

Achievement in formal tertiary education

This report forms part of a series called Learners in tertiary education.

Topics covered by the series are access, pathways, student support, participation, retention and qualification completions.

#### **Author**

Mieke Wensvoort, Senior Analyst Email: mieke.wensvoort@minedu.govt.nz

Telephone: 04-463 7537 Fax: 04-463 8713

All views expressed in this report, and any remaining errors or omissions, remain the responsibility of the author.

#### Published by

Tertiary Sector Performance Analysis Tertiary, International and System Performance MINISTRY OF EDUCATION

#### © Crown Copyright

This work is licensed under the Creative Commons Attribution 3.0 New Zealand licence.

You are free to copy, distribute and adapt the work, as long as you attribute the work to the copyright holder and abide by the other licence terms. To view a copy of this licence, visit http://creativecommons.org/licenses/by/3.0/nz/.

This report is available from the Ministry of Education's Education Counts website: www.educationcounts.govt.nz

June 2011

ISBN (web) 978-0-478-36732-4

# Achievement in formal tertiary education

1	Key	findings	1
2	Meth	nods and data used in this report	3
3	Achi	evement	5
	3.1	Qualifications completed at public tertiary education institutions	5
	3.2	Qualifications completed at private training establishments	7
4	Com	pletion rates of full-time students	8
	4.1	Qualification level	8
	4.2	Gender	10
	4.3	Ethnic groups	11
	4.4	Provider type	12
5	Com	pletion rates of part-time students	16
	5.1	Qualification level	16
	5.2	Gender	18
	5.3	Ethnic groups	19
	5.4	Provider type	20
6	Com	pletion rates of doctoral students	24
7	Com	pletion rates at private training establishments	25
	7.1	Full-time domestic students	25
	7.2	Part-time domestic students	28
8	Disc	ussion	31
Арре	endix A	Completion rates	33
Refe	rences		35

# **FIGURES**

1	Five-year qualification completion rates of domestic full-time students by level	8
2	Five-year qualification completion rates for full-time students in bachelors and higher qualifications – comparing the average rate for the 2001-2005 starting cohorts with the 1996-2000 starting cohorts	9
3	Five-year qualification completion rates for full-time students in non-degree qualifications – comparing the average rate for the 2001-2005 starting cohorts with the 1996-2000 starting cohorts	10
4	Five-year qualification completion rates of domestic full-time students by gender	11
5	Five-year qualification completion rates of domestic full-time students by ethnic group	12
6	Distribution of the qualifications started in 2005 by domestic full-time students by subsector and level	12
7	Five-year qualification completion rates of domestic full-time students in bachelors and higher qualification by sub-sector	13
8	Five-year qualification completion rates of domestic full-time students in non-degree qualifications by sub-sector	14
9	Five-year qualification completion rates of domestic part-time tertiary education students by level	16
10	Five-year qualification completion rates for part-time students in bachelors and higher qualifications – comparing the average rate for the 2001-2005 starting cohorts with the 1996-2000 starting cohorts	17
11	Average completion rates for part-time students in non-degree qualifications – comparing the average rate for the 2001-2005 starting cohorts with the 1996-2000 starting cohorts	18
12	Five-year qualification completion rates of domestic part-time students by gender	19
13	Five-year qualification completion rates of domestic part-time students by ethnic group	20
14	Distribution of qualifications started in 2005 by domestic part-time students by subsector and level	20
15	Five-year qualification completion rates of domestic part-time students in bachelors and higher qualifications by sub-sector	21
16	Five-year qualification completion rates of domestic part-time students in non-degree qualifications by sub-sector	22
17	Five-year qualification completion rates for full-time students in private training establishments – comparing the average rate for the 2003-2005 starting cohorts with the 2000-2002 starting cohorts	26

18	Five-year qualification completion rates of domestic full-time students at private training establishments by level	27
19	Five-year qualification completion rates for part-time students in private training establishments – comparing the average rate for the 2003-2005 starting cohorts with the 2000-2002 starting cohorts	29
20	Five-year qualification completion rates for domestic part-time students at private training establishments by level	30
21	Unemployment rates by qualification level and the five-year qualification completion rates of domestic full-time students	32

# **TABLES**

1	number of qualifications completed by domestic students at public tertiary education institutions by level and provider type	5
2	Number of qualifications completed by full-time students at public tertiary education institutions by gender	6
3	Number of qualifications completed by full-time students at public tertiary education institutions by ethnic group	7
4	Total number of qualifications completed by domestic students at private training establishments by level	7
5	Eight-year qualification completion rates of domestic doctoral students	24
6	Five-year qualification completion rates of domestic full-time tertiary education students at private training establishments	25
7	Five-year qualification completion rates of domestic part-time tertiary education students at private training establishments	28
8	Five-year qualification completion rates of domestic full-time students by sub-sector (excl. private training establishments)	33
9	Five-year qualification completion rates of domestic part-time by sub-sector (excl. private training establishments)	34

## 1 KEY FINDINGS

Over the last 10 years, almost a million tertiary education qualifications have been awarded to New Zealanders. One-third of these were bachelors or higher qualifications.

This report looks at whether rates of achievement have been improving and whether there are differences in achievement for men and women, or between ethnic groups. It looks at 10 cohorts of domestic tertiary education students. The first cohort of students started study in 1996 and the last cohort of students started study in 2005. For each cohort, the rate of qualification completion was calculated five years after starting study.

#### **KEY FINDINGS**

#### **Public tertiary education institutions**

#### NUMBER OF QUALIFICATIONS COMPLETED

- 1. In 2009, domestic students at publication tertiary education institutions completed 100,000 qualifications.
- 2. Comparing 2009 with 1999, the largest percentage increase in qualification completions was for level 4 certificates, followed by level 1 to 3 certificates, honours degrees and postgraduate certificates/diplomas, doctoral degrees and level 5 to 7 diplomas.
- 3. Masters degrees was the only qualification level with fewer completions in 2009 than in 1999.

#### FIVE-YEAR QUALIFICATION COMPLETION RATES

- 4. Comparing the average rate for the 2001 to 2005 starting cohorts with the 1996 to 2000 starting cohorts showed that:
  - the five-year qualification completion rate has improved for both full-time and part-time students
  - underlying the improvement in the five-year average completion rate of full-time and parttime students were increases in the completion rates at every qualification level except the rate for part-time bachelors-degree students which remained unchanged
  - for students who started study between 2001 and 2005, the five-year qualification completion rate averaged 69 percent for full-timers and 34 percent for part-timers
  - the qualification completion rate of full-time male students has improved, narrowing the difference in achievement between men and women
  - the five-year qualification completion rate increased for full-time and part-time students in each ethnic group
  - the five-year qualification completion rate of full-time Māori and Pasifika students continues to be lower than for the other ethnic groups
  - for part-time students, the five-year qualification completion rates were similar for Europeans, Māori and Pasifika, and
  - Asian students had the highest part-time qualification completion rates.

#### **KEY FINDINGS CONTINUED**

#### Private training establishments

#### NUMBER OF QUALIFICATIONS COMPLETED

- 1. In 2009, domestic students at private training establishments completed 25,000 qualifications.
- 2. Comparing 2009 with 2000, the largest percentage increases in qualification completions were for level 4 certificates and level 5 to 7 diplomas.
- 3. Honours degrees and postgraduate certificates/diplomas was the only qualification level with fewer completions in 2009 than in 1999.

#### FIVE-YEAR QUALIFICATION COMPLETION RATES

- 4. Comparing the average completion rate for the 2003 to 2005 starting cohorts with the 2000 to 2002 starting cohorts:
  - the five-year qualification completion rate has improved for full-time students, while it declined slightly for part-time students
  - underlying the improvement in the five-year average completion rate of full-time students were increases in the completion rates at every qualification level except honours degrees and postgraduate certificates/diplomas
  - for students who started study between 2001 and 2005, the five-year qualification completion rate averaged 72 percent for full-timers and 40 percent for part-timers.

