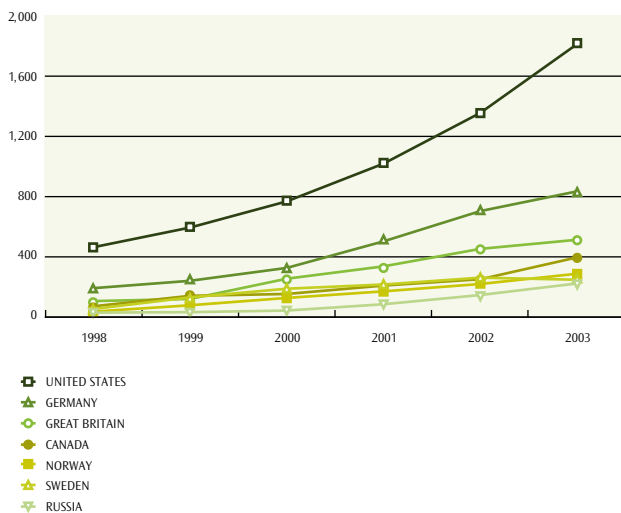
Notes:

- ¹ Data relates to students enrolled at any time during the year with a tertiary education provider in formal qualifications of greater than 0.03 EFTS.
- ² Data before 1999 excludes PTE and OTEP students.
- ³ Data excludes those PTEs and OTEPs which neither received tuition subsidies nor were approved for student loans and/or allowances.
- ⁴ Data excludes all non-formal learning and on-job industry training.

Students from Europe made up the second largest group with over 6 percent of the international student body (2,900 students). The numbers from this region increased by 19 percent in 2003, with German students (at 840) making up the largest group. Other well-represented countries were Britain, Sweden, Norway, Russia and France. Unlike Asia and the Pacific, international student numbers increased from virtually all the European countries.

Students from the United States and Canada were the third largest group and increased by 590 or 37 percent in 2003, the largest numerical gain after China. Students from this region made up nearly 5 percent of all international students. Students from the United States, totalling more than 1,080, were the fifth largest group of international students.

FIGURE 3.26: TOP EUROPEAN AND NORTH AMERICAN COUNTRIES FOR INTERNATIONAL STUDENTS 1998-2003



Notes:

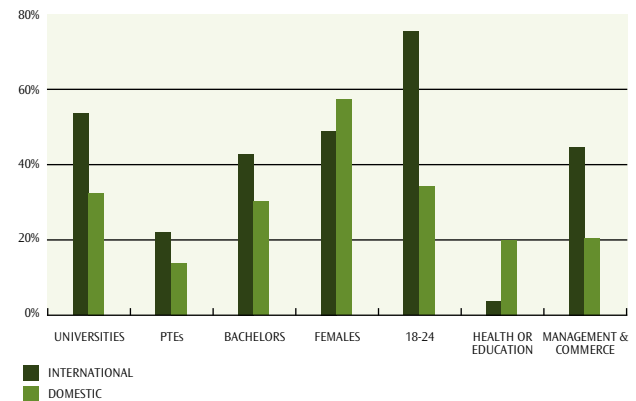
- 1 Data relates to students enrolled at any time during the year with a tertiary education provider in formal qualifications of greater than 0.03 EFTS.
- 2 Data before 1999 excludes PTE and OTEP students.
- 3 Data excludes those PTEs and OTEPs which neither received tuition subsidies nor were approved for student loans and/or allowances.
- 4 Data excludes all non-formal learning and on-job industry training.

In 2003, international students were likely to be aged 18 to 24, men and Asian. They were also likely to be studying at a university or a PTE, at diploma or bachelors level, and in management and commerce.

Around three in four international students were aged 18 to 24, compared with one in three domestic students. Over half (53 percent) were at universities and 22 percent at PTEs, compared with 32 percent and 14 percent, respectively, for domestic students.

By contrast, just 2 percent of international students were aged 40 or over, compared with 26 percent of domestic students. Men made up 52 percent of international students, compared with 43 percent of domestic students. International students were less likely to be studying in the fields of health, education and engineering, and at levels below diploma.

FIGURE 3.27: SELECTED CHARACTERISTICS OF INTERNATIONAL AND DOMESTIC STUDENTS 2003



Notes:

- 1 Data relates to students enrolled at any time during the year with a tertiary education provider in formal qualifications of greater than 0.03 EFTS.
- 2 Data excludes all non-formal learning and on-job industry training and those PTEs and OTEPs which neither received tuition subsidies nor were approved for student loans and/or allowances.

A total of 12,439 international students completed a qualification in 2003, some 11 percent of all students who completed a qualification. The distribution of international students completing qualifications followed a similar pattern to their distribution in enrolments.

Of international students starting a qualification at a public provider in 1999, 46 percent had completed it by the end of 2003, higher than the rate of 40 percent for similar domestic students. While international students completed at a higher rate, the rate of students dropping out was the same, at 50 percent, reflecting the fact that over 80 percent of international students studied full-time, compared with around 50 percent of domestic students.

