

INTRODUCTION

Postgraduate qualifications comprise qualifications at three levels of the New Zealand Register of Quality Assured Qualifications (the register). Level 8 qualifications are postgraduate diplomas and certificates or bachelors degrees with honours. Level 9 qualifications are masters degrees, and level 10 qualifications are doctoral degrees. This chapter looks at students enrolled in these qualifications who are funded through the Student Component fund.

AN OVERVIEW

There were 35,390 students (including 4,420 international students) enrolled in postgraduate study in 2004, up by 2,190 students, or 6.2 percent over 2003. There were 30,970 domestic students enrolled in postgraduate study in 2004, an increase of 5.1 percent over 2003. This continues the strong growth, of between 4 and 5 percent, in postgraduate students over the last three years. Postgraduate students made up 6.8 percent of all domestic tertiary students in 2004.

The number of equivalent full-time students (EFTS) in postgraduate study in 2004 was 21,660, up by 1,130 EFTS, or 5.5 percent over 2003. There were enrolments totalling 18,370 domestic EFTS in postgraduate study in 2004, an increase, over 2003, of 600 EFTS. Postgraduate-level enrolments made up 7.6 percent of all domestic EFTS in 2004.

Since 1994, the number of postgraduate students has grown by 67 percent, while the percentage of the population aged 15 and over participating in postgraduate study rose from 0.5 percent in 1994 to 1.0 percent in 2004. Most of this growth was because of increased rates of participation rather than increases in population.

The largest proportion of students at postgraduate level were studying at honours or postgraduate certificate/diploma level (53 percent of students in 2004), while 37 percent studied at masters level and 13 percent at doctorate level. There were 16,300 students enrolled in honours or postgraduate certificate/diploma study in 2004, up 6.8 percent over 2003, 11,320 students enrolled in masters study, up 3.7 percent, and 3,980 students enrolled in doctorate study, up 4.2 percent.

International student numbers continued to grow in 2004, increasing by 590 (or 13 percent) over 2003. Growth in international student numbers has been strong over the last four years, increasing from 1,600 in 2000 to 4,420 in 2004.

A total of 9,590 domestic students completed 9,840 postgraduate qualifications in 2004. This represented a 2.1 percent increase, over 2003, in the number of students who completed postgraduate qualifications, and an increase of 1.8 percent on the number of students completing in 2000.

An estimated 57 percent of domestic students who started a postgraduate qualification in 2000 had completed after five years. The completion rate for postgraduate study is higher than both sub-degree and bachelors-level qualifications. Around 38 percent of those who started a postgraduate qualification in 2000 had left without completing it five years later, and 5 percent were still studying towards it five years later.

There was a marked difference in five-year completion rates at the three levels of postgraduate study, largely reflecting the duration of the qualifications at each level. An estimated 28 percent of domestic students who started a doctorate qualification in 2000 had completed it after five years, compared with 51 percent for masters students and 58 percent for honours and postgraduate certificate/diploma students. However, five-year retention rates for doctorate students are similar to those of masters, and honours and postgraduate certificate/diploma students, indicating that doctorate students take longer to complete their qualification. Long-term completion rate estimates confirm that eventually doctorate students complete at a similar rate to other postgraduate levels.

First-year attrition was low (8 percent) for domestic students starting a doctorate qualification in 2003. This compares with 26 percent for masters students, and 33 percent for honours and postgraduate certificate/diploma students in 2003.

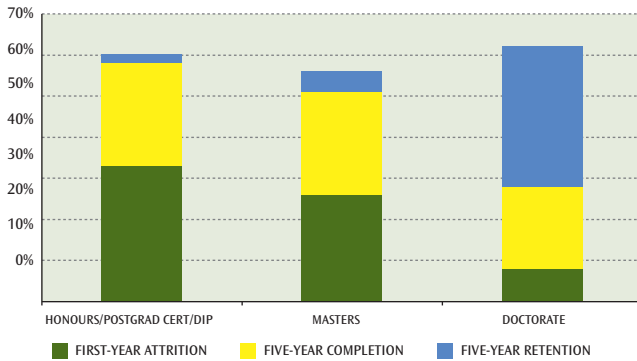
FIGURE 11.1: PARTICIPATION IN POSTGRADUATE-LEVEL STUDY 1994-2004





Learners in tertiary education

FIGURE 11.2: FIRST-YEAR ATTRITION, FIVE-YEAR COMPLETION, AND FIVE-YEAR RETENTION RATES IN POSTGRADUATE STUDY BY QUALIFICATION LEVEL 2004



On average, a student who started doctorate study in 1998 took 3.9 EFTS years to complete, but, unlike other levels of study, more of those who left without completing persisted beyond their first year. In fact, half of those leaving did so after two equivalent full-time years of doctoral study.¹ In general, students at the postgraduate level are more likely to persist longer than undergraduate students before withdrawing.

Of those students completing a postgraduate qualification in 2003, 32 percent went on to further study at either the same or a lower level in 2004. Of those completing a postgraduate qualification in 2000, 41 percent went on to further study sometime between 2001 and 2004.

Of those domestic students who completed a bachelors-level qualification in 2003, 15 percent went on to postgraduate study in 2004. This rate has remained relatively unchanged over the last five years. Of those domestic students who completed a bachelors-level qualification in 1999, 23 percent went on to postgraduate study sometime between 2000 and 2004. These progression rates were higher for students aged 18 to 24 years than any other age group.