## 2 METHODS AND DATA USED IN THIS REPORT

The qualification completion rates presented here relate to New Zealand's domestic students enrolled in formal qualifications of more than one week's duration. The number of qualifications completed by level and type of provider are presented in chapter 3. The rate at which students complete a qualification is covered by level and type of provider in chapters 4 to 7. We look at differences in achievement by qualification level. We also do a longer-term analysis using average completion rates over five cohorts for public tertiary education institutions and over three cohorts for private training establishments.

The Ministry of Education uses a cohort measure of qualification completion. This means we look at the people who start a qualification in a particular year and we trace their progress over the succeeding years. We calculate the qualification completion rate after a given number of years as the number who have successfully completed a qualification by that point in time as a percentage of the number of starters. The qualification completion rate may be measured any number of years after a group of students has started study.

In this report, we have measured qualification completion rates five years after each cohort has started study. Except at doctoral level, most students who are likely to complete a tertiary qualification do so within that time. The report includes the latest available five-year completion rates for students who started study in 2005 and completed a qualification by 2009.

Some students complete a qualification at a higher level than the one in which they started their study. Students who moved to a higher-level qualification during the five-year period were counted in the qualification level in which they started. For example, a student who starts a level 5 to 7 diploma and completes a degree is counted in the diploma completion rate.

The Ministry's qualification completion rate differs from the measure of qualification completion used by the Tertiary Education Commission in its release of provider performance data (Tertiary Education Commission 2010). The Commission uses a measure of the proportion of students who complete a qualification in any one year, irrespective of the starting year. <sup>1</sup>

The five-year completion rates of full-time students are discussed separately from those of part-time students, as part-time students have lower completion rates than full-time students. In part, that is because a proportion of part-time students do not study towards a qualification (Scott 2009). Inclusion in the full-time completion rate or the part-time completion rate depends on the student's study type, whether their study was continuous or not and the characteristics of the qualification.

The full-time completion rate refers only to students who, continuously every year, studied full-time, for a full-year (or for the length of the qualification where this is less than a year). This means that people who study full-time for only part of a year are included in the full-time completion rate when the length of the qualification is less than one year.

Students who no longer meet the criteria for the full-time completion rate are included in the part-time completion rate. This means that the five-year part-time completion rate includes people who have studied part-time throughout, as well as people who have studied full-time and part-time during that period.

The tertiary education enrolments and completions data is provided to the Ministry of Education by tertiary education providers. In 2000, the data collection was extended to record multiple

<sup>&</sup>lt;sup>1</sup> Refer to <a href="www.tec.govt.nz/tertiary-sector/performance-information/educational-performance/">www.tec.govt.nz/tertiary-sector/performance-information/educational-performance/</a> for an explanation of the Tertiary Education Commission's approach.

ethnicities. Up to three ethnicities are collected. If a student selects more than one group they are counted in each group. Rates have not been calculated for groups with fewer than 30 students.

Section 6 in this report covers the eight-year qualification completion rates for doctoral students as most of these students take longer than five years to complete this study programme.

Section 7 in this report covers the tertiary education achievement of private tertiary education providers. Information from private training establishments has been included in the Ministry of Education's statistical collections from 1999 onwards. The qualification completions at private training establishments were included from 2000 onwards. Private providers are included if they receive government enrolments-based funding or if their students were eligible to apply for loans or allowances. Providers who only deliver targeted training or only have full-fee paying students are not included.

A table of the five-year completion rates for both full-time and part-time students by provider type and qualification level is included in Appendix A

## 3.1 Qualifications completed at public tertiary education institutions

The number of qualifications completed by domestic students at public tertiary education institutions totalled 100,000 in 2009 (see Table 1). Compared with 10 years earlier, the number of completions has increased by 68 percent. While this increase is, in part, due to population and enrolment increases, the proportions of the New Zealand population aged 15 years and over holding a tertiary qualification has increased at every qualification level.

At every qualification level, the number of qualifications completed increased from 1999 to 2009, except for masters degrees which showed a small decline. There were almost five times as many level 4 certificates completed in 2009 than in 1999 and more than twice as many level 1 to 3 certificates. The number of completions increased from 1999 to 2009, for bachelors degrees by 5.0 percent, for level 5 to 7 diplomas by 31 percent, for honours and postgraduate certificates/diplomas by 51 percent and for doctoral degrees by 48 percent. Graduate certificates and diplomas increased by 13 percent from 1999 to 2009.

Table 1

Number of qualifications completed by domestic students at public tertiary education institutions by level and provider type

	Universities		Polytechnics		Wānanga		Total	
	1999	2009	1999	2009	1999	2009	1999	2009
Certificates 1-3	903	894	16,685	26,449	318	13,236	17,906	40,579
Certificates 4	403	1,131	2,792	9,916		4,095	3,195	15,142
Diplomas 5-7	1,903	1,630	4,738	5,656	289	1,786	6,930	9,072
Bachelors degrees	15,571	17,295	4,192	3,219	62	310	19,825	20,824
Graduate certificates/ diplomas	2,604	3,311	669	384	11		3,284	3,695
Honours & postgraduate certs/dips	4,859	7,097	177	505		17	5,036	7,619
Masters	2,934	2,711	81	89	10	9	3,025	2,809
Doctorates	425	628					425	628
Total	29,602	34,697	29,334	46,218	690	19,453	59,626	100,368

Note: The 1999 data from the colleges of education has been merged with the data from the universities.

#### **Provider type**

At universities, the number of qualifications completed by domestic students totalled 34,700 in 2009, up 17 percent on 1999. Completions of bachelors degrees by domestic students at universities increased by 11 percent from 1999 to 2009. There were three times as many level 4 certificates completed at universities in 2009 than in 1999 (although the number is still low). The number of doctoral degrees, bachelors degrees with honours, postgraduate certificates/diplomas and graduate certificates/diplomas completed also increased substantially from 1999 to 2009. In contrast, the number of level 5 to 7 diplomas and masters degrees completed at universities decreased from 1999 to 2009.

At polytechnics, the number of qualifications completed by domestic students totalled 46,200 in 2009, up 58 percent on 2009. The increase in the number of level 1 to 3 certificates from 1999 to 2009 (up 59 percent) made the biggest contribution to the overall increase in qualifications completed at polytechnics. Proportionately, level 1 to 3 certificate completions were the same in 2009 as in 1999 at 57 percent. However, the proportion of level 1 to 3 certificate completions

peaked in 2005 at 61 percent, reflecting large enrolment increases at these levels in the early 2000s. Since 2006, the balance of enrolments has been shifting with a higher proportion of students now taking qualifications at higher levels. Recent increases in the rate at which level 1 to 3 certificates have been completed have kept the proportion of level 1 to 3 certificate completions at 57 percent despite the downward trend in enrolments at this level.

There were two-and-a-half times as many level 4 certificates completed at polytechnics in 2009 than in 1999. Over the same period, level 5 to 7 diplomas increased by 19 percent and the number of honours degrees and postgraduate certificates/diplomas almost trebled. Completions of bachelors-level qualifications by domestic students at polytechnics decreased substantially from 1999 to 2009. The overall completion pattern at polytechnics suggests an increased focus on their core role of delivering vocational qualifications and applied research that supports vocational learning.

At wānanga, qualification completions have shown strong growth from 1999 to 2009 at all qualification levels. The biggest contributors to the overall increase in completions were non-degree qualifications. Postgraduate qualification completions remained small in number, while there were five times as many completions of bachelors degrees in 2009 than in 1999.

#### Gender

From 1999 to 2009, the number of qualifications completed at public tertiary education institutions increased for men by 79 percent and for women by 61 percent (see Table 2). The number of non-degree qualifications completed showed the biggest increases over this period, while the number of bachelors and higher qualifications completed by female students increased more strongly than that for male students. Fifty-eight percent of all qualifications in 2009 were completed by women. In 1999, 60 percent of all qualifications were completed by women.