These rates varied according to level studied. While international students were over-represented at diploma and bachelors levels, five-year retention and completion rates at these levels were lower for international students than for domestic students.

By contrast, completion rates were higher at all other levels for international students, and drop-out rates similar or lower. In particular, while 40 percent of both international and domestic students starting a doctorate in 1999 had dropped out by 2003, 40 percent of international students had completed their doctorate, compared with 23 percent of domestic students. Again, much of this difference would be explained by higher levels of full-time study among international students in New Zealand.

FIGURE 3.28: FIVE-YEAR QUALIFICATION RETENTION RATES BY QUALIFICATION LEVEL AND SELECTED SUB-SECTORS FOR INTERNATIONAL AND DOMESTIC STUDENTS 2003

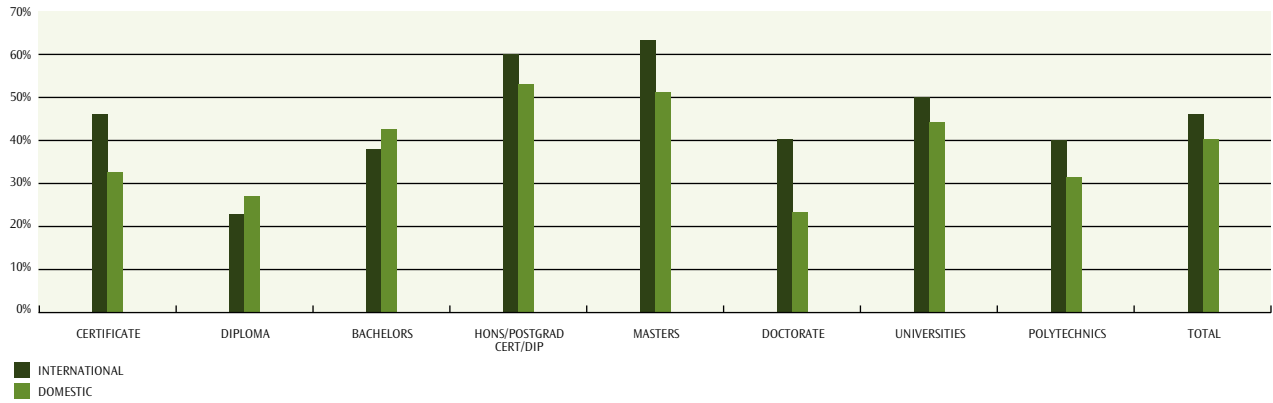
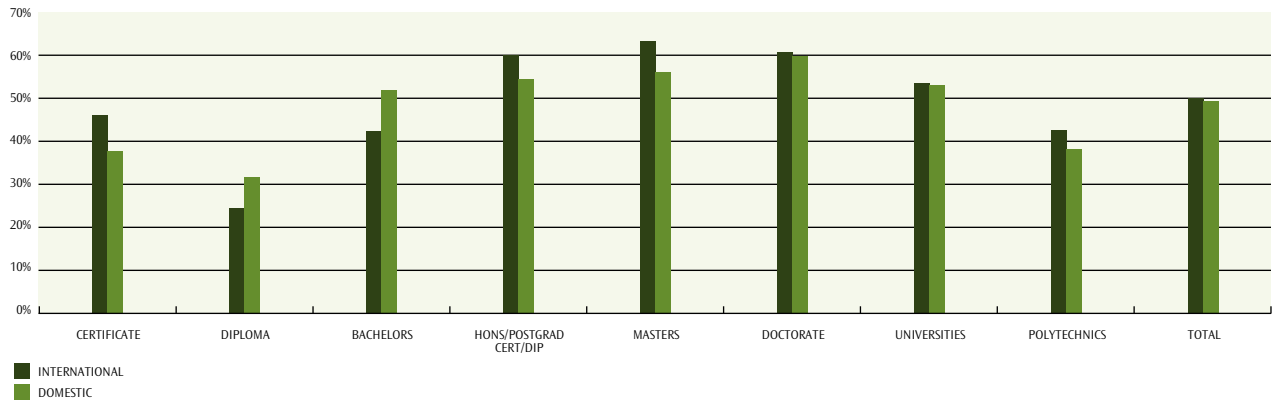


FIGURE 3.29: FIVE-YEAR QUALIFICATION COMPLETION RATES BY QUALIFICATION LEVEL AND SELECTED SUB-SECTORS FOR INTERNATIONAL AND DOMESTIC STUDENTS 2003



Notes:

- ¹ All rates are estimates.
- ² Five-year retention rate is defined as the percentage of domestic students starting a qualification at a public provider in 1999 who have completed by 2003 or who are still enrolled in 2003.
- ³ Five-year completion rate is defined as the percentage of domestic students starting a qualification at a public provider in 1999 who have completed by the end of 2003.
- ⁴ Data relates to students enrolled at any time during the year with a tertiary education provider in formal qualifications of greater than 0.03 EFTS.
- ⁵ Data excludes all PTEs, OTEPs, non-formal learning and on-job industry training.
- ⁶ Students who were enrolled at more than one qualification level have been counted in each level.
- ⁷ Totals also include those students whose qualification level is unknown.
- ⁸ Total includes those students who have changed qualification level, whereas rates for individual levels do not.

