Chapter 9

Learners in levels 4 to 6 of the New Zealand Register of Quality Assured Qualifications

INTRODUCTION

Qualifications at levels 4 to 6 of the New Zealand Register of Quality Assured Qualifications are mostly designed to help train the country's technicians, tradespersons, information technology professionals, business administrators, artists, and tourism and hospitality professionals. Tertiary education at these levels makes a major contribution to the development of New Zealand's human and social capital.

Qualifications at levels 4 to 6 provide:

- continuing pathways for learners progressing from lower levels (such as school leavers), and
- entry points into the system for those seeking to
  - gain vocation-ready qualifications
  - change careers, or
  - obtain prerequisite qualifications for higher-level programmes such as bachelors degrees.

This chapter looks at some of the trends of New Zealand's tertiary education system at these levels both at tertiary education providers (TEPs) and also in workplace learning which contributes significantly to provision at these levels.

CONTRIBUTION TO NEW ZEALAND'S HUMAN AND SOCIAL CAPITAL

The majority of the courses and qualifications at levels 4 to 6 are vocationally specialised, have close links with industry and are of shorter duration than those at higher levels such as bachelors degrees.

Learners and trainees[1] can choose from a variety of vocational qualifications offered at levels 4 to 6. These cater for the needs of New Zealand's primary and secondary industries, infrastructure and business service industries, and community service industries, as well as responding to the needs of newer industries (such as viticulture and multimedia).

The more buoyant labour market over recent years has led to increasing returns[2] for sub-degree qualifications. These better returns, plus the government's Skill New Zealand and Industry Training Strategies, may have steered people towards vocational qualifications. The number of students gaining qualifications at level 4 grew by 590 percent over the last five years, compared with 23 percent at bachelors degree level.

Workplace learning contributes to upskilling New Zealand's workforce and to the enhancement of business performance. Since 2000, the numbers undertaking industry training have increased at a faster rate than the tertiary system as a whole. In 2004, nearly 140,000 New Zealanders were involved in workplace learning, an increase of over 70 percent in the last five years. One of the key goals of workplace learning is to improve access to training and nationally-recognised achievement for those most disadvantaged in terms of educational qualifications.[3]

Tertiary education at these levels also contributes to New Zealand's social development, with about 30 percent of its qualifications focused on the arts, society and culture in fields such as: fashion, screen acting, creative design, religion, māoritanga, youth and community,[4] but there are relatively few foundation education qualifications at these levels.

CHARACTERISTICS OF QUALIFICATIONS AT LEVELS 4 TO 6

All qualifications issued at level 4 are certificates while level 5 and 6 qualifications comprise both certificates (of a more advanced or specialised nature) and diplomas. Diplomas prepare learners for self-directed application of skills across a broad range of educational and vocational areas in technical, professional, and/or management roles. The modular nature of many qualifications at these levels often means that prior qualifications or experience can be built upon at various levels over time. For example, the following qualifications all build on each other:

Level 4: National Certificate in Electrical Engineering (Electrician)

Level 5: National Certificate in Electrical Engineering (Advanced trade level)

Level 6: National Diploma in Engineering.

As for all qualifications on the register, it is the complexity of specific skills and knowledge to be acquired that defines their level rather than their duration. The New Zealand Qualifications Authority (NZQA) describes levels 4 to 6 as advanced trades, technical and business qualifications.[5] A key differentiator of level 4 to 6 qualifications from higher levels is that they are mainly of an applied nature, with research skills and abstract concepts usually introduced at level 7 (bachelors degree level).

1 In this chapter the word 'trainee' refers to learners in industry training (including Modern Apprenticeships).

2 Statistics New Zealand (2004), *Household Labour Force Survey* and *New Zealand Income Survey*.

3 Tertiary Education Commission (2005), *Industry Training 2004*, page 6.

4 Taken from *KiwiQuals* website (http://www.kiwiquals.govt.nz/index.do), New Zealand Qualifications Authority.

5 NZQA website (http://www.nzqa.govt.nz/framework/about.html), New Zealand Qualifications Authority, 29 September 2005.

Level 4 sees the introduction of theoretical concepts and analytical skills that are further developed in levels 5 and 6. Level 6 is defined by NZQA as requiring a command of wide-ranging, highly specialised technical or scholastic skills that employ specialised knowledge with depth in more than one area.[6]

There are two main modes of learning and training at levels 4 to 6. 'Learners' are enrolled in provider-based learning at a tertiary education provider and 'trainees' in workplace learning programmes learn on the job while earning income. Some trainees learn both in the workplace and in the classroom. There are two types of workplace learning programmes at levels 4 to 6 of the register: Industry Training and Modern Apprenticeships. In addition, as discussed in Chapter 8, there are some workplace training schemes at lower levels – for instance, Gateway (for secondary school students) and Workplace Literacy.

While industry training is now undertaken at higher levels of the register, level 4 tends to be the highest level at which trainees study, with less than 2 percent of training occurring at higher levels in 2004. Most trainees complete unit standards that earn credits towards National Certificates or National Diplomas that, for apprenticeships, have replaced the trade and advance trade certificates. Industry trainees may only complete a few National Qualification Framework (NQF) unit standards; trainees (and their employers) may not aim for completion of an entire qualification.

DIVERSITY AND SIZE OF LEVEL 4 TO 6 TERTIARY EDUCATION PROVISION

In recent times, one of the most noticeable trends in tertiary provision by level has been the expansion in the provision of level 4 certificates and the uptake of it by those less traditional student groups. While many qualifications at levels 4 to 6 have been developed for new or growing industries, TEPs have been successfully active in engaging non-traditional student target groups, such as mature Māori students, or those with low or no qualifications, into their programmes.

This upsurge in tertiary education provision and enrolments at level 4 and also to a lesser extent in levels 5 and 6 over the last five years has seen the share of mid-register tertiary education provision increase significantly. In 2004, over a quarter of all formal students were engaged in level 4, 5 or 6 programmes of learning. The number of learners in TEPs at levels 4, 5 and 6 have increased by nearly 85 percent over the last five years to 111,900. In 2004, they represented 17 percent of all formal students (670,000). The number of trainees in workplace learning at levels 4, 5 or 6 has increased by 110 percent to 66,087 in 2004 to represent 10 percent of all formal students.

In particular, the last five years have seen the number of students engaged in level 4 provider-based learning or workplace learning increase by 451 and 100 percent respectively.

TABLE 9.1: FORMAL STUDENTS IN TERTIARY EDUCATION BY REGISTER LEVEL 2004

Formal students	Levels 4-6	All levels
Provider-based learning		
Domestic	98,308	454,953
International	13,583	50,455
Total	**111,891**	**505,408**
Workplace learning		
Industry Training (including Modern Apprenticeships)	66,087	139,597
Modern Apprenticeships (as at 31 December 2004)	6,520	7,175
Total	**66,087**	**139,597**
Total formal students	**172,500**	**670,000**

Notes:

1 Totals are the estimated number of unique formal students.

2 'Total formal students' includes those formal students enrolled in all other types of programmes of 0.03 EFTS or more such as Training Opportunities, Youth Training, Gateway, etc.

Source: Ministry of Education and Tertiary Education Commission

The diversity of qualifications that learners and trainees can study for at levels 4 to 6 has increased over recent years. There has been significant uptake in the fields of community and social services, entrepreneurship, security, viticulture, multimedia, hospitality, seafood processing, and community and social services.