Table 2

Number of qualifications completed by full-time students at public tertiary education institutions by gender

	Fem	ales	Males		
	1999	2009	1999	2009	
Certificates 1-3	10,455	20,843	7,451	19,736	
Certificates 4	1,899	9,114	1,296	6,028	
Diplomas 5-7	4,453	5,547	2,477	3,525	
Bachelors degrees	1,2671	13,291	7,154	7,533	
Graduate certificates/diplomas	2074	2,485	1,210	1,210	
Honours and postgraduate certs/dips	2,642	4,718	2,394	2,901	
Masters	1,565	1,621	1,460	1,188	
Doctorates	185	329	240	299	
Total	35,944	57,948	23,682	42,420	

#### **Ethnic group**

Comparing the number of qualifications completed in 2009 at public tertiary education institutions with the number completed in 1999, Māori and Pasifika domestic students had the biggest percentage increases of the ethnic groups in the number of qualification completed. Māori and Pasifika students completed almost three times as many qualifications in 2009 as in 1999 (see Table 3). Asian domestic students completed more than two times as many qualifications in 2009 than in 1999 reflecting the increase in New Zealand's Asian population over that time. European domestic students completed 44 percent more qualifications in 2009 than 10 years earlier.

 Table 3

 Number of qualifications completed by full-time students at public tertiary education institutions by ethnic group

	Europeans		Māori		Pasifika		Asians	
	1999	2009	1999	2009	1999	2009	1999	2009
Certificates 1-3	10,666	22,046	3,857	12,129	1,059	2,914	1,862	5,697
Certificates 4	2,145	8,442	555	4,314	106	1,288	317	1,866
Diplomas 5-7	5,124	5,808	1,233	2,124	329	538	487	922
Bachelors degrees	15,582	14,771	1,897	2,156	546	1,039	2,151	3,635
Graduate certificates/ diplomas	2,678	2,626	319	307	102	141	248	706
Honours and postgraduate certificates/diplomas	3,958	5,364	287	582	75	245	666	1,462
Masters	2,127	1,883	179	215	56	82	557	605
Doctorates	317	449	16	29	4	13	55	129
Total	42,597	61,389	8,343	21,856	2,277	6,260	6,343	15,022

## 3.2 Qualifications completed at private training establishments

At private training establishments, qualification completions increased by 84 percent from 2000 to 2009 to 25,100 qualifications in response to the expansion of this sub-sector. Level 4 certificates and level 5 to 7 diplomas made the biggest contribution to the increase in the number of qualifications completed from 2000 to 2009.

**Table 4**Total number of qualifications completed by domestic students at private training establishments by level

	2000	2009
Certificates 1-3	8,426	11,399
Certificates 4	1,461	5,977
Diplomas 5-7	2,725	6,270
Bachelors degrees	159	401
Graduate certificates/diplomas	25	599
Honours and postgraduate certs/dips	799	417
Masters	22	58
Doctorates		
Total	13,617	25,121

## 4 COMPLETION RATES OF FULL-TIME STUDENTS

The full-time completion rate refers only to students who continuously studied full-time for a full-year (or for the length of the qualification if less than a year).

Seventy-one percent of the domestic full-time students who started study at public tertiary education institutions in 2005 had completed a qualification by 2009. For students who started study in 1996 the comparable rate was 62 percent. Underlying this improvement in the average qualification completion rate were increases in the completion rates at every qualification level.

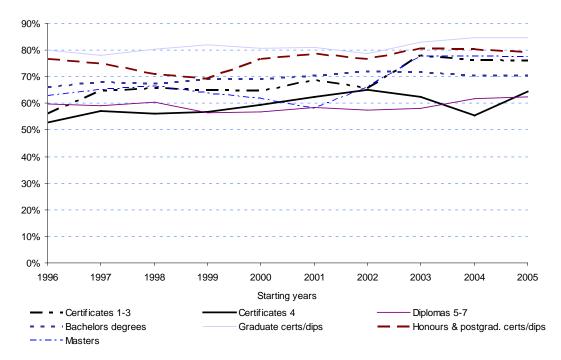
#### 4.1 Qualification level

The tertiary education achievement of full-time students varies by qualification level and the overall completion rates mask these differences. Full-time students complete bachelors or higher study programmes at a higher rate than level 5 to 7 diplomas and level 4 certificates.

The highest five-year full-time completion rate at public tertiary education institutions were achieved by people studying graduate certificates or diplomas. Of full-time students who started a graduate certificate or diploma in 2005, 85 percent had completed a qualification by 2009. This compared to 80 percent for honours degrees and postgraduate certificates/diplomas, 77 percent for masters degrees and 70 percent for bachelors degrees (see Figure 1). For information on doctoral students see Section 6.

Although most non-degree qualifications are completed at a lower rate by full-time students than higher-level qualifications, the five-year completion rates of certificate-level qualifications have improved substantially in recent years. For full-time students who started study in 2005, the five-year completion rate for level 1 to 3 certificates was 76 percent, compared to 56 percent for students who started study in 1996. The comparable rates were 64 percent and 53 percent for level 4 certificates and 63 percent to 60 percent for level 5 to 7 diplomas.

Figure 1
Five-year qualification completion rates of domestic full-time students by level

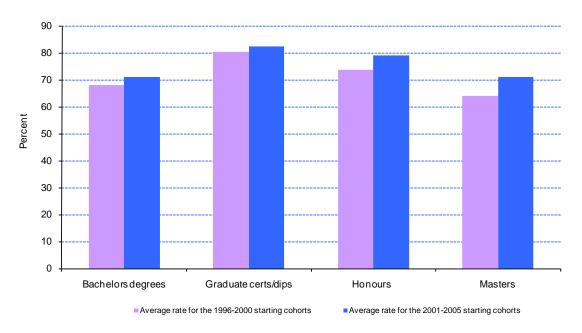


#### **Longer term trends**

Comparing the people who started study between 2001 and 2005, with the people who started study between 1996 and 2000, showed that the five-year qualification completion rate had improved, on average, at every qualification level (see Figures 2 and 3).

The five-year completion rate of full-timers in graduate certificates and diplomas averaged 82 percent for students who started study over the years between 2001 and 2005, and this compared to 80 percent for students who started study between 1996 and 2000. Comparable figures for the other qualification levels were: 79 percent and 74 percent for honours degrees and postgraduate certificates/diplomas; 71 percent and 68 percent for bachelors degrees; and 71 percent and 64 percent for masters degrees.

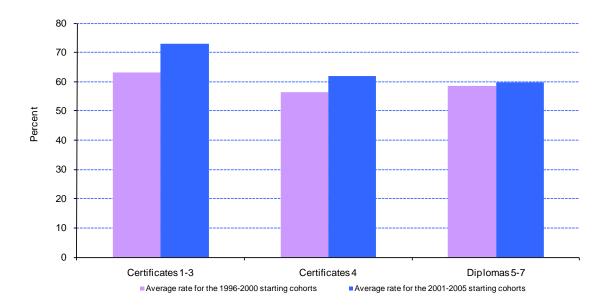
Figure 2
Five-year qualification completion rates for full-time students in bachelors and higher qualifications – comparing the average rate for the 2001-2005 starting cohorts with the 1996-2000 starting cohorts



Note: 'Honours' includes bachelors degrees with honours and postgraduate certificates/diplomas.

The completion rate for level 1 to 3 certificates averaged 73 percent for full-time students who started study between 2001 and 2005 and 63 percent for students who started study between 1996 and 2000. The reviews of non-degree qualifications held in 2004 and 2005 may have contributed to the recent improvement in the level 1 to 3 certificate completion rate in that less relevant qualifications, which may have had a lower completion rates, are no longer funded (Profile & Trends, 2006, p.92). The completion rate for level 4 certificates averaged 62 percent for full-time students who started study between 2001 and 2005 and 56 percent for students who started study between 1996 and 2000. The comparable rates for level 5 to 7 diplomas were 60 percent and 58 percent.