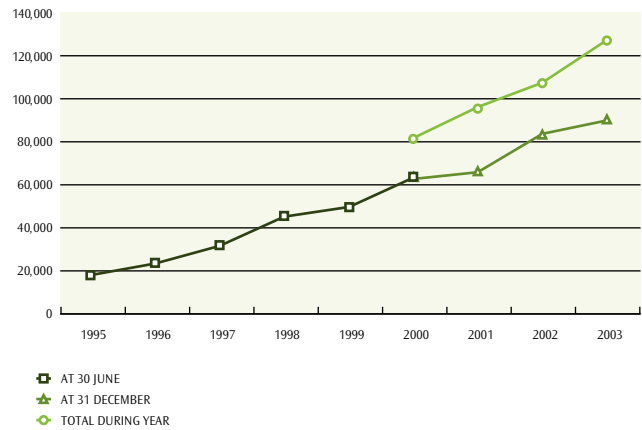
INDUSTRY TRAINING

The government's Industry Training Strategy is designed to increase the quality and quantity of industry training in New Zealand. The strategy is industry-led and is designed to be responsive to the needs of both enterprises and employees. It is funded through the Tertiary Education Commission (TEC) and is administered by industry training organisations (ITOs). Much of the following analysis is taken from the report *Industry Training 2003*, published by the TEC in September 2003.

The number of trainees, including Modern Apprentices, who participated in industry training continued to grow strongly in 2003, increasing by 19,900 (or 19 percent) compared with 2002. A total of 126,870 trainees participated during 2003, up 55 percent on the number in 2000.

These figures follow the trend of constant growth in trainee numbers since the programme's inception under the Industry Training Act 1992.

FIGURE 3.30: TRAINEES IN INDUSTRY TRAINING 1995-2003



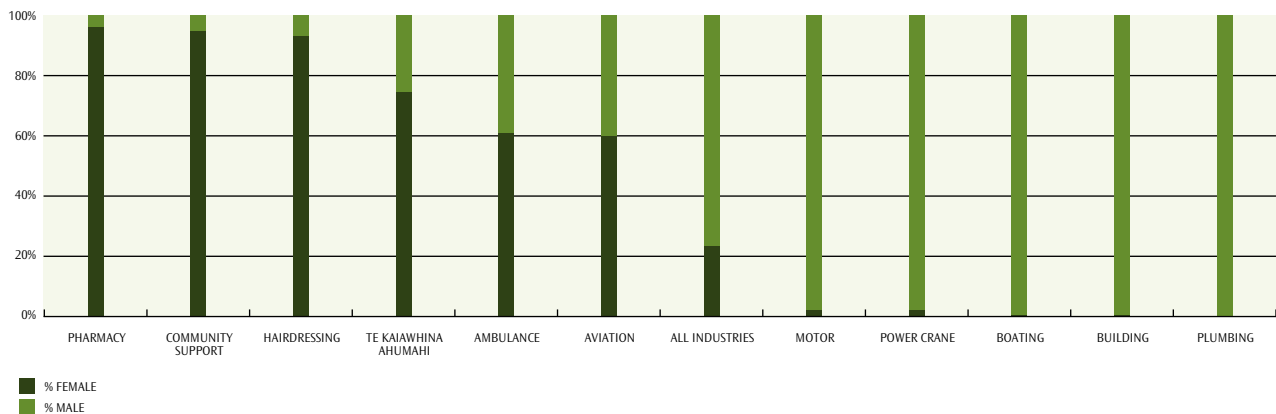
Notes:

- ¹ Because of changes to reporting systems, figures from 2000 may not be exactly comparable with previous years.
- ² Totals also include Modern Apprenticeship numbers.

Source: Tertiary Education Commission.

In 2003, three quarters of industry trainees were men, although the proportion of women undertaking industry training increased from 13 percent in 1996 and 22 percent in 2002 to a quarter in 2003. However, the gender split varied significantly across ITO industry areas, from pharmacy, community support and hairdressing, where over 90 percent of trainees were women, to boating and building, where less than 1 percent of trainees were women.

FIGURE 3.31: INDUSTRIES WITH THE HIGHEST AND LOWEST SHARE OF FEMALE TRAINEES IN INDUSTRY TRAINING 2003



Notes:

¹ Data relates to total number of trainees at 31 December 2003.

² Totals also include Modern Apprenticeship numbers.

Source: Tertiary Education Commission.

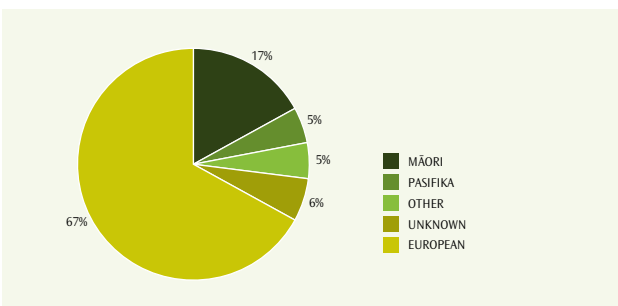
There were 21,700 Māori in industry training in 2003, representing 17 percent of all industry trainees, compared with 11 percent in 1996, and 18,440 Māori in 2002. By comparison, 10 percent of the workforce was Māori, and Māori represented 13 percent of the population aged 15 and over, and 21 percent of students enrolled in formal qualifications at tertiary education providers.