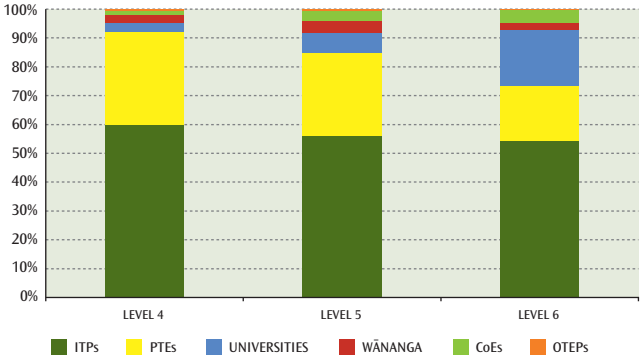
Using Statistics New Zealand information, the diversity and extensiveness of industry training can be seen. It is estimated that industry training organisations (ITOs) cover the training needs of two thirds (66 percent) of employers and over 70 percent of employees. This means that these employers and employees have the opportunity to access industry training in their industry. All primary industries (agriculture, forestry, fishing and mining) and 96 percent of manufacturing and construction industries are covered by the 41 ITOs around the country.[7]

6 NZQA website (http://www.nzqa.govt.nz/framework/levels.html), New Zealand Qualifications Authority, 29 September 2005.

7 Tertiary Education Commission (2005), *Industry Training 2004*, page 7.

There were approximately 2,200 qualifications on offer at levels 4 to 6 in 2004 with 1,014 offered at level 4, 778 at level 5 and 394 at level 6.[8] The majority of these qualifications are offered at institutes of technology and polytechnics (ITPs) and private training establishments (PTEs), which reflects the role of these sub-sectors in the provision of off-job training in workplace learning. In total, ITPs and PTEs offered 92 percent of all level 4 qualifications in 2004, 85 percent of all level 5 qualifications and 73 percent of all level 6 qualifications.

FIGURE 9.1: DISTRIBUTION OF LEVEL 4 TO 6 QUALIFICATIONS BY SUB-SECTOR 2004



Nearly 80 percent of all these qualifications were of no more than one year's duration but, reflecting their increasing complexity, 16 percent of level 5 and 6 qualifications are of one to two years' duration and 5 percent are of two years' duration.[9]

A PROFILE OF PROVIDER-BASED LEARNERS

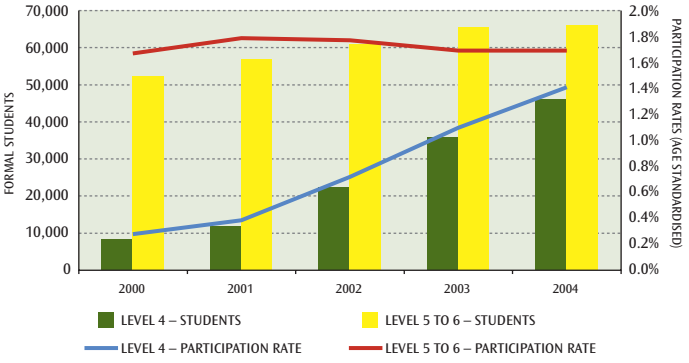
Characteristics of students in level 4 to 6 tertiary education

The significant increase in the number of New Zealanders engaged in provider-based tertiary education has seen greater diversity among those learners over the last five years.

This upsurge in enrolments has seen the proportion of New Zealand's resident population aged 15 years and over participating in provider-based learning increase significantly from 10.5 percent in 2000 to 14.3 percent in 2004.[10] The rise of enrolments in level 4 certificates has seen the participation rate in this level of qualification increase from 0.3 percent in 2000 to 1.4 percent in 2004. The participation rate for levels 5 and 6 in total, like that of all other levels, has remained reasonably constant over the last five years at 1.7 percent in 2004.

The expansion in the numbers of formal students engaged in provider-based tertiary education at level 4 has seen them increase by 451 percent since 2000 to 46,017 in 2004. The number of students in provider-based tertiary education at levels 5 and 6, in total, increased by 39 percent to 65,874. In total, all students at levels 4, 5 and 6 contributed 22 percent of all formal students engaged in provider-based learning.

FIGURE 9.2: FORMAL STUDENTS IN PROVIDER-BASED TERTIARY EDUCATION AT LEVELS 4 TO 6 2000-2004



Note: The participation rates do not include international students.

Figure 9.3 shows that the bulk of the increase in participation in level 4 certificates has occurred mainly as a result of the expansion of the wānanga sector. In 2000, there were only 137 students studying such certificates in wānanga, whereas by 2003 this figure had reached a high of 18,261 before dropping to 15,951 in 2004. The last two years have also seen the ITP sector, the main traditional provider of level 4 certificates, grow its enrolments from around a level of 6,000 students in each of the years 1999 through to 2002 to 18,104 students in 2004. Similarly, the PTE sector and other tertiary education providers (OTEPs) are also increasing their student numbers at level 4 with increases over 2003 of 5,393 (136 percent) and 271 (3,011 percent) in 2004.

By contrast, the number of students in level 5 to 6 programmes has grown at a slower rate but again, of all the sub-sectors, the wānanga and PTEs have increased the fastest over the last five years. A 10 percent drop in students in level 5 programmes at PTEs in 2004 may be a reflection of some PTEs repositioning their provision slightly towards level 4 certificates instead of the longer and more intricate advanced certificates and diplomas, of levels 5 and 6.

8 Based on active qualifications at tertiary education institutions (TEIs), PTEs and other tertiary education providers (OTEPs).

9 Based on active qualifications at TEIs, PTEs and OTEPs.

10 Age-standardised participation rate (refer to technical notes).

FIGURE 9.3: FORMAL STUDENTS ENROLLED IN LEVEL 4 CERTIFICATES BY TYPE OF PROVIDER 1999-2004

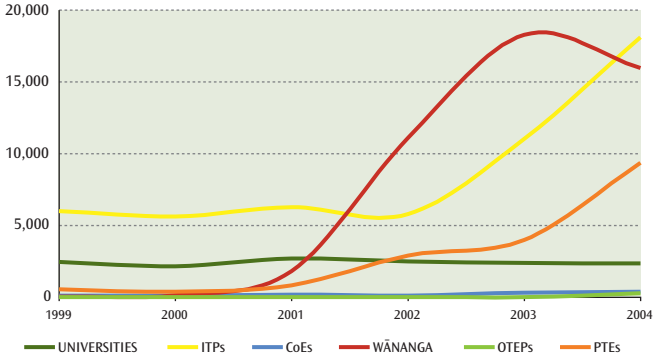
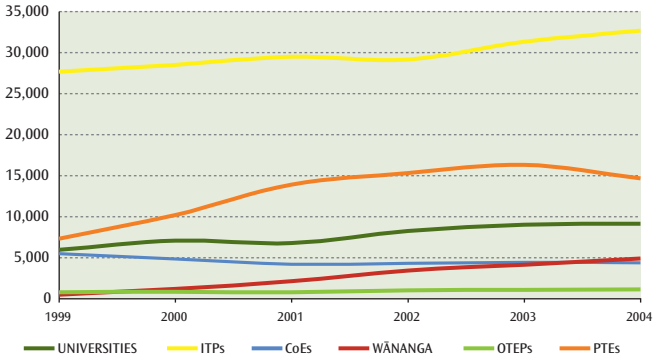


FIGURE 9.4: FORMAL STUDENTS ENROLLED IN LEVEL 5 AND 6 CERTIFICATES AND DIPLOMAS BY TYPE OF PROVIDER 1999-2004



In 2004, the average age of a provider-based learner across all levels was just under 28 years, which is a reflection of the significant increase in the number of older students enrolling at the lower levels of the register. Of all the levels, level 4 has seen the greatest increase in mature students. Those aged 25 years and over in level 4 qualifications have increased nearly sixfold (560 percent) since 2000 with their proportion growing from 58 percent to 71 percent, and of those in 2004, the majority (58 percent) are women. In comparison, the number of students aged over 25 years in levels 5 to 6 grew by only 16 percent. Over a third of students in level 4 study are aged 40 years or older, compared with 29 percent for levels 5 and 6 in total. By contrast the figure for bachelors degrees is 15 percent. Of those students aged over 40 years, Māori have seen the biggest increase in participation at level 4, up 6,221 students since 2000.