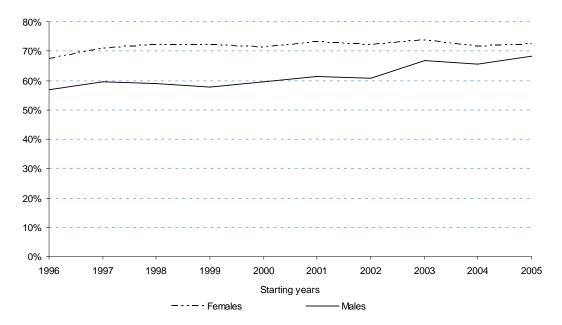
Figure 3
Five-year qualification completion rates for full-time students in non-degree qualifications – comparing the average rate for the 2001-2005 starting cohorts with the 1996-2000 starting cohorts



### 4.2 Gender

While females have higher qualification completion rates than males, the gender difference in the five-year qualification completion rate of full-time students has narrowed in recent years. This results from a more marked improvement in the completion rate of full-time male students. Of full-time students who started study in 2005, 68 percent of males completed a qualification by 2009, compared to 72 percent of females. This compared to a bigger gender difference for students who started study in 1996, with 57 percent of males and 67 percent of females completing a qualification by 2000.

Figure 4
Five-year qualification completion rates of domestic full-time students by gender



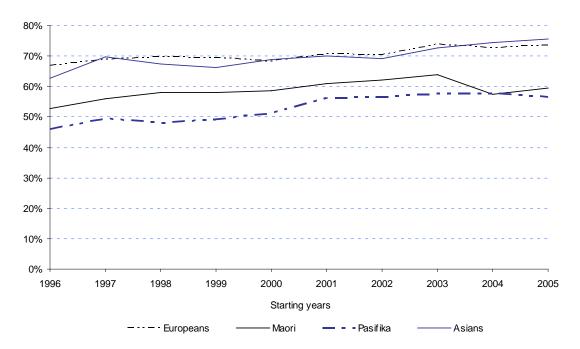
## 4.3 Ethnic groups

Comparing the cohort that started in 2005 with the cohort that started in 1996, the five-year qualification completion rate of full-time students increased for all ethnic groups. Of all full-time students starting study in 2005, 76 percent of Asians, 74 percent of Europeans, 60 percent of Māori and 57 percent of Pasifika had completed their study programmes by 2009.

Although Māori students had a lower completion rate, Māori participate in tertiary education at a higher rate than other ethnic groups. In 2004, the proportion of Māori aged 15 years or over participating in tertiary education was as high as 20 percent, compared to 14 percent for the population as a whole. In 2009, the Māori participation rate, at 17 percent, was 4 percentage points higher than the overall participation rate, with the higher participation in level 4 certificates, level 5 to 7 diplomas and level 1 to 3 certificates. While the five-year completion rate of Māori students who started study in 2005 increased on the previous year by 3 percentage points to 60 percent, the rate has fluctuated within a narrow band in recent years.

The Pasifika five-year completion rate for full-time students is also lower than the comparable overall completion rate, however, it has moved upwards in recent years to 57 percent.

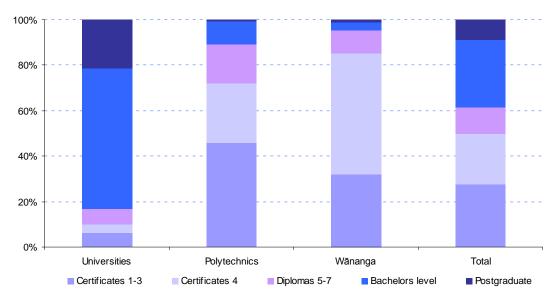
Figure 5
Five-year qualification completion rates of domestic full-time students by ethnic group



## 4.4 Provider type

Tertiary education provision varies by type of provider. Figure 6 shows that a high proportion of the qualifications started in 2005 by full-time students at universities were at bachelors or postgraduate level. In contrast, polytechnics and wānanga had non-degree qualifications as their main focus. Level 5 to 7 diplomas comprised 17 percent of all qualifications started in 2005 at polytechnics and 10 percent at wānanga. Level 4 certificates comprised 53 percent of all qualifications started in 2005 at wānanga and 26 percent at polytechnics. Level 1 to 3 certificates were most commonly studied at polytechnics. In 2005, 46 percent of qualifications started at polytechnics were level 1 to 3 certificates and 32 percent at wānanga (see Figure 6).

Figure 6
Distribution of the qualifications started in 2005 by domestic full-time students by sub-sector and level



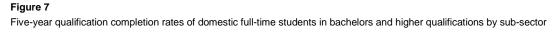
Of all bachelors degrees started by full-time students in 2005, 80 percent were started at a university and 15 percent at a polytechnic. Of all the graduate certificates and diplomas started in 2005 by full-time students, 78 percent were undertaken at a university, 16 percent at private training establishments (see Section 7) and 6.0 percent at a polytechnic. Of all the honours degrees and postgraduate certificates/diplomas started in 2005 by full-time students, 86 percent were undertaken at a university, 8.2 percent at a private training establishment (see Section 7) and 4.7 percent at a polytechnic.

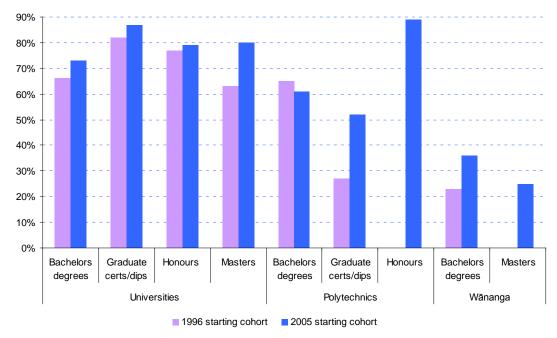
#### **Higher-level qualifications**

Full-time students at universities have been completing bachelors or higher qualifications at higher rates than before and at a higher rate than the sector average (Figure 7). Bachelors-level students at universities tend to be younger than polytechnic students and have a higher school achievement level. This suggests that universities are attracting more high-ability entrants than polytechnics and gaining a qualification is important to young people as they seek to enter the labour market. Of full-time students who started study at a university in 2005, 73 percent had completed a bachelors degree by 2009. This compared to 61 percent at polytechnics and 36 percent at wānanga. The comparable rates for graduate certificates and diplomas were: 87 percent at universities and 52 percent at polytechnics.

Of the full-time students who started study for an honours degree or a postgraduate certificate/diploma at a university in 2005, 79 percent had completed a qualification by 2009. The comparable figure was 89 percent for polytechnics.

Almost all masters degrees are undertaken at a university and 80 percent of the full-time students who started masters study in 2005 had completed this qualification by 2009. (See Section 6 for completion rates of doctoral students.)





#### Notes:

'Honours' includes bachelors degrees with honours and postgraduate certificates/diplomas.

<sup>&</sup>lt;sup>2</sup> Engler and Smyth (2011) showed that among young students leaving school and undertaking full-time degree study, the mean NCEA achievement score is 50 (on a scale of 0-100) while for polytechnics students it is 44. Engler and Smyth showed that among young full-time intramural degree students, there is almost no difference in the five-year qualification completion rate.

2. In 1996, there were no full-time students who started an honours degree or postgraduate certificate/diploma at a polytechnic or a masters degree at wānanga.