There was some variation in Māori trainees across ITO industries, although the range of difference was less than that for gender. Māori were well represented in Te Kaiawhina Ahumahi, where 56 percent of trainees were Māori, forestry (29 percent), and seafood (22 percent), and under-represented in pharmacy (0 percent), hairdressing (5 percent), and equine (6 percent).

Pasifika trainees represented 6 percent of all industry trainees, a similar rate to 2002, but up from 2 percent in 1996. There were 6,850 Pasifika trainees in industry training in 2003, compared with 6,384 in 2002.

The pattern of participation across ITO industries was different again for Pasifika trainees, with over-representation in plastics (30 percent of all trainees), building service contractors (24 percent), and apparel and textile (20 percent), and under-representation in pharmacy, equine, agriculture and ambulance (all less than 1 percent of trainees).

FIGURE 3.32: DISTRIBUTION OF INDUSTRY TRAINEES BY ETHNIC GROUP 2003



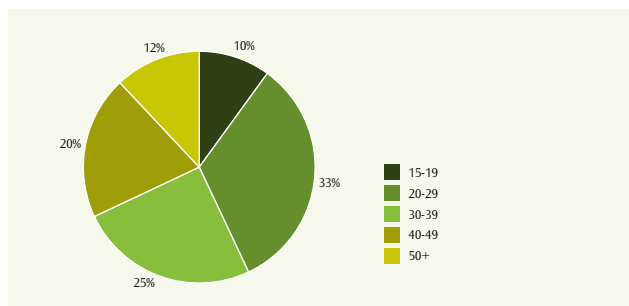
Notes:

- ¹ Data relates to total number of trainees at 31 December 2003.
- ² Totals also include Modern Apprenticeship numbers.
- ³ Ethnic group is based on the single prioritised method of reporting.

Source: Tertiary Education Commission.

Nearly a third of trainees were aged between 20 and 29, while a further 25 percent were aged between 30 and 39. The number of trainees aged between 15 and 19 increased significantly from 2000 and numbered 12,180 in 2003, or 10 percent of all trainees. This result shows the impact of the government's Modern Apprenticeships initiative, which was introduced during 2000 to facilitate increased access of young people to industry training.

FIGURE 3.33: DISTRIBUTION OF INDUSTRY TRAINEES BY AGE GROUP 2003



Notes:

- ¹ Data relates to total number of trainees at 31 December 2003.
- ² Totals also include Modern Apprenticeship numbers.

Source: Tertiary Education Commission.


A key goal of industry training is to improve access to training and nationally recognised achievement for those most disadvantaged in terms of educational qualifications.

In 2003, of those participants whose previous qualification level was known⁸:

- 28 percent of all participating trainees had no previous qualifications
- 38 percent of participating Māori trainees had no previous qualifications
- 34 percent of participating Pasifika trainees had no previous qualifications, and
- 20 percent had a certificate or diploma below degree level.

⁸ Collection of previous educational qualifications commenced from the beginning of 2000. Out of the 106,997 trainees, records are known for 59,185.





Industry training has a strong focus on levels 1 to 4 of the National Qualifications Framework. In 2003:

- 41 percent of all participating trainees were in level 4 or higher industry training programmes
- 70 percent of Māori trainees were in level 3 or higher industry training programmes, and
- 57 percent of Pasifika trainees were in level 3 or higher industry training programmes, up considerably from 53 percent in 2001.

In 2003, 14,181 national certificates were completed by industry trainees. These were at the following levels of the NQF:

- 405 at level 1
- 3,221 at level 2
- 4,125 at level 3
- 6,242 at level 4, and
- 188 at level 5 and above.

Seventy-four percent of the national certificates were completed at level 3 or above and 38 percent of the national certificates completed by Māori were at level 4 or above. Thirty-one percent of the national certificates completed by Pasifika trainees were at level 4 or above.

A significant feature of industry training in 2003 was the success of people with no or few previous certificates:

- Eighty-one percent of the national certificates achieved by trainees with no previous educational qualification were at level 3 or above.
- Eighty-three percent of the national certificates achieved by trainees with fifth form or equivalent previous educational qualifications were at level 3 or above.

In 2003, industry trainees achieved nearly 2.5 million credits towards national qualifications, an average of nearly 20 credits per trainee:

- Seventy percent of the total credits achieved were at level 3 of the NQF or higher.
- Sixty-seven percent of the credits achieved by Māori trainees were at level 3 of the NQF or higher.
- Sixty-two percent of the credits achieved by Pasifika trainees were at level 3 of the NQF or higher.