The age profile of first-year students in the mid-register levels is a reflection of the fact that, of the school leavers who go directly into tertiary education after leaving school, very few (14 percent) enrol in level 4, 5 or 6 qualifications compared with those who enrol in level 1 to 3 certificates (44 percent) or bachelors degrees (43 percent).

Women dominate the enrolment figures in level 4, 5 and 6 tertiary education and this is also reflected in their participation rates. In 2004, women contributed 56 percent of students at level 4 and 60 percent of all those at levels 5 and 6 in total. Their participation rates were 1.6 percent and 2.0 percent respectively for these levels, compared with 1.2 percent and 1.3 percent respectively for men.

In the older age groups, women comprise slightly higher proportions at level 4 and in levels 5 and 6.

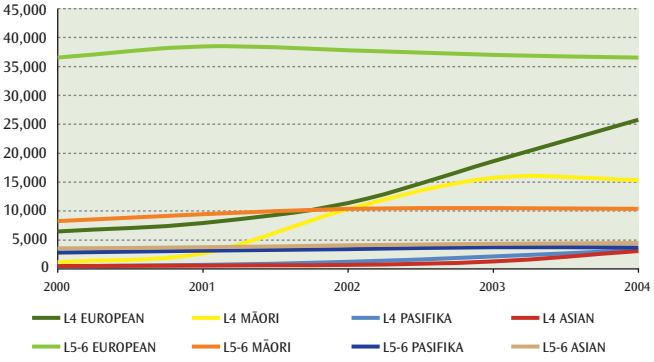
In 2004, women dominated enrolments in level 4, 5 and 6 qualifications at colleges of education (CoEs), comprising 89 percent of all students in level 4 programmes and 83 percent of all students in levels 5 and 6, in total. Also in wānanga, women comprised around two thirds of all students in 2004.

All of the four main ethnic groups are represented in enrolments at levels 4 to 6 and their growth rates reflect the success of tertiary providers at engaging many non-traditional student groups such as mature students and those with low or no qualifications.

The majority (90 percent) of students studying at levels 4 to 6 in 2004 identified as being either European (63 percent) and/or Māori (26 percent). Pasifika student enrolments contribute 7 percent of all students in levels 4 to 6 (compared with their share of the national resident population aged 15 years and older – 6 percent). Asian students contribute slightly less than their share of the national resident population aged 15 years and older (10 percent) by contributing 8 percent of all students studying at these levels.

The largest increases in student numbers have been at level 4, where, over the last five years, Māori students have increased by 1,271 percent and Pasifika students by 682 percent. The dip in Māori student numbers in 2004 reflects a general slowdown in enrolments in the wānanga sector in 2004. Student growth in levels 5 and 6 has been slow in comparison.

FIGURE 9.5: DOMESTIC FORMAL STUDENTS IN LEVELS 4, 5 AND 6 BY ETHNIC GROUP 2000-2004



These increases in student numbers by ethnic group are also reflected in the changes in participation rates. For example, the proportion of Māori aged 15 years and over who engaged in level 4 tertiary education increased from 0.2 percent to 3.3 percent.

The profile of prior activity (as at October 2003) of students in level 4 to 6 programmes in 2004 was: 60 percent had been in the workforce; 15 percent were not in the workforce or education and training; 12 percent were previously at school; and only 9 percent had been in tertiary education. This last figure reflects, in the main, the shorter duration of the programmes on offer at these levels.

Over two fifths (20,800) of all students in level 4 to 6 qualifications were new to the tertiary education system in 2004, with the majority of such first-year students coming previously from the workforce (59 percent), from school (22 percent), or from non-workforce activities (16 percent). Māori contributed 31 percent of all first-year students at level 4 and 20 percent at levels 5 to 6. Pasifika contributed 9 percent of all first years at level 4 and 8 percent at levels 5 and 6 in total. Most of the first-year students in level 4 qualifications were aged over 25 years (62 percent), compared with 51 percent of all those in levels 5 and 6. Two fifths of all first-year students in level 4 qualifications had no school qualifications at all compared with 22 percent in levels 5 to 6.

In 2004, over half of students in level 4 certificates had not achieved a school qualification greater than NCEA level 1 (formerly School Certificate), compared with 34 percent for levels 5 and 6 in total. Only 12 percent of students at level 4 held NCEA level 3, compared with 20 percent for levels 5 and 6.

Of all the 111,900 students enrolled in level 4, 5 and 6 programmes of study, 88 percent (98,308) were domestic students and 12 percent (13,583) were international students. The international students comprised 1,344 students at level 4 and 12,239 at levels 5 and 6. Numbers at these levels increased dramatically from 2000 but now appear to be levelling off.

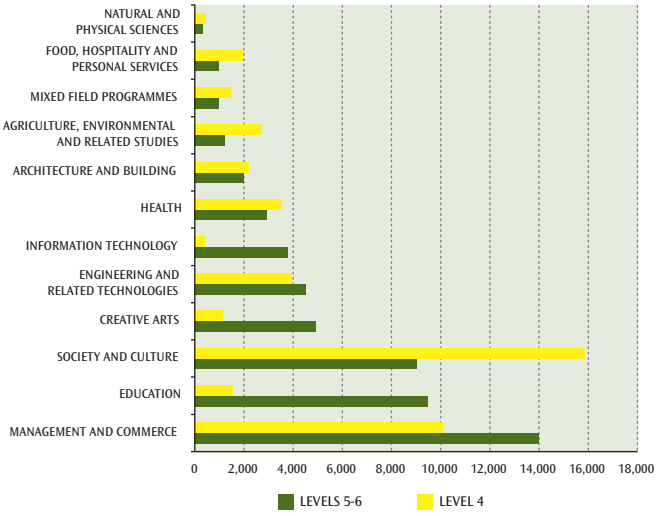
In 2004, most international students studying in level 4 certificates were citizens of Asian countries (81 percent) or European countries (10 percent). Similarly, for levels 5 and 6 in total, 91 percent were from Asia with 4 percent from the Pacific region.

In 2004, 22 percent of all students who identified themselves as having a disability were studying in level 4 to 6 programmes (5,482). On average at these levels in 2004, students had a study load of 0.56 EFTS.

Study choices by students in levels 4 to 6

Around half of all students in levels 4 to 6 were enrolled in management and commerce and society and culture courses. Popular courses in the field of management and commerce included international travel and tourism, advanced business marketing, e-business, real estate studies and marine sales and services. Popular courses in society and culture included social work, legal studies, organisational psychology, employment support and practical theology.

FIGURE 9.6: DOMESTIC FORMAL STUDENTS IN LEVELS 4 TO 6 BY FIELD OF STUDY 2004



In 2004, 33 percent of level 4 students and 38 percent of all level 5 and 6 students were enrolled in programmes of study with an equivalent full-time student (EFTS) value of 0.8 or more, with under a quarter enrolled in programmes of less than 0.2 EFTS.