Of domestic students completing an honours or postgraduate certificate/diploma qualification in 2003, 17 percent went on to masters or doctorate study in 2004, and of those students completing a masters qualification in 2003, 5.8 percent went on to doctorate study in 2004.

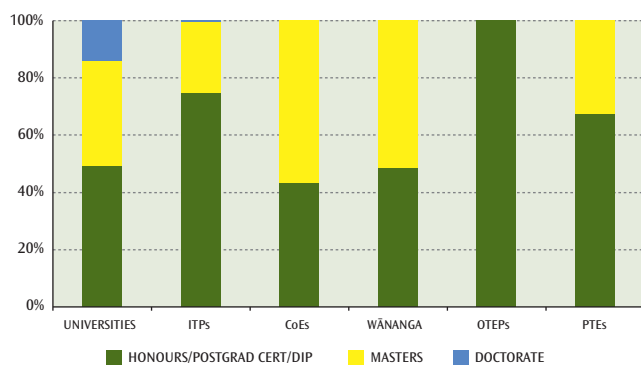
SUB-SECTOR

Universities continue to be the largest type of tertiary education organisation (TEO) in terms of the number of domestic students enrolled in postgraduate study, with 89 percent of all domestic postgraduate students in 2004, compared with 7.2 percent for institutes of technology and polytechnics (ITPs), 1.7 percent for colleges of education (CoEs), 1.6 percent for other tertiary education providers (OTEPs), 1.5 percent for private training establishments (PTEs), and 0.6 percent for wānanga. The higher the level of postgraduate study, the more likely it is to be done at a university. During 2004, almost 100 percent of doctorate study was done at universities.

These trends are similar when the number of domestic students is converted to EFTS. During 2004, the number of university postgraduate enrolments totalled 16,780 EFTS (91 percent of all domestic postgraduate EFTS), an increase of 290 EFTS (1.8 percent) over 2003.

ITPs attract a growing proportion of postgraduate students, with the number of domestic students increasing by 1,930 (or 640 percent) in the six years since 1999 to reach 2,240 during 2004. The majority (75 percent) of postgraduate students at ITPs were studying at postgraduate certificate/diploma level, while a further 25 percent were studying at masters level and the remaining 0.4 percent were studying at doctorate level.

FIGURE 11.3: DISTRIBUTION OF DOMESTIC POSTGRADUATE STUDENTS BY SUB-SECTOR AND QUALIFICATION LEVEL 2004



In 2004, 26 percent of students who graduated from university achieved a postgraduate qualification. By contrast, other parts of the sector were more focused on lower-level qualifications.

¹ Many doctoral students extend their study over a long period, greater than the six-year window analysed here. It is likely that a proportion of those who have left after one or two full-time years of study may return to complete in the future.

The five-year completion rate for postgraduate students at universities in 2004 was 56 percent, compared with 30 percent for students at ITPs. Five-year retention rates for postgraduate students at university in 2004 were 60 percent, compared with 37 percent for ITPs. The five-year rates were higher at universities than at ITPs across all three postgraduate qualification levels, although rates for ITPs have been variable over the last five years.

The first-year attrition rate for domestic postgraduate students at ITPs in 2003 was 39 percent, compared with 29 percent for students at universities. First-year attrition rates have remained relatively unchanged at universities over the last five years. However, first-year attrition rates for ITPs have been variable.

Of all domestic students completing a postgraduate qualification at a university in 2003, 34 percent went on to further study at either the same or a lower level in 2004. This compares with 38 percent for ITPs. Students studying at honours and postgraduate certificate/diploma level are more likely to progress to study at a higher level from a university than any other sector.