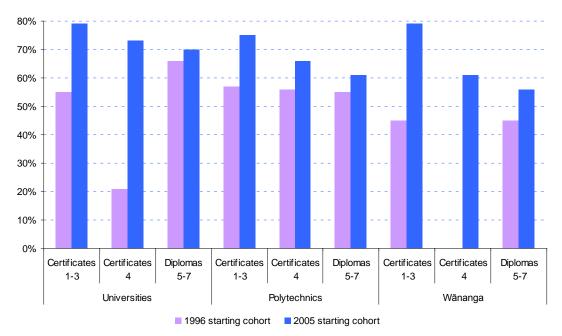
#### Non-degree qualifications

In recent years, full-time students have been completing non-degree qualifications at higher rates than before at all types of providers. Of the full-time students who started level 1 to 3 certificate study at a polytechnic in 2005, 75 percent had completed this qualification by 2009. The comparable figures were 79 percent for both wānanga and universities. At universities the increase in the five-year completion rate for level 1 to 3 certificates could reflect the expansion of certificates in university preparation and foundation studies.

Some variation among tertiary education providers exists in the rate of completion of level 4 certificates and level 5 to 7 diplomas. Of the full-time students who started level 4 certificate study at a polytechnic in 2005, 66 percent had completed this qualification by 2009. The comparable figures were 61 percent for wānanga and 73 percent for universities.

Of the full-time students who started level 5 to 7 diploma study at a polytechnic in 2005, 61 percent had completed this qualification by 2009. The comparable figures were 56 percent for wānanga and 70 percent for universities.

Figure 8
Five-year qualification completion rates of domestic full-time students in non-degree qualifications by sub-sector



Note: In 1996, there were no full-time students who started a level 4 certificate at wananga.

#### Longer term trends

Across all qualification levels, the five-year completion rate of full-time students has improved for each provider type. Students who started full-time study at a university between 2001 and 2005, averaged a five-year completion rate of 75 percent overall, compared to 69 percent for students who started study between 1996 and 2000. The comparable figures were 65 percent and 61 percent at polytechnics and 65 percent and 51 percent at wānanga.

Full-time students, who started a bachelors-degree at a university between 2001 and 2005, averaged a completion rate of 73 percent. This compared to 69 percent, on average, for university full-time students starting study between 1996 and 2000. The bachelors-degree completion rate at polytechnics fell by 1 percentage point from 65 percent, on average, for full-time students who started study between 1996 and 2000, to 64 percent, on average, for full-time

students who started study between 2001 and 2005. At wānanga, comparing the same years, the bachelors-degree completion rates of full-time students increased, on average, from 38 percent to 40 percent.

Full-time students, who started an honours degree or a postgraduate certificate/diploma at a university between 2001 and 2005, averaged a completion rate of 79 percent. This compared to a rate of 74 percent, on average, for university full-time students who started study between 1996 and 2000. The comparable five-year completion rate of full-time students at polytechnics was 71 percent between 2001 and 2005.<sup>3</sup>

Full-time students who started a graduate certificate or diploma at a university between 2001 and 2005 averaged a completion rate of 85 percent. This compared to 82 percent, on average, for full-time university students who started study between 1996 and 2000. The comparable figures for full-time students at a polytechnic were 65 percent and 52 percent.

<sup>3</sup> An average completion rate for polytechnic students in honours degrees and postgraduate certificates/diplomas was not able to be calculated for the years 1996 to 2000 as the numbers were small.

## 5 COMPLETION RATES OF PART-TIME STUDENTS

Students who have not studied continuously every year, or who have not studied full-time, for a full-year, are included in the part-time completion rate. For simplicity's sake, in this section, we describe all such students as part-time even though some have studied full-time and part-time during that period and some have studied part-time throughout.

Part-time students are completing their study programmes at higher rates than before, although their overall five-year completion rate, at 36 percent, is half the rate of full-time students. Among those doing part-time study are some who enrol in a few courses only, with no intention of completing a qualification – for instance, older people who already have a qualification, wanting to up-skill in a specific area. Part-time students not wanting to gain a qualification are part of the reason that part-time qualification completion rates are lower than those of full-time students (Scott 2009).

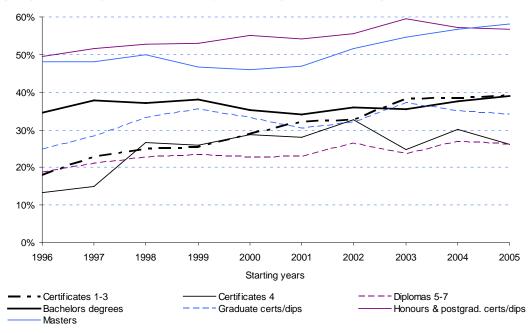
Of the part-time students who started study between 2001 and 2005, 34 percent, on average, had completed a qualification five years later. This compared to 28 percent, on average, for the part-time students who started study in the years between 1996 and 2000.

Of the 2005 starters, there were more than twice as many students included in the five-year parttime completion rate as in the five-year full-time completion rate. Students included in the parttime rate completed 46,400 qualifications between 2005 and 2009. Of these 12,900, or 28 percent, were bachelors or higher qualifications. This compared to 14,700, or 40 percent, bachelors or higher qualifications, completed over the same period, by full-time only students.

#### 5.1 Qualification level

While tertiary education achievement by part-time students varied by qualification level, the differences were less pronounced than for full-time students (compare Figure 9 below with Figure 1). Most of the completion rates by part-time students who started study in 2005, ranged from 26 percent to 39 percent. For students completing masters degrees and postgraduate certificates/diplomas the rates were around 60 percent.

Figure 9
Five-year qualification completion rates of domestic part-time tertiary education students by level



Of the part-time students who started bachelors-degree study in 2005, 39 percent had completed this qualification by 2009. Comparable figures for the other qualification levels were: 39 percent for level 1 to 3 certificates, 34 percent for graduate certificates/diplomas and 26 percent for both level 4 certificates and level 5 to 7 diplomas.

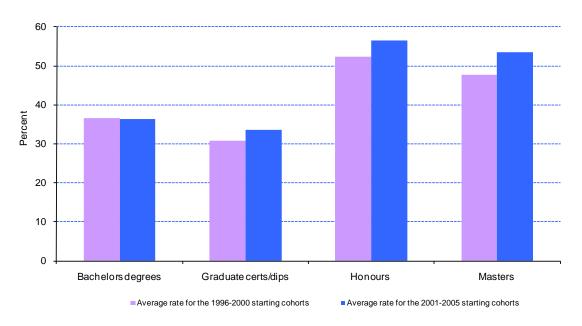
The highest part-time completion rates in 2009 were achieved by people studying postgraduate qualifications, other than doctoral degrees. These higher part-time rates reflect the nature of some postgraduate and masters qualifications. Many students start such qualifications by studying on a full-time basis but complete their thesis or dissertation part-time. In addition, degrees like a Master of Business Administration are designed to be completed on a part-time basis. Of part-time students who started an honours degree or a postgraduate certificate/diploma in 2005, 57 percent had completed this qualification by 2009. The comparable figure for masters degrees was 58 percent.

#### Longer term trends

Comparing the people who started study between 2001 and 2005, with the people who started study between 1996 and 2000, showed that the five-year completion rate of part-time students improved, on average, at every qualification level except for bachelors degrees. The five-year completion rate for bachelors degrees remained unchanged at 36 percent (Figure 10).

The five-year completion rate for graduate certificates and diplomas averaged 34 percent for part-time students who started study between 2001 and 2005. This compared to 31 percent, on average, for part-time students who started study between 1996 and 2000. Comparable figures for the other qualification levels were: 57 percent and 52 percent for honours degrees and postgraduate certificates/diplomas and 53 percent and 48 percent for masters degrees.

Figure 10
Five-year qualification completion rates for part-time students in bachelors and higher qualifications – comparing the average rate for the 2001-2005 starting cohorts with the 1996-2000 starting cohorts

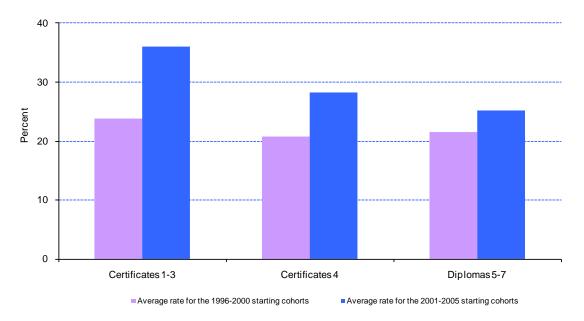


Note: 'Honours' includes bachelors degrees with honours and postgraduate certificates/diplomas.