TABLE 9.2: DOMESTIC FORMAL STUDENTS ENROLLED BY STUDY LOAD 2004

Level	0.03 to 0.19	0.20 to 0.39	0.40 to 0.59	0.60 to 0.79	0.80+	Unknown	Total
Level 4 certificate	22%	16%	21%	8%	33%	0%	100%
Level 5-6 diploma	23%	17%	14%	8%	38%	0%	100%

Note: Study load relates to the total EFTS value of all qualifications enrolled in during the year.

Pathways in and through levels 4 to 6

Overall, when compared with other levels, levels 4, 5 and 6 have very high attrition rates – that is, a relatively high proportion of those who started a qualification neither completed it nor returned for further study towards it in subsequent years. Also, compared with other levels, students at these levels have poor completion rates. At level 4, 42 percent of those who started a certificate in 2003 did not complete it and did not enrol again in 2004. Of the students who started a level 5 or 6 qualification in 2000, only 34 percent had completed it or are still studying it five years later. Of the students starting in 2000, only around 30 percent had completed their level 4, 5 or 6 qualification by 2004, compared with 39 percent for all students at any level.

The highest attrition rates occur in universities for level 4 certificates and at CoEs for level 5 and 6 certificates and diplomas. These results may reflect the specialised nature of their programmes of study, the transfer of students from these qualifications before completion to higher-level qualifications, or the fact that many students – especially those part-time students already in employment – will be wanting to study particular courses from a qualification, rather than the whole qualification. Wānanga and PTEs had the lowest first-year attrition rates at level 4 (37 percent) and OTEPs and wānanga had the lowest at levels 5 and 6 (8 percent and 35 percent respectively). Wānanga also had the highest five-year rates of retention at level 4 and PTEs were the highest for levels 5 and 6.

TABLE 9.3: FIRST-YEAR ATTRITION AND FIVE-YEAR RETENTION AND COMPLETION RATES FOR LEVEL 4 TO 6 STUDENTS BY SUB-SECTOR

	First-year attrition (2003-2004)		Five-year retention (2000-2004)		Five-year completion (2000-2004)	
Sub-sector	Level 4	Levels 5-6	Level 4	Levels 5-6	Level 4	Levels 5-6
Universities	69%	43%	33%	33%	32%	31%
ITPs	49%	48%	26%	25%	23%	21%
CoEs	36%	63%	11%	19%	11%	17%
Wānanga	37%	35%	58%	42%	57%	40%
OTEPs	N/A	8%	N/A	35%	N/A	34%
PTEs	37%	39%	54%	45%	54%	43%
Total	**42%**	**44%**	**31%**	**34%**	**29%**	**30%**

The highest completion rates at these levels were in the wānanga and PTEs.

TABLE 9.4: FIRST-YEAR ATTRITION AND FIVE-YEAR RETENTION AND COMPLETION RATES FOR LEVEL 5 TO 6 STUDENTS BY GENDER, ETHNIC GROUP AND AGE GROUP

	First-year attrition (2003-2004)		Five-year retention (2000-2004)		Five-year completion (2000-2004)	
	Level 4	Levels 5-6	Level 4	Levels 5-6	Level 4	Levels 5-6
Female	40%	43%	39%	36%	38%	32%
Male	44%	45%	24%	31%	20%	27%
European	44%	44%	29%	34%	26%	30%
Māori	38%	45%	30%	33%	28%	30%
Pasifika	45%	41%	40%	32%	39%	28%
Asian	49%	41%	46%	35%	47%	32%
Other	47%	42%	39%	34%	38%	31%
Under 18	36%	43%	31%	37%	27%	34%
18-24	42%	40%	26%	38%	22%	35%
25-39	43%	45%	32%	31%	30%	27%
40 and over	41%	47%	38%	29%	37%	26%

While males had higher first-year attrition rates than females in all mid-register levels and over time, it is females who had better retention and completion rates than males. Asian and Pasifika students had the highest five-year retention and completion rates at level 4. Younger students are more likely to complete a level 5 to 6 qualification while older students are more likely to complete a level 4 certificate.

The proportion of students who completed a level 5 or 6 qualification and then proceeded on to another qualification in the next year (direct progression), is greater than that for students in level 4. The proportion that completed a level 4 certificate and moved on to other qualifications within five years of completing is greater than that for students completing levels 5 to 6 qualifications.

Learners in tertiary education

TABLE 9.5: PROGRESSION RATES FOR STUDENTS COMPLETING LEVEL FOUR TO SIX QUALIFICATIONS

	Number of students completing 2003		Progression to a higher qualification			
			Direct progression (2003-2004)		Five-year progression (2000-2004)	
	Level 4	Levels 5-6	Level 4	Levels 5-6	Level 4	Levels 5-6
Total	12,188	10,956	15%	16%	29%	23%
Female	8,312	7,032	17%	16%	33%	24%
Male	3,876	3,924	13%	17%	24%	21%
European	5,231	7,080	16%	13%	28%	21%
Māori	6,716	2,363	15%	23%	42%	27%
Pasifika	706	787	20%	16%	28%	25%
Asian	447	925	21%	23%	24%	30%
Other	412	459	14%	16%	23%	23%
Under 18	212	323	12%	11%	26%	10%
18-24	1,753	4,241	24%	18%	35%	25%
25-39	4,235	3,718	16%	15%	29%	22%
40 and over	5,875	2,528	13%	17%	25%	23%
Universities	548	1,607	32%	23%	32%	30%
ITPs	1,959	4,245	21%	20%	28%	28%
Colleges of Education	112	565	42%	21%	-	27%
Wānanga	8,421	1,296	13%	25%	59%	32%
OTEPs	0	122	11%	4%	-	5%
PTEs	1,167	5,510	11%	7%	13%	12%

The highest rates of direct progression among those who finished level 4 certificates in 2003 were at CoEs and universities. The highest direct progression rates for those who completed level 5 or 6 qualifications were at wānanga and universities. Wānanga had the highest rate of overall progression over the five-year period 2000 to 2004 for levels 4, 5 and 6.

Overall, female students are more likely to progress to further study than males, directly following study or within the five years following completion. Similarly, Europeans are generally less likely to progress to further levels of study, over time, than any of the other three main ethnic groups.

Māori students have the highest rates of progression, both direct and over time, on to further study at all levels. Similarly, students aged 40 years and over had the highest rates of progression on to further study.

A PROFILE OF WORKPLACE LEARNERS

Industry Training

The government's Industry Training strategy is designed to increase the quality and quantity of industry training in New Zealand. It is now a key component of the Skill New Zealand campaign. Industry training was introduced in 1992 to assist in the development of an internationally competitive and highly-skilled workforce. The strategy is industry-led and is designed to be responsive to the

needs of enterprises and employees. It superseded the former apprenticeship and farm cadet systems and extended the benefits of structured industry training to a wider range of people and industries than ever before.

The Industry Training Act 1992 provided the framework for industry to control the development, implementation and management of industry training programmes and allowed ITOs to be responsible for setting skill standards and arranging training programmes in the industry they represent. All training is assessed against national standards set by the ITOs and earns credits and qualifications registered on the NQF. ITOs do not provide training themselves, but make arrangements for workplace assessment and off-job delivery of training, such as the purchase of training at an ITP or a PTE.