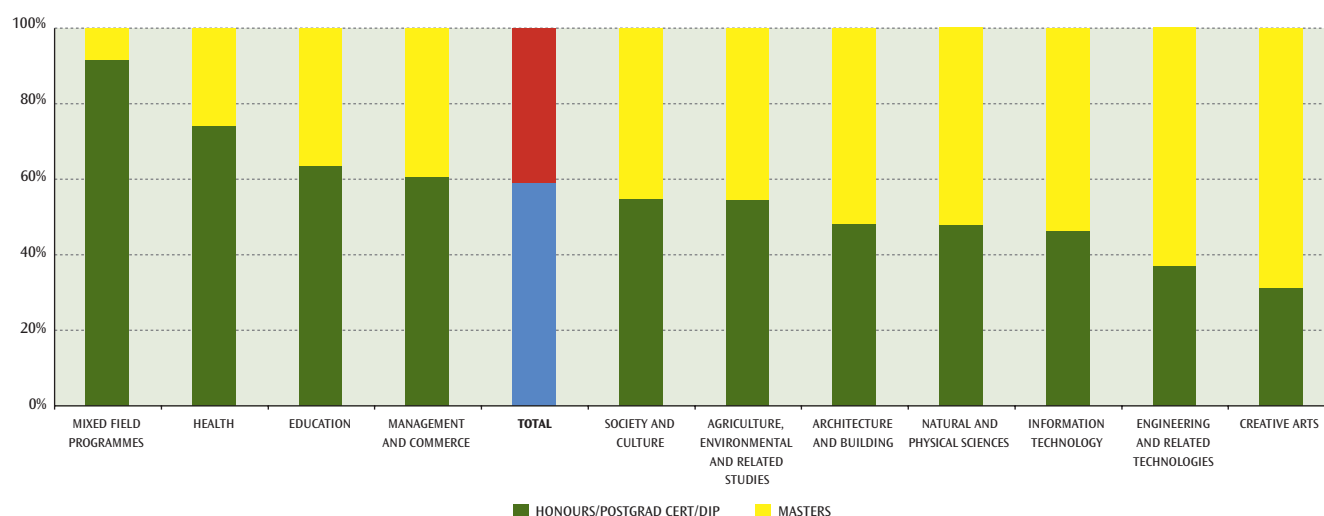
FIELD OF STUDY

Society and culture-related, and management and commerce-related fields of study were the most popular at postgraduate level in 2004. The society and culture field of study had around 6,900 students (or 22 percent of all domestic postgraduate students in 2004), while the management and commerce field of study had around 6,880 postgraduate students (or 22 percent). 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.

Enrolments in the health field of study increased by 1,190 (or 55 percent) from 2001 to 2004. This field now makes up more than 16 percent of all domestic students studying at postgraduate level. Other popular broad fields of study were mixed field programmes (13 percent of domestic students in 2004), natural and physical sciences (10 percent), and education (8.3 percent).

The most popular fields of study at honours or postgraduate certificate/diploma level were management and commerce (4,280 domestic students), health (3,810 students), society and culture (3,770 students), and education (1,600 students). The most popular fields of study at masters level were society and culture (3,090 domestic students), management and commerce (2,780 students), natural and physical sciences (1,590 students), and health (1,330 students).

FIGURE 11.4: DISTRIBUTION OF DOMESTIC POSTGRADUATE STUDENTS BY FIELD OF STUDY AND QUALIFICATION LEVEL 2004





Learners in tertiary education

ITPs were popular for study in health (with 72 percent of students in 2004), and management and commerce (11 percent). Study at postgraduate level in ITPs made up 32 percent of all postgraduate study in information technology.

The most popular fields of study for wānanga students, at postgraduate level, were society and culture (with 60 percent of students in 2004), management and commerce (26 percent), and education (14 percent).

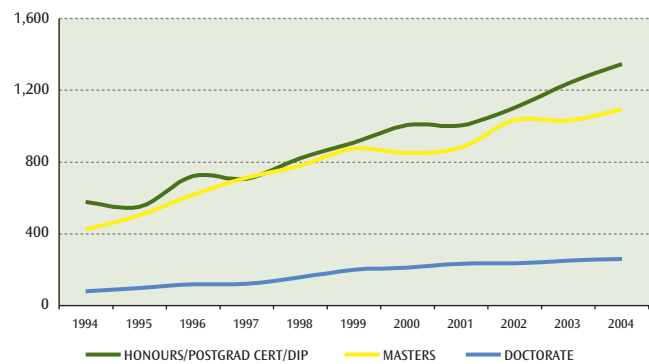
ETHNIC GROUP

European student numbers have grown at a slower rate than other ethnic groups since 1994. As a consequence, 74 percent of postgraduate students were of European ethnic group in 2004, down from 83 percent in 1994, despite the number of European students having increased by 6,890 since 1994. The share of all other ethnic groups has increased over this period.

Māori and Pasifika are under-represented in postgraduate study. Of all postgraduate students, 8.8 percent are Māori and 2.9 percent are Pasifika.² Māori students enrolled at postgraduate level make up 2.8 percent of all Māori students in tertiary education. This rate is similar for Pasifika students, while European students enrolled at postgraduate level make up 7.5 percent of all European students in tertiary education. While Māori and Pasifika are under-represented at postgraduate level, their share has been increasing every year.

There were 2,640 Māori postgraduate students in 2004, up 150 percent on 1994, compared with 67 percent for all postgraduate domestic students. When adjusted for age differences, 0.6 percent of Māori aged 15 and over participated in postgraduate study. Pasifika students were the fastest-growing ethnic group in postgraduate study in the six years between 1999 and 2004. There were 880 Pasifika domestic students in 2004, up 6.3 percent from 2003. When adjusted for age differences, Pasifika people participated at a lower rate than other groups (0.4 percent, compared with 1.0 percent for all groups).

FIGURE 11.5: NUMBER OF MĀORI DOMESTIC POSTGRADUATE STUDENTS BY QUALIFICATION LEVEL 1994-2004



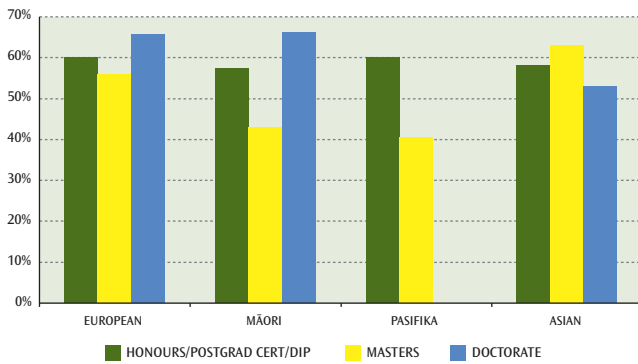
The Asian ethnic group has had the strongest growth over the 11 years since 1994, although this growth has slowed slightly since 1999. When adjusted for age differences, 1.2 percent of Asian New Zealanders aged 15 and over participated in postgraduate study in 2004, the highest rate of any ethnic group. Asian students are more likely to be studying at doctorate level than other ethnic groups.