The five-year completion rate for level 5 to 7 diplomas averaged 25 percent for part-time students who started study over the years between 2001 and 2005. This compared to 22 percent, on average, for part-time students who started study between 1996 and 2000. Comparable figures for the other non-degree qualifications were: 28 percent and 21 percent for level 4 certificates and 36 percent and 24 percent for level 1 to 3 certificates.

Figure 11

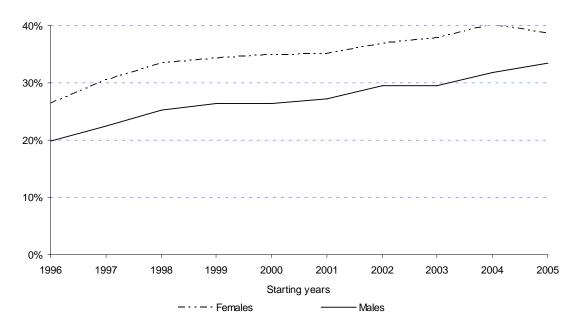
Average completion rates for part-time students in non-degree qualifications – comparing the average rate for the 2001-2005 starting cohorts with the 1996-2000 starting cohorts



### 5.2 Gender

Over the last 10 years, the five-year qualification completion rates of part-time students have improved for both men and women, while the difference in tertiary education achievement between them remained unchanged. Of part-time students who started study by 2005, 33 percent of males had completed a qualification in 2009, compared to 39 percent of females. Of students who started study in 1996, 20 percent of males and 26 percent of females for students had completed a qualification by 2000.

Figure 12
Five-year qualification completion rates of domestic part-time students by gender



## 5.3 Ethnic groups

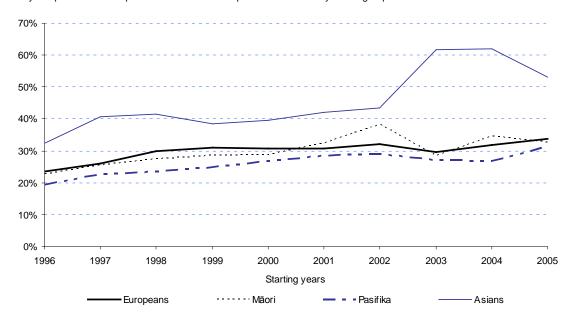
Comparing the people who started study in 2005 with the people who started study in 1996, showed that the five-year qualification completion rate of part-time students has increased significantly overall for each ethnic group. The most substantial of these improvements occurred for the Asian ethnic group (up 21 percentage points) and Pasifika students (up 12 percentage points).

Of the part-time students starting study in 2005, 53 percent of Asians completed their study programmes by 2009. The comparable rate was 34 percent for Europeans, 33 percent for Māori and 31 percent for Pasifika.

Comparing European, Māori and Pasifika students who started study in 2005, the main difference underlying their overall completion rates is that level 4 certificates are completed at higher rates by Māori and Pasifika, while Europeans complete bachelors degrees at a higher rate.

Figure 13 shows that Asian part-time students have a higher overall completion rate due to higher rates of completion at every qualification level. The higher completion rates of Asian part-time students who started study in 2003 and 2004 coincided with unusually high increases in level 1 to 3 certificate enrolments by Asian students in those years. The number of domestic Asian students starting a level 1 to 3 certificate doubled in 2003 and these enrolments increased by another 45 percent in 2004. Asian part-time students who started level 1 to 3 certificates in 2003 and 2004 completed these qualifications at higher rates than before and at a higher rate than the sector average. These increases in the level 1 to 3 certificate completion rate contributed, in part, to the higher overall completion rates in 2003 and 2004 of Asian part-time students.

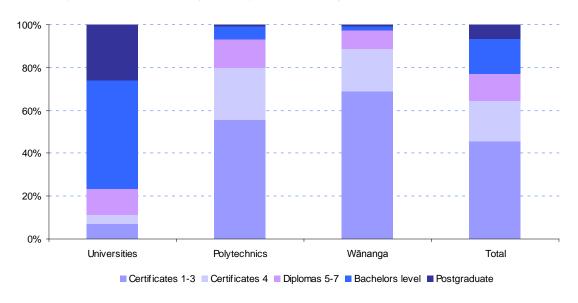
Figure 13
Five-year qualification completion rates of domestic part-time students by ethnic group



## 5.4 Provider type

In 2005, 51 percent of part-time students at universities started a bachelors degree and 26 percent started a postgraduate qualification (Figure 14). Postgraduate study is mostly undertaken at universities and, in 2005, 90 percent of all honours degrees or postgraduate certificates and diplomas started at tertiary education institutions by part-timers were started at a university. Similarly, 75 percent of all graduate certificates and diplomas started by part-timers at tertiary education institutions in 2005 were started at a university.

Figure 14
Distribution of qualifications started in 2005 by domestic part-time students by sub-sector and level



At polytechnics and wānanga, part-time students were concentrated in non-degree qualifications with the majority studying level 1 to 3 certificates and around 25 percent undertaking level 4 certificates.

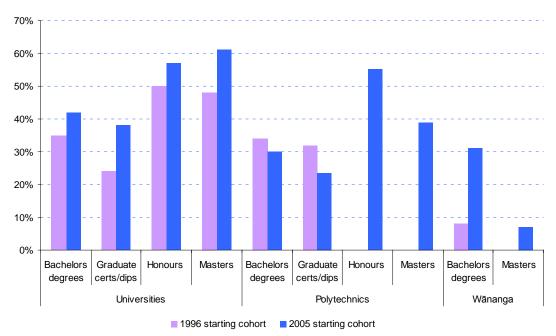
#### **Higher-level qualifications**

Of part-time students who started study for a bachelors degree at a university in 2005, 42 percent had completed the qualification by 2009. This compared to 30 percent at polytechnics and 31 percent at wānanga. The comparable rates for graduate certificates and diplomas were: 38 percent at universities and 23 percent at polytechnics. The student population at polytechnics and wānanga is older and these types of students have lower completion rates because of greater work and family commitments. Also, older students are less likely to be focussed on qualifications and more likely to be interested in taking a course to up-skill.

Of the part-time students who started study for an honours degree or a postgraduate certificate/diploma at a university in 2005, 57 percent had completed this qualification by 2009. The comparable figure was 55 percent at polytechnics.

Masters degrees are mainly undertaken at universities and 61 percent of the part-time students who started masters study at a university in 2005 had completed this qualification by 2009.

Figure 15
Five-year qualification completion rates of domestic part-time students in bachelors and higher qualifications by sub-sector



#### Notes

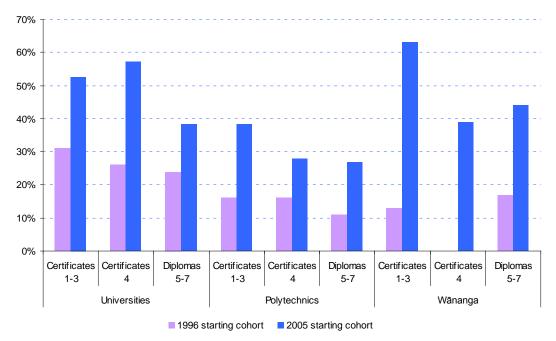
#### Non-degree qualifications

Comparing the cohort of students that started in 2005 with the cohort that started in 1996, part-time students are completing level 1 to 3 certificates at considerably higher rates than before (see Figure 16). The completion rate for part-time students of level 4 certificates and level 5 to 7 diplomas by part-time students also increased.