The Tertiary Education Commission (TEC) purchases industry training through the ITOs. Industry training is jointly funded by the government through the Industry Training Fund, and by industry, through financial and in-kind contributions.

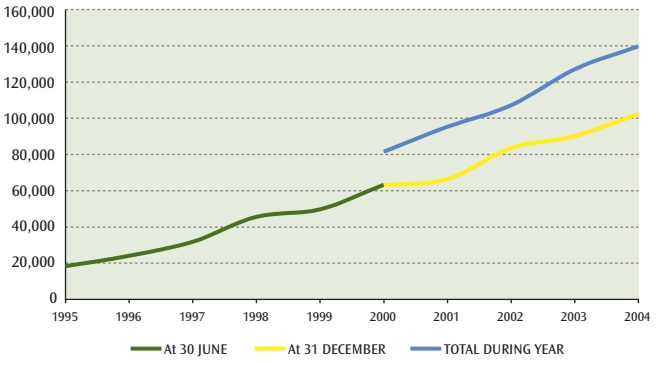
Since 2000, industry training has grown at a faster rate than the provider-based part of the tertiary education system. The number of trainees, including Modern Apprentices, participating in industry training grew by 72 percent over the last five years, compared with 52 percent for all other formal students. [11]

This growth is reflected in the significant increases in funding. In 2004, industry contributed $46.7 million in cash[12] to industry training, up from $41.6 million in 2003, and the government invested $125.0 million, up from $98.5 million in 2003.

The number of industry trainees, including Modern Apprentices, continued to grow strongly in 2004, increasing by 12,700 (or 10 percent) from 2003 and future growth is expected to achieve the industry training strategy's target of 150,000 people participating in industry training in 2005. A total of 139,597 trainees participated during 2004, of which 7,175 were Modern Apprenticeships as at 31 December 2004, up 15 percent on 2004. Employer participation in industry training increased by 7 percent from 29,200 in 2003 to 31,300 in 2004.

These figures follow the trend of constant growth in trainee numbers since the start of industry training in 1992.

FIGURE 9.7: TRAINEES IN INDUSTRY TRAINING 1995-2004



Notes:

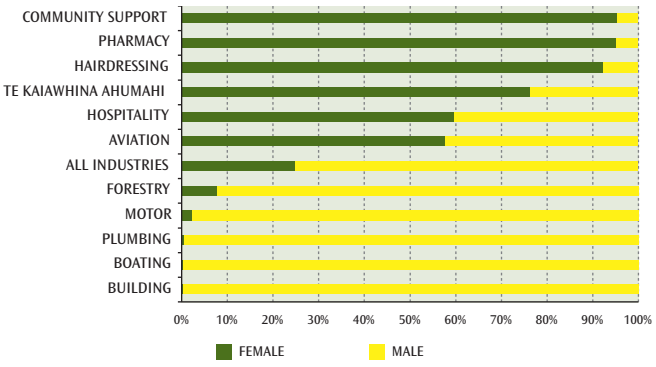
1 Because of changes to reporting systems, figures from 2000 may not be exactly comparable with previous years.

2 Totals also include Modern Apprenticeship numbers.

Source: Tertiary Education Commission

In 2004, nearly 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 27 percent in 2004. The gender split varied significantly across ITO industry areas, from community support, pharmacy and hairdressing, where over 90 percent of trainees were women, to boating and building where less than 1 percent of trainees were women.

FIGURE 9.8: REPRESENTATION OF WOMEN IN INDUSTRY TRAINING BY INDUSTRY 2004



Notes:

1 Data relates to the total number of trainees as at 31 December 2004.

2 Totals also include Modern Apprenticeship numbers.

Source: Tertiary Education Commission

11 The number of trainees is based on total trainees during the year.

12 The industry contributions do not recognise any cash contributions to industry training made by employers.

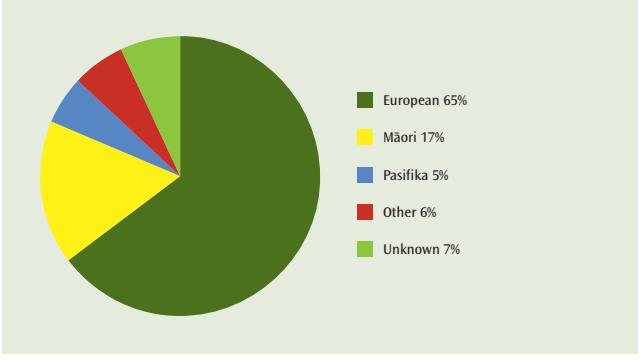
There were 23,500 Māori in industry training in 2004, representing 17 percent of all industry trainees. This compared with 11 percent in 1996, and 21,700 Māori trainees in 2003. By comparison, 8.4 percent of the labour force was Māori,[13] and Māori represented 13 percent of the population aged 15 and over,[14] and 21 percent of students enrolled in formal qualifications at tertiary education providers.

There was some variation in the number of Māori trainees across ITO industries, although the range of difference was less than that for gender described above. Māori were well represented in Te Kaiawhina Ahumahi,[15] where 55 percent of trainees were Māori, forestry (29 percent), and seafood (24 percent), and under-represented in pharmacy (0 percent), hairdressing (4 percent) and boating (6 percent).

Pasifika trainees represented 6 percent of all industry trainees, the same rate as 2003, but up from 2 percent in 1996. There were 7,662 Pasifika trainees in industry training in 2004, compared with 6,850 in 2003.

The pattern of participation across ITO industries was different again for Pasifika trainees, with over-representation in plastics (31 percent of all trainees), building service contractors (20 percent), and apparel and textile (18 percent), and under-representation in pharmacy, agriculture and flooring (all less than 1 percent of trainees).

FIGURE 9.9: DISTRIBUTION OF INDUSTRY TRAINEES BY ETHNIC GROUP 2004



Notes:

1 Data relates to the total number of trainees during the year.

2 Totals also include Modern Apprenticeship numbers.

3 Ethnic group is based on the single prioritised method of reporting.

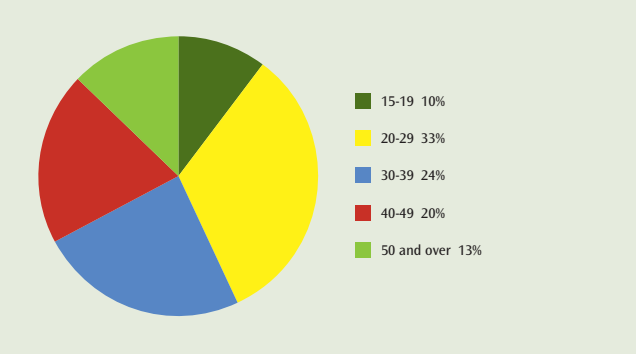
Source: Tertiary Education Commission

Nearly a third of trainees were aged between 20 and 29, while nearly a quarter were aged between 30 and 39. The number of trainees aged between 15 and 19 increased significantly from 2000 and numbered 14,180 in 2004, or just over 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.

Industry training provides opportunities for ongoing development and updating of skills for older people. Older people are well represented in industry training with 45,653 trainees, or one third of all trainees aged 40 and over in 2004. Training in social services was dominated by older students in 2004. Nearly two out of every three trainees enrolled with the Community Support and Te Kaiawhina Ahumahi ITOs were aged 40 and over as at 31 December 2004. The Forest Industries Training and Education Council ITO is the largest ITO and also had the highest number of industry trainees aged 40 and over, numbering 4,838 at 31 December 2004. Other ITOs with relatively large numbers of older trainees in 2004 were:

- Engineering, Food and Manufacturing
- Community Support, and
- Road Transport.