Of domestic students, Asian students have the highest overall five-year completion rates of all ethnic groups (60 percent in 2004). Completion rates for Māori and Pasifika students have been improving over the last five years; however, their rates are still below those of Asian and European students.

Across all ethnic groups, postgraduate students have higher five-year completion and five-year retention rates than sub-degree or bachelors-level students. First-year attrition rates are lower for European and Asian students and higher for Māori and Pasifika students. First-year attrition rates have improved across all ethnic groups over 2003 rates.

² Percentages for the whole tertiary sector are European 65 percent, Māori 21 percent, Pasifika 6.4 percent, Asian 12 percent.

FIGURE 11.6: FIVE-YEAR RETENTION RATES FOR DOMESTIC POSTGRADUATE STUDENTS BY ETHNIC GROUP AND QUALIFICATION LEVEL 2004



Māori students had the highest rates of progression to further study: 41 percent of those completing a postgraduate qualification in 2003 continued studying, at either the same or a lower level, in 2004. Of domestic Asian students completing an honours and postgraduate certificate/diploma in 2003, 26 percent continued studying in 2004 towards a masters or doctorate qualification. Of Pasifika students completing a masters qualification in 2003, 12 percent continued studying towards a doctorate qualification in 2004, the highest rate of all ethnic groups.

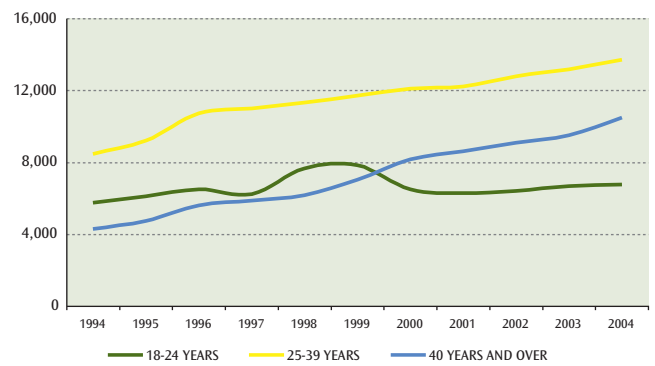
AGE

Not surprisingly, postgraduate-level domestic students have an older age profile than that of bachelors-level students. Over two in five postgraduate students, 44 percent, were aged 25 to 39 years during 2004, down slightly from 46 percent in 1994. One in three (34 percent) were aged 40 years and over, while one in five (22 percent) were aged 18 to 24 years. Since 1994, there has been a greater proportion of postgraduate students aged 40 years and over, while the proportion of students aged 18 to 24 years has dropped. During 1994, 23 percent of postgraduate students were aged 40 years and over, while 31 percent were aged 18 to 24 years. During 2004, this had turned around so that 34 percent of postgraduate students were aged 40 years and over, and 22 percent were aged 18 to 24 years.

During 2004, there were about 10,500 postgraduate domestic students aged 40 years and over. Growth in student numbers in this age group since 1994 has been 145 percent, which is twice

that of any other age group. While some of this growth has been due to population increases in this age group, there have also been noticeable increases in rates of participation. In the six years since 1999, there has been a decrease in the number of students aged 18 to 24 years studying at the postgraduate level.

FIGURE 11.7: NUMBER OF DOMESTIC POSTGRADUATE STUDENTS BY AGE GROUP 1994-2004



The participation rate in postgraduate study for domestic students aged 18 to 24 years was 1.7 percent, the highest of any age group. However, students in this age group are outnumbered by students in both the 25 to 39 years and the 40 years and over age groups. The participation rate for students aged 25 to 39 years during 2004 was 1.6 percent, compared with 0.6 percent for students aged 40 years and over.

Domestic students studying at doctorate level were older than those studying at both honours and postgraduate certificate/diploma and masters levels. In 2004, the average age of a doctorate student was 37.1, compared with 35.8 years for a masters student, and 33.8 years for an honours and postgraduate certificate/diploma student. Since 1994, the average age of students at masters and doctorate levels has been increasing more than that at honours or postgraduate certificate/diploma level. The average age has increased by about four years for students at masters and doctorate levels between 1994 and 2004, compared with just over two years for honours and postgraduate certificate/diploma students.

Māori students studying at postgraduate level are more likely to be aged 40 years and over than other ethnic groups. Around 41 percent of Māori students were aged 40 years and over during 2004, compared with the overall average of 34 percent. Domestic

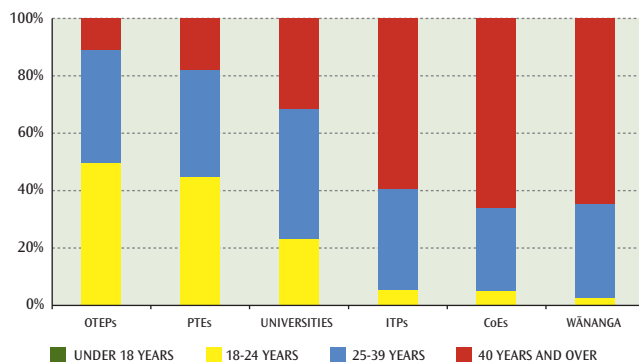


Learners in tertiary education

Asian students were more likely to be aged 18 to 24 years than other ethnic groups.