<sup>1. &#</sup>x27;Honours' includes bachelors degrees with honours and postgraduate certificates/diplomas.

<sup>2.</sup> In 1996, there were no part-time students who started an honours degree, a postgraduate certificate/diploma or a masters degree at a polytechnic or a masters degree at wānanga.

Figure 16
Five-year qualification completion rates of domestic part-time students in non-degree qualifications by sub-sector



Of the part-time students who started level 1 to 3 certificate study at a polytechnic in 2005, 34 percent had completed this qualification by 2009. The comparable figures were 63 percent for wananga and 44 percent for universities.

Of the part-time students who started level 4 certificate study at a polytechnic in 2005, 23 percent had completed this qualification by 2009. The comparable figures were 38 percent for wānanga and 48 percent for universities.

Of the part-time students who started level 5 to 7 diploma study at a polytechnic in 2005, 22 percent had completed this qualification by 2009. The comparable figures were 44 percent for wannaga and 33 percent for universities.

#### **Longer term trends**

Across all qualification levels, the five-year qualification completion rate of part-time students has improved for each provider type.

Between 2001 and 2005, the five-year qualification completion rate of part-time students at universities averaged 42 percent overall, compared to 37 percent for the years between 1996 and 2000. Increases in the completion rate at every qualification level contributed to this overall improvement in the five-year qualification completion rate of part-time students at universities.

Between 2001 and 2005, the five-year qualification completion rate of part-time students at polytechnics averaged 26 percent overall, compared to 22 percent for the years between 1996 and 2000. When looking at the type of qualifications completed at polytechnics, the pattern for part-time students was similar to that of full-time students – the completion rate improved for postgraduate qualifications and non-degree qualifications, it remained stable for graduate certificates and diplomas, while the rate dropped for bachelors degrees.

Between 2001 and 2005, the five-year qualification completion rate of part-time students at wānanga averaged 50 percent overall, compared to 22 percent for the years between 1996 and 2000. Above-average completion rates for non-degree qualifications contributed to this overall improvement in the five-year qualification completion rate of part-time students at wānanga.

Among part-time students starting study of level 1 to 3 certificates, between 2001 and 2005, those studying at wānanga averaged the highest completion rate, at 53 percent. This compared to an average rate of 24 percent for wānanga part-time students who started study between 1996 and 2000. Over the period from 2001 to 2005, participation at wānanga grew rapidly and the programmes and qualifications offered were different from those taught earlier. The comparable figures for the other provider types were: 45 percent and 37 percent at universities and 28 percent and 22 percent at polytechnics.

For level 4 certificates, part-time students starting study at a university between 2001 and 2005 averaged the highest completion rate, at 49 percent. This compared to an average rate of 41 percent for university students who started study over the years between 1996 and 2000. The comparable figures for the other tertiary education institutions were: 43 percent and 22 percent at wānanga and 22 percent and 17 percent at polytechnics.

Among part-time students taking level 5 to 7 diplomas, those starting study at wānanga between 2001 and 2005 averaged the highest completion rate of 35 percent. This compared to an average of 20 percent for part-time wānanga students who started study between 1996 and 2000. The comparable figures for the other tertiary education institutions were 31 percent and 28 percent at universities and 21 percent and 18 percent at polytechnics.

## 6 COMPLETION RATES OF DOCTORAL STUDENTS

Many doctoral students take longer than five years to complete their qualification, so for these students we look at the eight-year completion rate. We analysed the achievement of six starting cohorts. The first cohort of students started study in 1997 and the last cohort of students started study in 2002. For each starting cohort, the rate of qualification completion was calculated eight years after starting study. All doctoral study reported on here was started at a university.

New Zealand's doctoral students are completing their study programmes at higher rates than before. The eight-year qualification completion rate of doctoral students increased steadily for each cohort starting study between 1997 and 2002. Of the students who started doctoral study in 2002, 61 percent had completed their qualification by 2009. The eight-year rate of the students who started doctoral study in 1997 was 12 percentage points lower at 49 percent.

The higher rates of doctoral completion may have been influenced, in part, by the introduction of performance-based funding. Starting in 2004, part of the government's research funding for tertiary education institutions was shifted to the Performance-Based Research Fund. Twenty-five percent of the fund's allocation is based on the number of research degree completions by the tertiary education provider, providing a stronger incentive for universities to select doctoral students carefully and to support them more effectively in their studies (Smart 2007).

#### Gender

There were only small differences in the eight-year doctoral degree completion rates between men and women from 1997 through to 2009. Of doctoral students who started study in 2002, 61 percent of males completed their qualification in 2009, compared to 60 percent of females. This compared to 49 percent of males and 50 percent of females for the students who started doctoral study in 1997.

#### **Ethnic group**

Comparing the 2002 starting cohort with the 1997 starting cohort, the eight-year qualification completion rate of doctoral students increased for the European, Asian and Other ethnic groups. The most substantial of these improvements occurred for the European ethnic group (up 14 percentage points to 63 percent). The eight-year qualification completion rate of Māori doctoral students (42 percent for students who started study in 2002) continued to be lower than for the other ethnic groups. Because of the difficulty of calculating completion rates for small groups of students, Pasifika doctoral students are not included here.

**Table 5**Eight-year qualification completion rates of domestic doctoral students

Starting years:	1997	1998	1999	2000	2001	2002
All doctoral students	49%	48%	54%	57%	60%	61%
Females	50%	46%	51%	57%	60%	60%
Males	49%	50%	57%	58%	61%	61%
Europeans	49%	50%	56%	60%	60%	63%
Māori		50%	41%	45%	53%	42%
Asians	53%	47%	54%	64%	70%	57%
Other ethnic group	56%	39%	61%	46%	58%	60%

# 7 COMPLETION RATES AT PRIVATE TRAINING ESTABLISHMENTS

Information on tertiary education achievement at private tertiary education providers has been included in the Ministry of Education's statistical collections from 2000 onwards. The qualification completions analysed for domestic students at private training establishments covered the years from 2000 to 2009, involving six starting cohorts of students. The first cohort started study in 2000 and the last cohort started study in 2005. For each cohort, the rate of qualification completion was calculated five years after starting study.<sup>4</sup>

There was variability in the full-time and part-time completion rates at private training establishments. This reflects the very substantial growth in private training establishments over the period from 2000 to 2002 in response to changes in funding policy. As a result of these changes there were differences in the types of students, types of qualifications and teaching approaches between the early years of the decade and the later period.

#### 7.1 Full-time domestic students

The full-time completion rate refers to students who continuously studied full-time for a full-year (or for the length of the qualification if less than year). Level 1 to 3 certificates were the most common qualification studied by full-time students at private training establishments, comprising 41 percent of all qualifications started in 2005. Level 4 certificates comprised 25 percent and level 5 to 7 diplomas comprised 24 percent of all qualifications started at private training establishments in 2005. Nine percent of full-time students who started study at a private training establishment in 2005 were undertaking a bachelors or higher qualification.

Over the period from 2000 to 2009, the five-year qualification completion rate of domestic full-time students at private training establishments has varied from year to year at most qualification levels (see Table 6). However, at most qualification levels the rates for those who started in 2005 were higher than for the 2000 starters. Across all the qualification levels, 74 percent of the full-time students who started study in 2005 had completed a qualification by 2009. This compared to 67 percent of the students who started study in 2000.