FIGURE 9.10: DISTRIBUTION OF INDUSTRY TRAINEES BY AGE GROUP 2004



Notes:

1 Data relates to the total number of trainees at 31 December 2004.

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

13 Statistics New Zealand (June 2004), *Household Labour Force Survey*.

14 Series 6 Māori and national estimated resident population distributions, mean year ended 31 December 2004 (final), Statistics New Zealand, 2004.

15 The ITO for social services.

in terms of educational qualifications. In 2004, of those participants whose previous educational background was known:[16]

- 26 percent of all participating trainees had no previous qualifications
- 37 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 bachelors degree level.

In 2003, access to industry training funding for training above level 4 on the NQF became available, extending the ability of ITOs to meet the current and future needs of industry and employees within industry. In 2004, industry training still had a strong focus on levels 1 to 4 of the NQF. In 2004:[17]

- 60 percent (100,913) of all participating trainees were in industry training programmes at levels 1 to 3
- 38 percent (62,874) of all participating trainees were in level 4 industry training programmes
- 2 percent (3,214) of all participating trainees were in level 5 and above industry training programmes
- 67 percent (18,957) of Māori trainees were in level 3 or higher industry training programmes, and
- 56 percent (4,940) of Pasifika trainees were in level 3 or higher industry training programmes, about the same as last year.

In the year 2004, more than 20,300 national certificates were completed by industry trainees with the bulk being completed at level 4 (44 percent), level 3 (32 percent) and level 2 (20 percent). The numbers at each level were:

- 753 at level 1
- 3,992 at level 2
- 6,446 at level 3
- 9,003 at level 4, and
- 140 at level 5 and above.

Around 34 percent of the national certificates completed by Māori and 23 percent of the national certificates completed by Pasifika trainees were at level 4 or above, down from the 2003 figures of 38 percent and 31 percent respectively.

A significant feature of industry training in 2004 was the success of people with no or few previous qualifications:

- Seventy-four percent of the national certificates achieved by trainees with no previous educational qualification were at level 3 or above.
- Seventy-five percent of the national certificates achieved by trainees with only fifth form or equivalent educational qualifications were at level 3 or above.

In 2004, industry trainees achieved nearly 2.9 million credits towards national qualifications, an average of nearly 21 credits per trainee:

- Seventy percent of the total credits achieved were at level 3 of the NQF or higher.
- Sixty-six percent of the credits achieved by Māori trainees were at level 3 of the NQF or higher.
- Sixty 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 29,200 employers in 2003 to 31,260 in 2004.

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

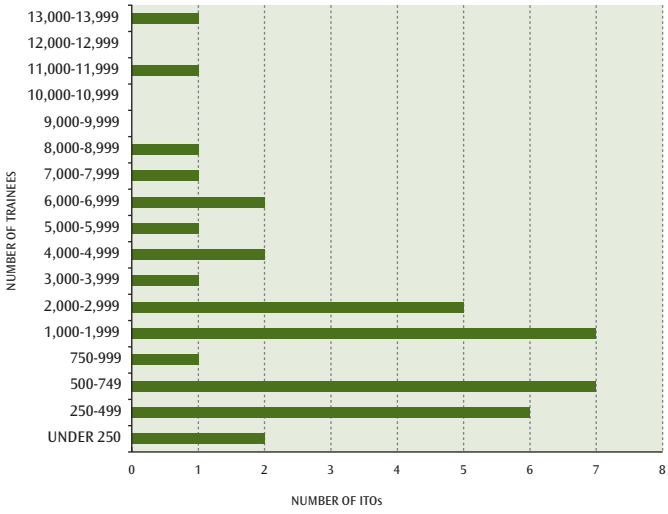
- commit to a formal, signed training agreement for each trainee
- provide structured on-job training and provide access to off-job training
- facilitate access to appropriate on- and off-job assessment
- ensure training meets national standards developed by their industry, and
- enable trainees to work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

Of the 38 ITOs with recorded trainees in 2004, the average number of trainees per ITO as at 31 December 2004 was 2,700. Half of the ITOs had fewer than 1,315 trainees. About 42 percent of ITOs had fewer than 1,000 trainees at 31 December, and 40 percent had over 2,000 trainees. The two largest ITOs were forestry, and engineering, food and manufacturing, both of which had over 11,000 trainees at 31 December 2004.

16 Collection of previous educational qualifications commenced from the beginning of 2000. Out of the 139,597 trainees in 2004, previous education records are known for 86,646.

17 Trainees may be enrolled in programmes at more than one level and hence the sum of each level may not equal the overall total.

FIGURE 9.11: ITOs BY NUMBER OF TRAINEES 2004



Notes:

1 ITO size is based on the number of trainees in the ITO as at 31 December 2004.

2 Totals also include Modern Apprenticeship numbers.

Source: Tertiary Education Commission

Modern Apprenticeships

Industry training is also delivered through the Modern Apprenticeships scheme, which is designed to complement and build on existing work-based industry training. 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 TEC 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.

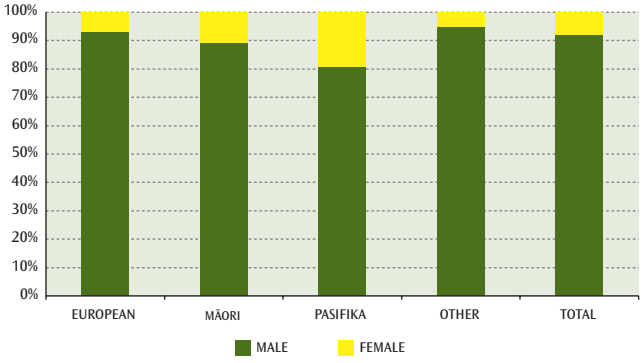
Modern Apprentices are assigned to a Modern Apprenticeship Co-ordinator, who acts as personal coach and mentor to the apprentice. Co-ordinators facilitate and support apprenticeship training, acting as the key link between employers and apprentices. They screen potential apprentices, arrange their employment and training, and work with employers and apprentices to produce individual training plans.

There was a total of 7,175 Modern Apprenticeships at 31 December 2004, up 15 percent from the 6,259 registered at 31 December 2003. In 2003/04, the government allocated $22.9 million for Modern Apprenticeships, targeting 7,000 Modern Apprentices annually.

In 2004, about 8 percent were women, 14 percent Māori and around 2 percent Pasifika. The average age of apprentices was 17 years, with about half of all trainees aged 17 or 18 years. Although aimed at younger people, provision may be made for older people seeking a change in career. There were only 130 apprentices outside the 15 to 21 year old age range in 2004.

One new industry, extractive, and two new industry sectors, floristry and viticulture, were added to the Modern Apprenticeships programme during 2004. This brought the number of industries and sub-sectors available for Modern Apprenticeships to 31, with the number of apprenticeships in each ranging from just five to 1,084, with an average of just over 231 apprenticeships in each.