Postgraduate domestic students at ITPs, CoEs and wānanga have very different age structures from university students. While students aged 18 to 24 years make up 23 percent of university postgraduate students, at ITPs, CoEs and wānanga students aged 18 to 24 years make up 5.4 percent, 5.1 percent, and 2.6 percent respectively.

FIGURE 11.8: DISTRIBUTION OF DOMESTIC POSTGRADUATE STUDENTS BY SUB-SECTOR AND AGE GROUP 2004



Domestic postgraduate students aged 18 to 24 years had higher completion and retention rates than other age groups. There was a similar trend in sub-degree and bachelors-level study, partly because older students were more likely to be studying part-time and combining study with work or family commitments. First-year attrition is higher for students aged 25 years and over at postgraduate level. The first-year attrition rate in 2004 was 33 percent for students aged 40 years and over, and 27 percent for students aged 25 to 39 years, compared with 21 percent for students aged 18 to 24 years.

GENDER

The number of women enrolled at a postgraduate level has grown at a faster rate than that of men. During 1994, the numbers of women and men in postgraduate study were similar, while in 2004 there were 1.5 times more women than men.³ The gender difference is more pronounced among postgraduate students than at either sub-degree or bachelors-level study. The gender share is more similar at doctorate level, where 48 percent of students are men.

There were 18,870 women studying at postgraduate level in 2004, up 9,640 (105 percent) over 1994. The number of men has decreased over the last six years, down 6.2 percent in 2004 from 12,900 in 1999, largely because of a decrease in the number of men studying at honours and postgraduate certificate/diploma level over this period. Growth in the numbers of women has been three times that of men since 1994. In 2004, 1.2 percent of women aged 15 years and over participated in postgraduate study, compared with 0.8 percent of men. Participation rates for women in postgraduate study have doubled since 1994.

Growth in the numbers of women studying at postgraduate level has been stronger than the numbers of men across all three qualification levels, although there has been a more significant difference in growth rates between women and men at the honours and postgraduate certificate/diploma level.

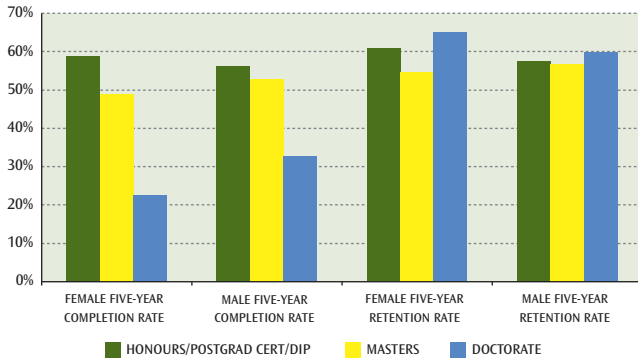
The share of women was higher than the overall postgraduate share in ITPs and CoEs, with 81 percent and 82 percent respectively. This compared with 59 percent of university and wānanga students, 65 percent of OTEP students, and 58 percent of PTE students who were women.

Māori women make up 67 percent of all Māori postgraduate students and Pasifika women make up 64 percent of all Pasifika students. Asian men make up 48 percent of all Asian domestic students and participate in postgraduate study at a similar rate to Asian women. The largest gender difference is in the 40 and over age group, where there are almost twice as many women in postgraduate study as there are men, and women's participation rate is twice as high.

Women are more likely to complete an honours or postgraduate certificate/diploma qualification than men. The difference between women and men in completion rates is less pronounced at the postgraduate level than at sub-degree and bachelors level. However, at masters and doctorate level, the five-year completion rate is higher for men than it is for women, and at doctorate level, after five years, men completed at a rate 10 percentage points higher than women. However, five-year retention rates at doctorate level were higher for women, and long-term completion rates estimates indicate that while men complete sooner, eventually women and men complete doctorate qualifications at a similar rate. At doctorate level, 43 percent of women 2000 starters were still studying in 2004, compared with 27 percent of men.

³ This relates to domestic students only.

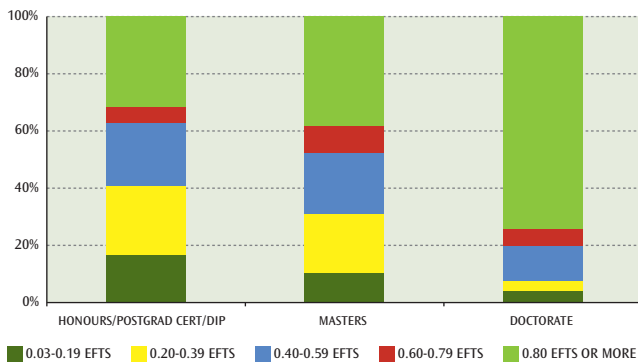
FIGURE 11.9: FIVE-YEAR RETENTION AND COMPLETION RATES FOR DOMESTIC POSTGRADUATE STUDENTS BY QUALIFICATION LEVEL AND GENDER 2004



STUDY LOAD

There are significant differences in the study load of students at the three different levels of postgraduate study. In 2004, 74 percent of doctorate students were enrolled with an EFTS value of 0.8 or more, compared with 38 percent for masters students, and 32 percent for honours and postgraduate certificate/diploma students. While the distribution of doctorate students by study load remained relatively constant over the last six years, the number of students enrolled with an EFTS value of less than 0.4 has increased significantly at both honours and postgraduate certificate/diploma and masters levels.