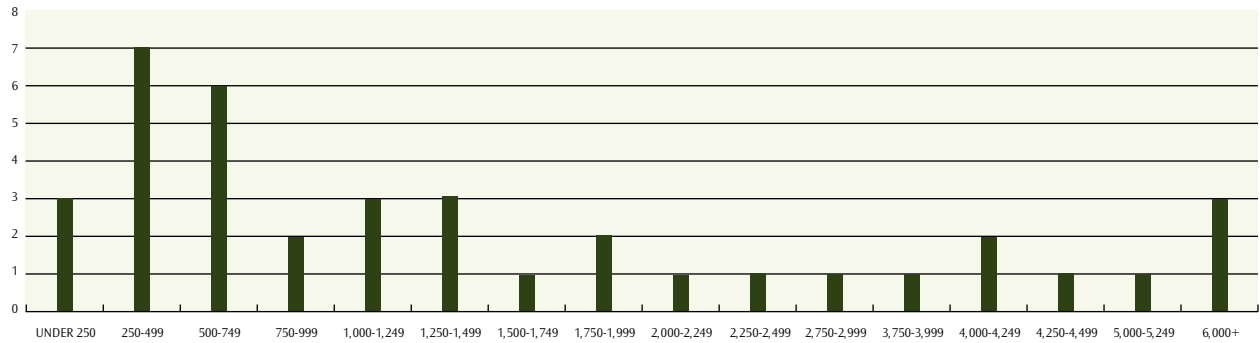
Employer participation in industry training increased by 19 percent from 24,576 employers in 2002 to 29,206 in 2003.

Employers who take part in industry training are supported by ITOs to:

- commit to a formal, signed training agreement for each trainee
- provide structured on-job training and provide access to off-job training
- facilitate access to appropriate on and off-job assessment
- ensure training meets national standards developed by their industry, and
- enable trainees to work towards, and obtain, portable national qualifications.

Of the 40 ITOs with recorded trainees in 2003, the average number of trainees per ITO as at 31 December 2003 was 2,250. Half of the ITOs had fewer than 1,050 trainees, and half had more than this. About 45 percent of ITOs had fewer than 1,000 trainees at 31 December, and a third had over 2,000 trainees. The two largest ITOs were forestry, and engineering, food and manufacturing, both of which had over 10,000 trainees at 31 December 2003.

FIGURE 3.34: NUMBER OF ITOs BY SIZE 2003



Notes:

¹ Size is based on the number of trainees in the ITO at 31 December 2003.

² Totals also include Modern Apprenticeship numbers.

Source: Tertiary Education Commission.

MODERN APPRENTICESHIPS

Introduced in 2000, the Modern Apprenticeships scheme is a work-based training initiative that encourages and helps young people, particularly those aged between 16 and 21 years, to take up and complete apprenticeship training.

Each young person undertaking a Modern Apprenticeship has an individual training plan that includes the range of specific and generic skills to be learnt.

Modern Apprenticeships are administered by the Tertiary Education Commission and:

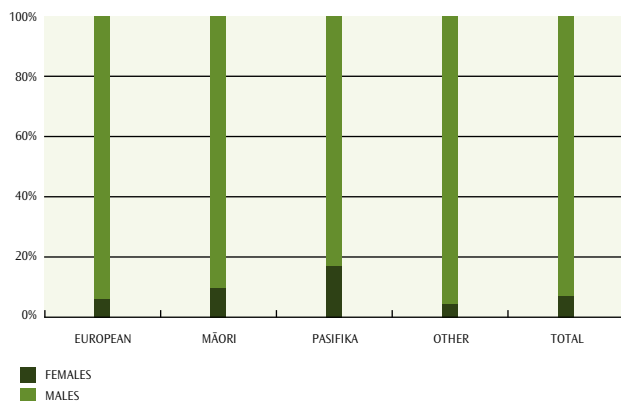
- provide systematic, high-quality, workplace learning
- are based on a training agreement and an individual training plan, signed off by both the employer and the apprentice
- lead to national qualifications in a wide range of industries at levels 3 and 4 of the NQF
- cover both industry-specific and generic skills
- develop the apprenticeship concept beyond the traditional industries, and
- complement existing tertiary education and industry training options.

Modern Apprenticeships are characterised by the new role of a Modern Apprenticeship Coordinator who acts as personal coach and mentor to the apprentice. Coordinators facilitate and support apprenticeship training, acting as the key link between employers and apprentices. They screen potential apprentices, arrange their employment and training, and work with employers and apprentices to produce individual training plans.

There was a total of 6,259 Modern Apprentices at 31 December 2003, up 44 percent from the 4,344 apprentices registered at 31 December 2002. Modern Apprenticeships were available in 34 industries, with an average of just over 200 in each. About 7 percent were women, 15 percent Māori and under 2 percent Pasifika. The average age of apprentices was 17 years, with about half of all trainees aged 17 or 18.