FIGURE 9.12: DISTRIBUTION OF MODERN APPRENTICESHIPS BY GENDER AND ETHNIC GROUP 2004



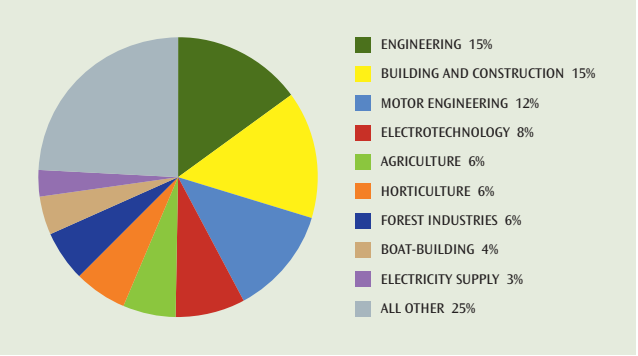
Notes:

1 Data relates to the total number of trainees at 31 December 2004.

2 Ethnic group is based on the single prioritised method of reporting.

Source: Tertiary Education Commission

FIGURE 9.13: DISTRIBUTION OF MODERN APPRENTICESHIPS BY SELECTED INDUSTRIES 2004



Notes:

1 Data relates to the total number of trainees at 31 December 2004.

2 Ethnic group is based on the single prioritised method of reporting.

3 There were 31 industries in which Modern Apprenticeships were available in 2004.

Source: Tertiary Education Commission

Skill Enhancement – Rangatahi Māia/Tupulaga Le Lumana'i

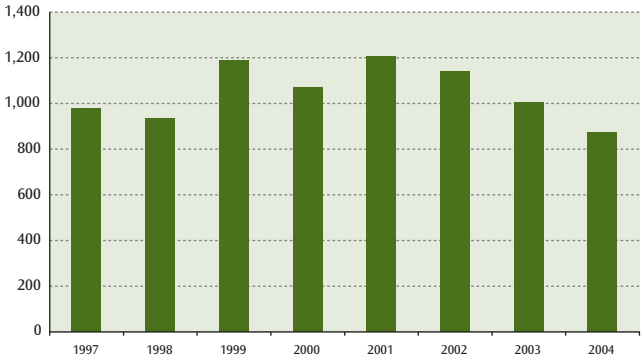
Another workplace learning programme that occurs at the mid-register levels is Rangatahi Māia/Tupulaga Le Lumana'i (Skill Enhancement), a vocational training programme for young Māori and Pasifika peoples that provides a bridge between school and work or further tertiary education in a wide range of skills, including trades skills.

It is designed to meet the skills required for an identified industry, leading to qualifications that are recognised by that industry and relevant workplace learning for the learner. The programmes lead to qualifications at level 3 or above on the NQF and are expected to lead the trainee into employment at higher occupational levels or further tertiary education. Skill Enhancement is delivered in two strands, Rangatahi Māia for young Māori, and Tupulaga Le Lumana'i for young Pasifika peoples.

The number of trainees continued to decrease in 2004, possibly a reflection of a more buoyant labour market. During 2004, 875 trainees participated in Skill Enhancement training, compared with 1,006 in 2003, 1,141 in 2002, 1,206 in 2001 and 1,070 in 2000. In 2004, a total of 58 providers offered Skill Enhancement vocational training programmes, of which 38 were PTEs and 14 were ITPs.

The age distribution of trainees was clustered, in that 45 percent of trainees in 2004 were 18 years or younger and 33 percent were older than 21 years. Also, 54 percent of trainees were female.

FIGURE 9.14: SKILL ENHANCEMENT TRAINEES 1997-2004



Note: Data relates to the total number of trainees during the year.

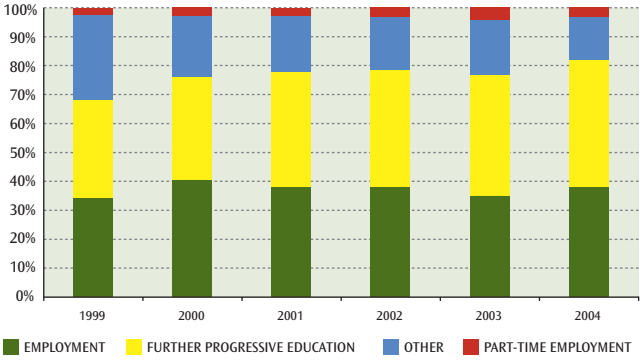
Source: Tertiary Education Commission

Of the 875 trainees in 2004, 73 percent were Māori and 23 percent were Pasifika students, compared with 79 percent and 21 percent respectively in 2003 and 81 percent and 19 percent in 2002. Māori participation in Skill Enhancement has been decreasing. Pasifika peoples' participation in Skill Enhancement, however, has increased slightly over 2003 (197 students compared with 188).

In 2004, 38 percent of trainees completing Skill Enhancement moved on to employment and a further 44 percent moved on to further education or training. These proportions have been quite steady since 2001.

Learners in tertiary education

FIGURE 9.15: SKILL ENHANCEMENT TRAINEE OUTCOMES 1999-2004



Notes:

1 Data relates to the total number of trainees during the year.

2 Data is of known destination outcomes only and does not include missing and unknown results.

Source: Tertiary Education Commission

In 2004, the government called for a ministerial review of Skill Enhancement as part of the wider review of ethnically targeted policies and programmes. This was completed in 2005 and the government decided that the Skill Enhancement programme should continue, but that actions should be taken to strengthen the monitoring of provision, so that issues of quality, relevance and value for money are addressed in line with the other changes made at the certificate and diploma level (as part of the review of sub-bachelors degree provision in 2005). The government asked for further advice on how Skill Enhancement should be refocused from 2007 to ensure that learners most in need of this programme can access it, and to determine the nature of the programmes to be funded.

ASIAN STUDENTS IN TERTIARY EDUCATION IN NEW ZEALAND

Overview

This report provides a brief snapshot of Asian students enrolled in formal tertiary education in New Zealand, with a focus on domestic Asian students. In total, 91,110 Asian students were enrolled in formal tertiary education during the 2004 year – around 59 percent were domestic students and the remaining 41 percent were international students.

There has been relatively rapid growth in the number of Asian students participating in formal tertiary education. The number of Asian international students increased by 240 percent, from 10,900 students in 2000 to 36,960 in 2004. Asian domestic student numbers increased by 92 percent, from 28,150 to 54,160 students over the same period. This is more than twice the growth rate of all domestic students (44 percent).

Much of this increase is due to the rapid growth in the number of Asian domestic students enrolled at wānanga. A total of 18,834 Asian domestic students attended wānanga during 2004, whereas in 2000 there were only three Asian domestic students recorded as attending wānanga. If wānanga enrolments are excluded from the calculation of growth in student enrolments, the ethnic differential disappears.

International Asian students

International student numbers are strongly influenced by enrolments of international students from countries in Asia, as the majority of international students are Asian. Four out of five international students (81 percent) identified as Asian in 2004, compared with 12 percent of domestic students. The proportion of Asian students in the international student population has increased since 2000, when 69 percent of international students were Asian.

In 2004, 30,000 international students were from China, making up over half of all international Asian students (59 percent), around the same proportion as in 2003. A further 2,300 students were from the United States. Japan, South Korea and India each contributed around 2,000 students to the international student population.

The majority of first-year international Asian students (66 percent) were living overseas in the year prior to enrolment in 2004, compared with 13 percent of domestic Asian students.

International Asian students have a more youthful age profile than domestic Asian students. Three in four international students from Asian countries (77 percent) were aged between 18 and 24 years in 2004, and a further 21 percent were in the 25 to 39 year age group. International Asian students are more likely to be male than their domestic counterparts. Males made up 52 percent of the international Asian student population in 2004 (compared with 46 percent of domestic Asian students). Women slightly outnumbered men at universities, whilst the reverse was true for institutes of technology and polytechnics (ITPs) and private training establishments (PTEs). Only a handful of international Asian students were enrolled at wānanga.