FIGURE 11.10: DISTRIBUTION OF DOMESTIC POSTGRADUATE STUDENTS BY QUALIFICATION LEVEL AND STUDY LOAD 2004



HIGHEST SCHOOL QUALIFICATION

There are not too many differences in the distributions of highest school qualification of postgraduate students by level of study. The proportion of postgraduate students who have year 13 qualifications is around 45 percent, compared with 48 percent for bachelors-level students and around 12 percent for sub-degree students. Domestic students with an overseas school qualification are more likely to be studying at doctorate level, while students with NCEA level 2 or equivalent are more likely to be studying at masters level.

There has been strong growth in the number of students with overseas school qualifications across all three postgraduate levels, reflecting significant immigration over that period. Since 1994 domestic students with overseas school qualifications have increased by 310 percent at honours and postgraduate certificate/diploma level, 250 percent at masters level, and 240 percent at doctorate level. While students with NCEA level 3 qualifications or equivalent still represent the highest proportion of students studying at all three postgraduate levels in 2004, this proportion has decreased by 9.5 percentage points at honours and postgraduate certificate/diploma level, 20 percentage points at masters level, and 13 percentage points at doctorate level.

STUDENTS WITH DISABILITIES

During 2004, the number of students with disabilities represented 2.9 percent of students at honours and postgraduate certificate/diploma level, 2.8 percent of students at masters level, and 2.4 percent at doctorate level. This compares with about 4 percent at bachelors level and about 6 percent at sub-degree level. These proportions have remained relatively unchanged since information on disability was first collected in 1998. Students with disabilities are less likely to study at postgraduate level than other qualification levels.

Across all postgraduate qualification levels, students with disabilities are more likely to be aged 40 years and over than any other age group, and more likely to be Māori than any other ethnic group.



Learners in tertiary education

MODE OF STUDY

There is a higher proportion of domestic students studying extramurally at honours or postgraduate certificate/diploma level, than at masters or doctorate level. During 2004, 3,800 honours and postgraduate certificate/diploma students (23 percent) studied extramurally, while in terms of EFTS extramural students make up 16 percent of all honours and postgraduate certificate/diploma students. Extramural students made up 11 percent of masters students and 1.0 percent of doctorate students. In the six-year period since 1999, there has been growth in the number of extramural domestic students at all three levels of postgraduate study.

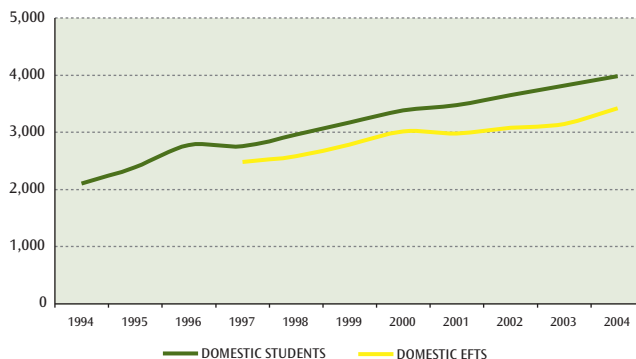
Around 63 percent of domestic students enrolled at postgraduate certificate/diploma level at PTEs studied extramurally in 2004, and 40 percent of students enrolled in OTEPs studied extramurally. Across all qualification levels, students studying extramurally are more likely to be aged 40 years and over than any other age group, and more likely to have a study load of between 0.2 and 0.4 EFTS.

DOCTORATES

There were 3,980 domestic students enrolled in doctorate⁴ study in 2004, an increase of 4.2 percent over 2003. Annual growth in doctorate students over the last three years has remained relatively constant. Doctorate students made up 14 percent of all postgraduate students. Since 1994, the number of doctorate students grew by 89 percent, more than other levels of postgraduate study. Almost 100 percent of doctorate study was done at universities in 2004. There were 10 doctorate students (0.3 percent) at ITPs in 2004.

Domestic students enrolled in doctorate study in 2004 made up 3,420 EFTS, up by 280 EFTS, or 8.9 percent over 2003. During 2004, 74 percent of doctorate students were enrolled with an EFTS value of 0.8 or more, the highest of any qualification level. Doctorate students are more likely to be full-time than any other students, although the proportion in full-time, full-year study at the doctorate level has dropped since 1998.

FIGURE 11.11: NUMBER OF DOMESTIC DOCTORATE STUDENTS AND EFTS 1994-2004



During 2004, there were 580 international students studying at doctorate level. International student numbers continued to grow in 2004, increasing by 120 (or 25 percent) over 2003.

A total of 550 domestic students completed doctorate qualifications in 2004. This represented a 5.4 percent increase in the number of students who completed doctorate qualifications over 2003, and an increase of 27 percent on the number of students completing in 2000. An estimated 28 percent of domestic students who started a doctorate qualification in 2000 had completed after five years. Around 38 percent of those who started in 2000 had left without their qualification five years later, and 35 percent were still studying towards their doctorate five years later.

While Pasifika students remain under-represented at doctorate level, their numbers have increased by 100 percent in the six years since 1999. Around 0.4 percent of the Pasifika population aged 15 years and over participate at doctorate level, compared with 1.0 percent overall. Māori are also under-represented at doctorate level with 6.5 percent of the total domestic students. European students make up 71 percent of doctorate students, while domestic Asian students make up the remaining 16 percent.