FIGURE 3.35: DISTRIBUTION OF MODERN APPRENTICES BY GENDER AND ETHNIC GROUP 2003

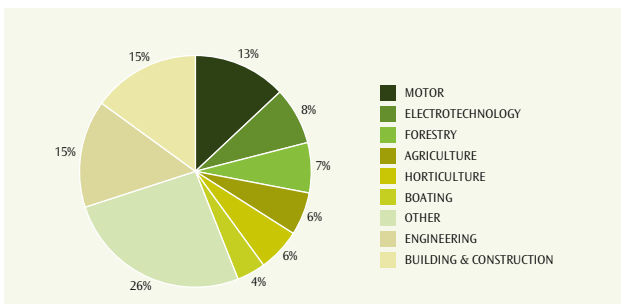


Notes:

- ¹ Data relates to total number of trainees at 31 December 2003.
- ² Ethnic group is based on the single prioritised method of reporting.

Source: Tertiary Education Commission.

FIGURE 3.36: DISTRIBUTION OF MODERN APPRENTICES BY SELECTED INDUSTRIES 2003



Notes:

- ¹ Data relates to the total number of trainees at 31 December 2003.
- ² Ethnic group is based on the single prioritised method of reporting.
- ³ There were 30 industries in which Modern Apprenticeships were available in 2003.

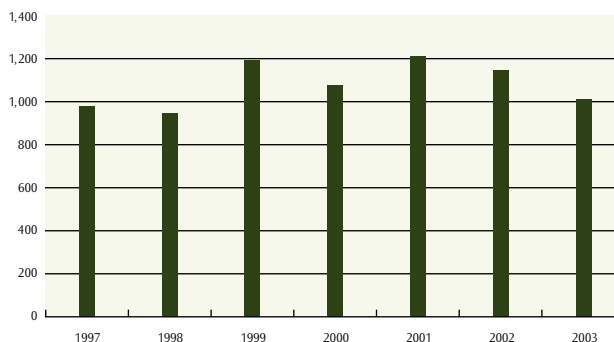
Source: Tertiary Education Commission.

SKILL ENHANCEMENT – RANGATAHI MĀIA/TUPULAGA LE LUMANA'I

Rangatahi Māia/Tupulaga Le Lumana'i (Skill Enhancement) is a vocational training programme for young Māori and Pasifika peoples. 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.

During 2003, 1,006 trainees participated in Skill Enhancement training, compared with 1,141 in 2002, 1,206 in 2001 and 1,070 in 2000.

FIGURE 3.37: SKILL ENHANCEMENT TRAINEES 1997-2003



Of the 1,006 students in 2003, 79 percent were Māori and 19 percent were Pasifika students, compared with 81 percent and 19 percent respectively in 2002 and 83 percent and 17 percent in 2001.

INTERNATIONAL COMPARISONS

Fair international comparisons of participation and completion of tertiary education are difficult to make because of significant education system differences, including financial access, academic entry, qualification content and completion standards, and data measurement and definitional differences.

The OECD provides the only source of standardised international comparisons. However, in order to achieve this comparability across countries, the OECD is obliged to use indicators that are not the best measures of participation, completion and retention that are possible (see below).

In all OECD international comparisons, tertiary education is defined according to the International Standard Classification of Education level (ISCED). Tertiary levels include levels 5A (bachelors, honours, masters, postgraduate certificates and diplomas), 5B (diplomas, national diplomas) and level 6 (doctorates). ISCED levels 5A and 6 are grouped by the OECD as tertiary education type A. ISCED level 5B is grouped as type B⁹. In New Zealand, tertiary education has traditionally been measured as formal study at a tertiary education provider, regardless of the ISCED level.

⁹ ISCED level 5 represents study at diploma, degree, and postgraduate level (excluding doctorate). Level 6 represents doctorate-level study. Level 5A represents more academically or theoretically-based study, while level 5B represents more vocationally-oriented study.

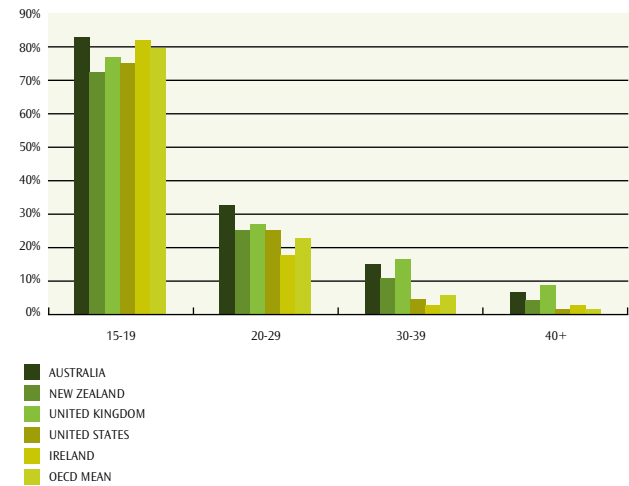
As such, the tertiary sector, as reported in OECD comparisons, represents only about 50 percent of the students measured in New Zealand education statistics, and reflects New Zealand's performance in the higher education part of the tertiary education sector only. The remainder of the sector is reported as post-secondary, non-tertiary in OECD comparisons. The difference is significant when looking to draw inferences from international comparisons about performance on access to tertiary education, especially in light of recent growth in the numbers of Māori students entering lower-level tertiary study.