International Asian students are far more likely to be studying at a higher level than their domestic counterparts. Almost half of all international students (49 percent) were enrolled in degree-level qualifications in 2004, compared with 11 percent of domestic students.

Over half of all international Asian students (56 percent) were enrolled in management and commerce qualifications in 2004. Other popular fields of study were society and culture and mixed field programmes.

Domestic Asian students

Over the past decade, the Asian domestic student population has grown faster than other ethnic groups. In 1994, 11,210 Asian students were enrolled in formal tertiary qualifications, making up 5 percent of the total student population. By 2004, this figure had risen to 54,160 students, or 12 percent of the student population. This is an increase of almost 400 percent over the decade, whereas total student numbers rose by around 80 percent over the same period.

Asian people make up an increasing proportion of the New Zealand population. Census data shows that the Asian resident population increased from 3.0 percent of the total population in 1991 to 6.6 percent in 2001. However, the increase in enrolments is more likely to be related to the youthful age structure of the Asian population. At the time of the 2001 Census, 21 percent were in the 15 to 24 age group, compared with 14 percent of the total New Zealand population.[1] Asian participation

1 Statistics New Zealand, 2001 Census Snapshot 15: Asian People.

in tertiary education is similar to that of the general population at around 14 percent, when adjusted for the differences in the age distribution.

An alternative approach to counting enrolments is to count the number of equivalent full-time student (EFTS) units used. In 2004, Asian students accounted for around 14 percent of all EFTS, which is slightly higher than their 12 percent share of the student headcount population. This suggests that Asian students may have higher study loads on average than other students. Asian students also completed 20,000 qualifications in 2004, which was 14 percent of all qualifications completed in that year.

Five-year completion rates for Asian students are comparatively high: 48 percent of domestic Asian students who started a qualification in 2000 had completed it by 2004, compared with 39 percent for all students.

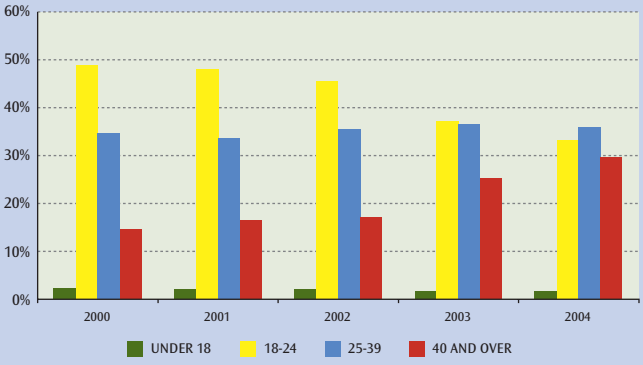
FIGURE 1: ASIAN DOMESTIC STUDENTS ENROLLED IN FORMAL TERTIARY EDUCATION 1994-2004

Age and gender

Asian domestic students have a similar age profile to all domestic students. In 2004, 39 percent of Asian students were under 25 years of age, compared with 38 percent of all students. A further 36 percent were aged 25 to 39 years (35 percent) and 25 percent were aged 40 and over (27 percent). In contrast, international Asian students have a youthful profile, with the majority aged under 25 in 2004. Changes in the age profile of Asian domestic students have followed national trends towards increased numbers of older students. For example, half of all domestic Asian students and 44 percent of all students were under 25 years of age in 2000.

More women than men participate in tertiary-level education, and this is also true for Asian domestic students. In 2004, 54 percent of Asian students were women, and the age-standardised participation rate of female Asian students was 15 percent in 2004 (13 percent for males). Asian women's participation has increased relative to men's since 2002, when the participation rate for both sexes was 10.5 percent.

FIGURE 2: DISTRIBUTION OF ASIAN DOMESTIC STUDENTS BY AGE GROUP 2000-2004



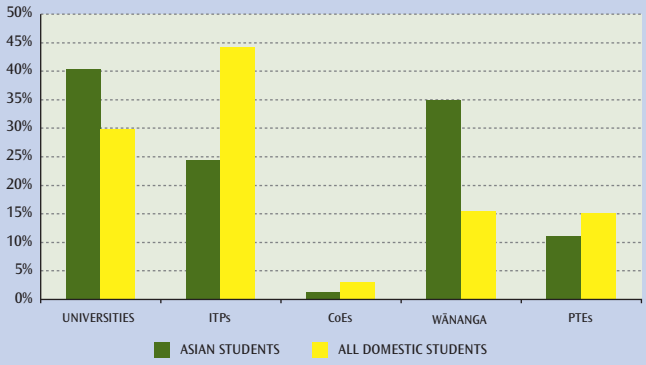
Sub-sector trends

There were 21,860 domestic Asian students enrolled at university in 2004, representing 40 percent of all domestic Asian students enrolled in formal tertiary education. This is higher than the percentage for all students (30 percent). Wānanga was also a popular choice of study location for Asian students, with 18,830 enrolled at a wānanga in 2004 (35 percent), and almost all of these students were studying at levels 1 to 3 of the qualifications register.[2] ITPs' share of Asian students was 24 percent (13,180 students) and a further 10 percent were enrolled in private providers.

Figure 3 shows that the sub-sector enrolment patterns for Asian students differ markedly from those of all students. Asian students are more likely to be enrolled at university or wānanga, but relatively fewer Asian students attended ITPs and private providers in 2004.

2 The New Zealand Register of Quality Assured Qualifications.

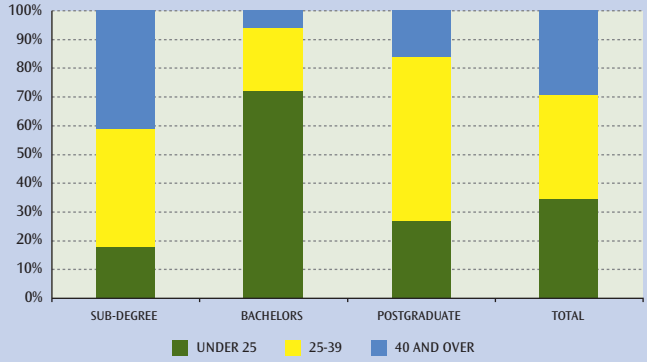
FIGURE 3: PERCENTAGE OF ASIAN AND TOTAL DOMESTIC STUDENTS BY SUB-SECTOR 2004



Qualification level and field of study

Most Asian students, like their non-Asian counterparts, are enrolled in qualifications at one of two levels on the qualifications register. More than half (55 percent) of all Asian domestic students were enrolled in level 1 to 3 certificate qualifications in 2004, with a further 32 percent studying for bachelors degrees at level 7 of the qualifications register. Level of study was age-related, with most Asian students (72 percent) enrolled in bachelors-level qualifications being under 25 years of age. In contrast, 18 percent of sub-degree-level students were under 25 years of age, as shown in the figure below.

FIGURE 4: ASIAN DOMESTIC STUDENTS BY AGE GROUP AND QUALIFICATION LEVEL 2004



The majority of Asian students enrolled in bachelors-level qualifications were attending university, as would be expected. Around 60 percent of all level 1 to 3 certificate enrolments were at ITPs, but for Asian students studying at this level, wānanga was the most popular choice (61 percent), and the majority of these students were enrolled in 'mixed field' qualifications, such as the KiwiOra certificate, a programme to assist new immigrants in their transition to life in New Zealand.

Overall, just over 22,000 Asian students (41 percent) were enrolled in mixed field qualifications in 2004, and a further 12,000 (22 percent) were undertaking studies in the management and commerce fields.

Learners in tertiary education