Doctorate students are more likely to be aged 25 to 39 years than any other age group, with 52 percent of domestic doctorate students in this age group during 2004. Students aged 40 years and over are making up a growing proportion of doctorate students, with 38 percent of domestic students aged 40 years and over in 2004, up from 24 percent in 1994. Students aged 18 to 24 years make up the remaining 10 percent of students studying at doctorate level.

⁴ This includes both Higher Doctorates and PhDs. PhDs are discussed further in Chapter 14.

INTERNATIONAL STUDENTS IN TERTIARY EDUCATION IN NEW ZEALAND

International education – the context

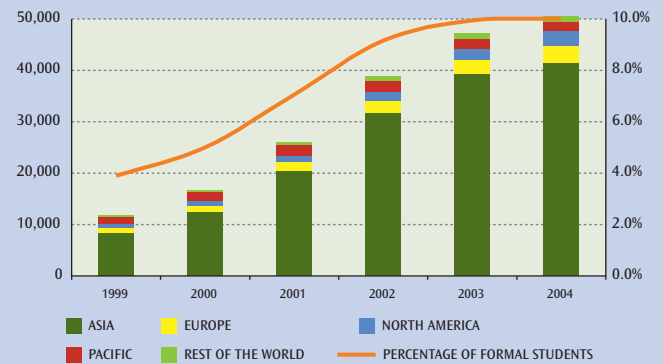
International education at the tertiary level in New Zealand has grown very substantially over the last decade. In the five years from 1994 to 1999, international student numbers doubled. Between 1999 and 2004, the numbers increased from 11,940 to 50,460. In 1999, international students made up 3.9 percent of all formal students. By 2004, international students were 10 percent of all students. The enrolment of international students – or export education – has become a significant, income-earning industry. International students contributed \$432 million in fees to the revenue of the public tertiary education institutions (TEIs) in 2004, or 13 percent of their total revenue. Export education is estimated to be worth \$2 billion annually, making export education the country's third largest services export earner.

The enrolment of international students is not subsidised by the New Zealand government.¹ International students pay fees to cover the full cost of their tuition. Although domestic tuition fees were frozen between 2001 and 2003 through the government's fee stabilisation policy, no such constraint applied to international fees. Without this restriction, international student fees have increased significantly on an equivalent full-time student (EFTS) basis. Between 2001 and 2004, the average international tuition fee per EFTS in TEIs increased by 24 percent, from \$11,500 to \$14,300 (including GST).

Where do international students come from?

The majority of international students in New Zealand are from Asia (82 percent in 2004). The next largest groups are from Europe (6.5 percent), North America (5.5 percent) and the Pacific (3.4 percent). A notable trend from 2003 to 2004 has been a slowdown in growth in the number of students from Asia and increasing numbers from Europe and North America. The number of students from the Pacific has been declining since 2001.

FIGURE 1: INTERNATIONAL STUDENTS IN FORMAL TERTIARY EDUCATION BY REGION OF ORIGIN AND AS A PERCENTAGE OF ALL FORMAL STUDENTS 1999-2004



The largest number of students continues to be from China (59 percent of international students in 2004). However, international student numbers from China only increased by 10 percent from 2003 to 2004, following on from very large increases in the previous years. The second largest number of international students in 2004 was from the United States. Student numbers from the United States increased by 28 percent from 2003 to 2004. The next largest student numbers come from Japan, South Korea and India. For each of these three countries, international student numbers decreased from 2003 to 2004 by between 2 and 6 percent.

Enrolments by international students

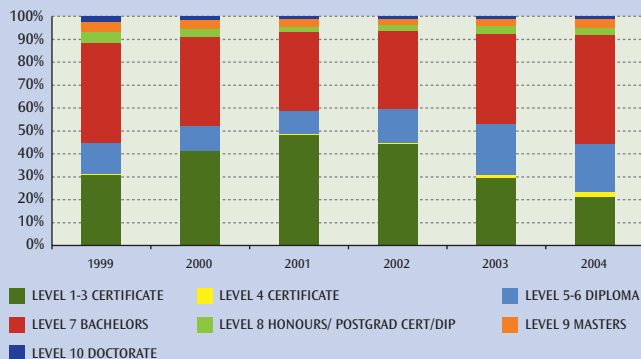
Over the last three years, there has been a shift among international students from studying at levels 1 to 3 of the register to higher-level qualifications. During 2001, 48 percent of international students were enrolled in level 1 to 3 certificates; in 2004, only 21 percent of international students were studying at these levels. Over the same period, the proportion of students studying at diploma or bachelors level has increased from 10 to 21 percent and from 34 to 48 percent respectively. While international student numbers have increased across all qualification levels since 1999, bachelors-level students made up nearly 50 percent of the total growth.

¹ Although a small subsidy is provided to a small number of international students who are fully engaged in research.



Learners in tertiary education

FIGURE 2: DISTRIBUTION OF INTERNATIONAL STUDENTS BY QUALIFICATION LEVEL 1999-2004



Over 80 percent of international students were studying at universities and institutes of technology and polytechnics (ITPs) during 2004, while a further 19 percent studied at private training establishments (PTEs). The number of international students studying at PTEs decreased by 5 percent over 2003 numbers.

The most popular field of study for international students in 2004 was management and commerce, with 49 percent of international students studying in this field. This was the case across all levels of study. Other popular fields of study were mixed field programmes (17 percent), and society and culture (15 percent). International students were more likely to be studying natural and physical sciences at postgraduate level than other qualification levels.