New Zealand's current growth in participation (over 90 percent) is largely due to increases in the rate of enrolment rather than through population growth. This is particularly so at ages 25 and over. In two of the three OECD measures described below, this has a distorting effect, given the way these measures are defined. This distortion is described further below.

Three measures of participation in tertiary study are used in OECD comparisons – enrolment rates, expected years in tertiary education, and net entry rates.

The enrolment rate measure uses enrolments in education as a percentage of population for four age groups (15 to 19 years, 20 to 29, 30 to 39, and 40 and over), and is shown below for selected countries.

FIGURE 3.38: OECD ENROLMENT RATES BY AGE GROUP 2002



Notes:

- Enrolment rate is the percentage of domestic students enrolled in an age group divided by the population in that age group.
- The figure for ages 30-39 and 40+ for Ireland is a combined rate for these ages.
- Data excludes all tertiary students below ISCED level 5.
- Data excludes all non-formal learning and on-job industry training and those PTEs and OTEPs which neither received tuition subsidies nor were approved for student loans and/or allowances.

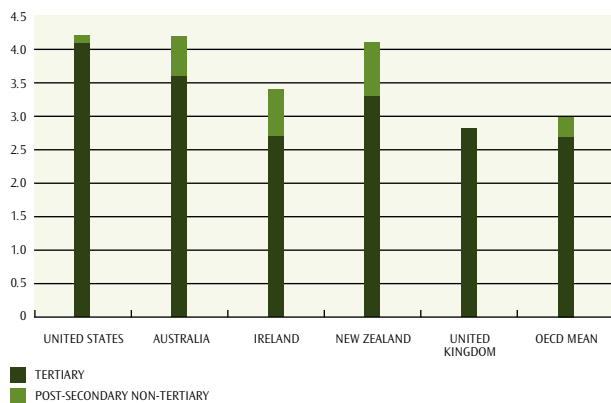
Source: OECD, *Education at a Glance: OECD Indicators 2004*, Table C1.2.

This is the best of the OECD measures for comparing participation. However, it does not distinguish between participation at secondary schools and tertiary institutions. In 2002, New Zealand ranked 24th out of 27 countries in participation rates for students aged 15 to 19, but slightly above average for ages 20 to 29. At older ages, New Zealand participation rates continue to rank amongst the highest in the OECD, fourth for ages 30 to 39 and third for ages 40 and over, but behind Australia and Britain in both age groups.

'Expected years in tertiary education' represents the expected number of years for which a 17 year old will be in tertiary education. Figure 3.39 shows that, on this measure, New Zealand performs well. In 2002, New Zealand was ranked first out of 27 OECD countries in terms of expected years in post-secondary non-tertiary level and sixth in terms of expected years in tertiary education (ISCED levels 5 to 6). Current high participation, especially for part-time, part-year study at older ages, will tend to overstate true expected years, and this will inflate this measure.



FIGURE 3.39: OECD EXPECTED YEARS IN TERTIARY EDUCATION 2002



Notes:

- Expected years represents the expected number of years for which a 17 year old will be in tertiary education.
- The OECD classifies New Zealand tertiary data as 'post-secondary non-tertiary' for students at ISCED level 4, and 'tertiary' for students at ISCED levels 5 and 6.
- Data excludes all non-formal learning and on-job industry training and those PTEs and OTEPs which neither received tuition subsidies nor were approved for student loans and/or allowances.

Source: OECD, *Education at a Glance: OECD Indicators 2004*, Table C1.1.

The OECD 'net entry rate' measure represents the proportion of the population that will enter tertiary education over their lifetime. This is estimated by aggregating first-time participation rates for every age.

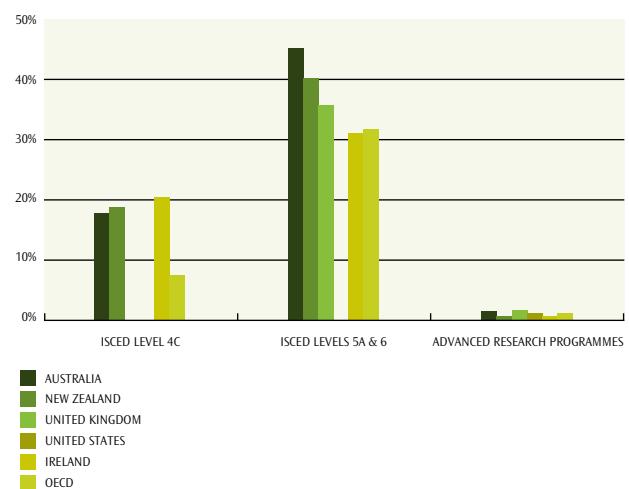
New Zealand ranked sixth in the OECD in terms of net entry rate to type A study and second to type B study. However, care should be used in interpreting this measure, as current high first-time participation, especially at older ages, will tend to artificially inflate the true rate at which New Zealanders will participate in tertiary education over their lifetime.

OECD uses 'graduation rate' as a measure of completion.