During 2004, international students were more likely to be aged 18 to 24 and men. Around three in four international students were aged 18 to 24, compared with one in three domestic students. Since 1999, 76 percent of the total growth in international students has been in students aged 18 to 24 years. By contrast, just 2 percent of international students were aged 40 years and over, compared with 29 percent of domestic students. Men made up 51 percent of international students, compared with 43 percent of domestic students.

Completion of qualifications by international students

Approximately 13,100 international students completed 13,700 qualifications in 2004. This was 10 percent of all students who completed a qualification in 2004. International students also made up 10 percent of all students enrolled in 2004.

About 40 percent of qualifications completed by international students were at bachelors level or above, compared with about 25 percent for domestic students. This difference largely reflects the higher percentage of international students enrolled at bachelors level and above (60 percent, compared with 35 percent for domestic students).

International students generally complete qualifications at a higher rate, and in a shorter time than domestic students. This gap reduces (but still remains) over time, reflecting the fact that domestic students are more likely to be studying part-time than international students and so take longer to complete. The difference is most pronounced at postgraduate level, where international student completion rates are between 5 and 10 percent higher than those of domestic students.

Figure 3 compares five-year retention and completion rates at different levels for domestic and international students. While completion rates are higher for international students for most qualifications, this is not the case for undergraduate-level diplomas, or bachelors-level diplomas or certificates. This may, in part, reflect the fact that many international students enrolling in qualifications at this level are doing so only to complete particular courses that may be required as part of a different qualification, such as a bachelors degree.

The effect is significant at bachelors level, where six-year completion rates for degree qualifications at bachelors level are 57 percent for international students, compared with 48 percent for domestic students. However, when bachelors-level certificates and diplomas are also included, the completion rate for domestic students is higher, at 42 percent, compared with 36 percent for international students.

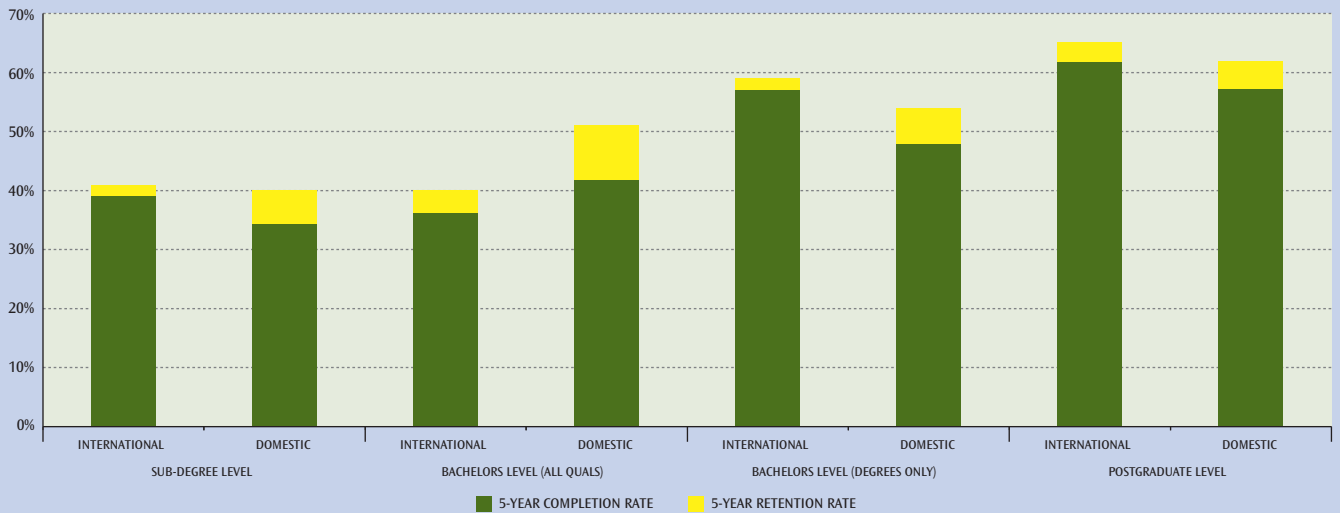
International students are more likely to be studying full-time and intramurally than their domestic counterparts, both of which are factors associated with higher rates of completion. However, a recent Ministry of Education study² showed that even after adjusting for these study-related and other demographic differences, international students were still 1.3 times more likely than a domestic student to complete a bachelors degree after six years.

This report goes on to say: '...International students are subject to a very different set of influences than their domestic counterparts. Principal among these is that most pay upfront the full cost of their tuition, which on average in 1998 meant

² Scott, David, Warren Smart (2005), *What factors make a difference to getting a degree in New Zealand?* Ministry of Education, Wellington. www.minedu.govt.nz/goto/tertiaryanalysis.

over \$8,000 more than their domestic counterparts (who were also able to borrow from the Student Loan Scheme). Having undertaken this financial commitment, which may incur some real or moral obligation to family, one might assume that there is a higher degree of motivation and commitment to succeed...'

FIGURE 3: FIVE-YEAR RETENTION AND COMPLETION RATES BY LEVEL FOR DOMESTIC AND INTERNATIONAL STUDENTS 2000-2004



Note: This graph records the situation in 2004 of those who started qualifications in 2000.



Learners in tertiary education