The gross graduation rate is the number of graduates, of any age, divided by the population of the typical graduation age. This is presented for first programmes for ISCED levels 5A and 5B¹⁰. In 2002, the OECD rate for those countries for which information is available was 32 percent for type A programmes and 11 percent for type B. The net graduation rate is the sum of the number of graduates of each age divided by the population of that age. Net graduation rates are presented for advanced research programmes (ISCED level 6). The New Zealand rate for advanced research programmes was 0.9 percent in 2002, slightly below the OECD rate of 1.2 percent.

These differences notwithstanding, OECD comparisons show New Zealand to be above or near OECD averages in graduation rates across all levels of tertiary study.

FIGURE 3.40: GRADUATION RATES FOR SELECTED OECD COUNTRIES 2002



Notes:

- Graduation rate is the number of graduates (of any age) divided by the population of the typical graduation age.
- 2001 data has been used for the New Zealand graduation rates at levels 5A and 6.
- Data excludes all non-formal learning and on-job industry training and those PTEs and OTEPs which neither received tuition subsidies nor were approved for student loans and/or allowances.

Source: OECD, *Education at a Glance: OECD Indicators 2004*, Tables A2.3 and A3.1.

¹⁰ ISCED level 5 represents study at diploma, degree and postgraduate level (excluding doctorate). Level 6 represents doctorate-level study. Level 5A represents more academically or theoretically-based study, while Level 5B represents more vocationally-oriented study.

PATHWAYS IN TERTIARY EDUCATION

Students enrolling for the first time in tertiary education have an increasing range of study decisions to make. These include what to study, what level to study, where to study, and for how long. As students move through their study, they may transfer to another provider, or switch to another qualification; they may drop out without completing a qualification, or move on to higher-level study. Some will prolong their studies due to work or family commitments, or take a break before returning to complete a qualification or start another one.

It is these patterns of movement between levels of qualification, completion, type of provider and duration that are described in *Pathways in Tertiary Education, 1998-2002*, a report published by the Ministry of Education in 2004.

The report tracked the cohort of first-year students in 1998 through five years until the end of 2002. Included in the aspects of pathways tracked for this group were:

- duration of study
- level of qualification studied
- type of provider
- attrition and completion
- articulation
- transfers and switches, and
- how many students take a break during their study.

Among some of the findings were:

- 35.2 percent of all 1998 starters studied for one year only, while 21.5 percent studied for two years, 14.2 percent studied for three years, 14.4 percent for four years, and 14.7 percent for all five years between 1998 and 2002.
- On average, a student starting at university was enrolled for 3.2 years between 1998 and 2002, a polytechnic starter was enrolled for 2.1 years, a college of education starter 2.7 years, and a wānanga starter 2.1 years.
- On average, a student starting at certificate level was enrolled for 1.9 years between 1998 and 2002, a diploma starter was enrolled for 2.4 years, and a degree starter was enrolled for 3.6 years. Over all levels, 1998 starters were enrolled on average for 2.1 years between 1998 and 2002.
- Nearly half of all attrition is in the first year. Attrition over the five years between 1998 and 2002 for all 1998 starters was 56.9 percent. Attrition in the first year was 26.9 percent of all 1998 starters.

- Completion rates improved significantly, the longer the period of study. 70.8 percent of those students who studied for four or more years gained a qualification, compared with 25.6 percent for those enrolled for two years or less, and 56.3 percent of those who studied for three years.
- Just 16.6 percent of students starting a degree studied for three years only. 59.9 percent of degree starters studied for four or more years. Of those 1998 degree starters studying for three years only, 68.1 percent completed their degree. 80.1 percent of students studying for four years completed, while 71.0 percent of students who have studied for five years completed in their fifth year.
- As an estimate of articulation in tertiary education, 6.2 percent of 1998 starters gained higher-level qualifications instead of, or in addition to, the level they started at. 9.5 percent of university degree starters progressed to and completed higher-level qualifications, compared with 1.6 percent for degree starters at polytechnic, 0.5 at colleges of education, and 6.2 percent for the cohort as a whole.
- 12.9 percent of 1998 starters took a break of at least one year in their study sometime between 1998 and 2002.
- 7.8 percent of all starting students studied at more than one type of provider between 1998 and 2002. The most common combination was university and polytechnic covering 5.3 percent of all starters. 1.1 percent of all starters combined study at a polytechnic with study at a wānanga, while 0.8 percent combined study at a college of education with study at a university, and 0.4 percent combined college of education and polytechnic.
- Nearly half (47.2 percent) of 1998 starters followed just 10 pathways (ie combinations of level, sub-sector, duration and completion) between 1998 and 2002. Some 3,600 pathways were followed by the total cohort of 1998 starters.
- The two most common pathways followed by 1998 starters were enrolment at certificate level at a polytechnic for one year without completing, or enrolment at certificate level at a polytechnic for two years without completing. These two pathways covered 23.2 percent of 1998 starters.
- Starting and completing a degree in three years was not one of the top 10 pathways, but starting and completing a degree in four years was sixth (3.0 percent of 1998 starters), while starting and completing a degree in five years was 10th most common (2.0 percent of 1998 starters).