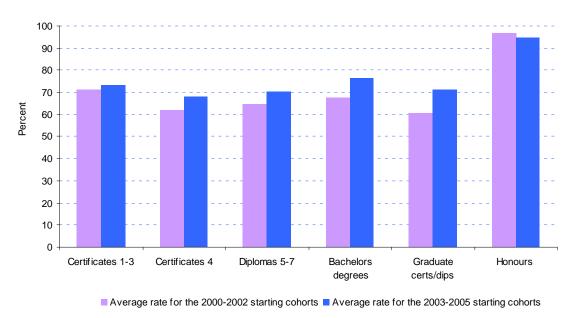
Table 6
Five-year qualification completion rates of domestic full-time tertiary education students at private training establishments

Starting years:	2000	2001	2002	2003	2004	2005
Certificates 1-3	70%	76%	68%	70%	74%	75%
Certificates 4	58%	63%	66%	69%	68%	67%
Diplomas 5-7	67%	67%	62%	67%	71%	73%
Bachelors degrees	82%	75%	51%	86%	79%	66%
Graduate certificates/diplomas			61%	40%	95%	95%
Honours and postgraduate certificates/diplomas	98%		95%	91%	96%	98%
Total	67%	71%	65%	69%	73%	74%

<sup>&</sup>lt;sup>4</sup> See Section 2 for the definitions of full-time and part-time students which have been used to calculate the qualification completion rates.

Comparing the cohorts who started study between 2003 and 2005, with the cohorts who started study between 2000 and 2002, showed that the five-year completion rate of full-time students at private training establishments improved overall, averaging an increase from 68 percent to 72 percent. Figure 17 shows the average five-year qualification completion rates of full-time students for the years 2000 to 2002 and 2003 to 2005. The average five-year completion rates improved at every qualification level except for honours degrees and postgraduate certificates/diplomas which fell from 97 percent to 95 percent.

Figure 17
Five-year qualification completion rates for full-time students in private training establishments – comparing the average rate for the 2003-2005 starting cohorts with the 2000-2002 starting cohorts



Note: 'Honours' includes bachelors degrees with honours and postgraduate certificates/diplomas.

#### **Qualification level**

Level 1 to 3 certificates are completed by full-time students at private training establishment at higher rates than before. Of the starting student in 2005, 75 percent had completed a level 1 to 3 certificate, compared to 70 percent of the starting students in 2000.

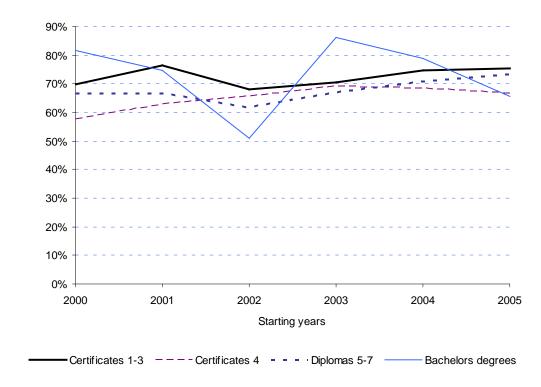
Level 4 certificates and level 5 to 7 diplomas are also completed by full-time students at private training establishment at higher rates than before. Of the students who started study for a level 4 certificate in 2005, 67 percent had completed this by 2009 and of the students who started a level 5 to 7 diploma, 73 percent had completed this by 2009. This compared to 58 percent and 67 percent, respectively, for students who started study in 2000.

Of private training establishment full-time students who started a bachelors degree in 2005, 66 percent had completed their qualification by 2009. The bachelors-degree completion rate was higher, at 82 percent, for students who started study in 2000.

Ninety-five percent of private training establishment students who started a graduate certificate/diploma in 2005 had completed this by 2009. The qualification completion rate for honours degrees and postgraduate certificates/diplomas was also high at 98 percent for students who started study in 2005. Although the number of full-time students in bachelors or higher

qualification at private training establishments continues to increase, this group represented only 9.0 percent of all full-time students in 2005, or 903 students.

Figure 18
Five-year qualification completion rates of domestic full-time students at private training establishments by level



Note: There were no graduate certificates/diplomas or honours degrees and postgraduate certificates/diplomas started by students at private training establishment in the early 2000s.

#### Gender

Over the last 10 years, the five-year qualification completion rate of full-time students at private training establishments has improved for males and females, while the gender difference has remained similar. Of full-time students who started study in 2005, 72 percent of males completed a qualification by 2009, compared to 75 percent of females. Of the students who started study in 2000, 64 percent of males and 69 percent of females had completed a qualification by 2005.

#### Ethnic group

Comparing the people who started study in 2005 with the people who started study in 2000, the five-year qualification completion rate of full-time students at private training establishments has increased overall for all ethnic groups, except Māori students for whom the rate remained unchanged at 62 percent. The biggest increase occurred for the Other ethnic group (up 13 percentage points to 78 percent). The comparable rates for the other ethnic groups were: 82 percent for Asian students (up by 12 percentage points), 64 percent for Pasifika students (up 10 percentage points) and 80 percent for European students (up 10 percentage points).

## 7.2 Part-time domestic students

Students who have not studied continuously every year, or who have not studied full-time, for a full-year, are included in the part-time completion rate. For simplicity sake, in this section, we describe all such students as part-time even though some have studied full-time and part-time during that period and some have studied part-time throughout. Part-time students tend to have lower completion rates.

Of the 2005 starters at private training establishments, 26,200 students were included in the five-year part-time completion rate, compared to 10,100 students included in the five-year full-time completion rate. Of the part-time students starting in 2005, 56 percent studied level 1 to 3 certificates and 23 percent studied level 4 certificates. Level 5 to 7 diplomas comprised 19 percent of all qualifications started at private training establishments in 2005.

Domestic part-time students at private training establishments are completing their study programmes at a slightly lower rate overall than before (see Table 7). Consequently, the gap in the five-year qualification completion rate of part-time and full-time students has widened at private training establishments in recent years. An increase, in 2005, in the proportion of full-time students who started study in bachelors or higher qualifications contributed, in part, to the larger difference between part-timers and full-timers as higher-level qualifications are completed higher rates than non-degree qualifications.

Table 7
Five-year qualification completion rates of domestic part-time tertiary education students at private training establishments

Starting years:	2000	2001	2002	2003	2004	2005
Certificates 1-3	47%	43%	37%	47%	39%	40%
Certificates 4	37%	42%	41%	43%	33%	30%
Diplomas 5-7	41%	40%	31%	42%	41%	33%
Bachelors degrees	30%	24%	25%	31%	32%	30%
Graduate certificates/diplomas	40%	25%	23%	31%	69%	67%
Honours and postgraduate certificates/diplomas	95%	96%	94%	95%		86%
Masters	54%	33%	64%	56%	64%	48%
Total	45%	43%	36%	46%	38%	37%

The longer-term trend shows that the five-year completion rate of part-time students at private training establishments averaged 40 percent across all qualification levels for people who started study from 2003 through to 2005, compared to 41 percent for those who started study from 2000 through to 2002. Level 4 certificates made a significant downward contribution to this decrease in the average completion rate. The level 4 certificate completion rate averaged 35 percent for part-time students who started study between 2000 and 2002, compared to 40 percent of part-time students who started study between 2003 and 2005 (Figure 19). In contrast, the average qualification completion rate at private training establishments improved for part-time students at most other qualification levels, while it remained stable for level 1 to 3 certificate study.

The highest qualification completion rates were achieved by postgraduate students but these students represented less than 1 percent of all part-time students at private training establishments. When the students who started a bachelors or higher qualifications were combined they represented less than 3 percent of all part-time students at private training establishments in 2005.

Figure 19

Five-year qualification completion rates for part-time students in private training establishments – comparing the average rate for the 2003-2005 starting cohorts with the 2000-2002 starting cohorts

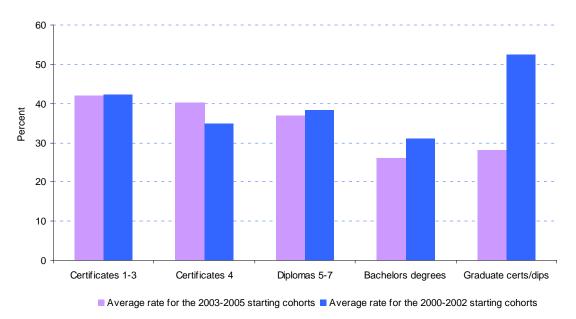
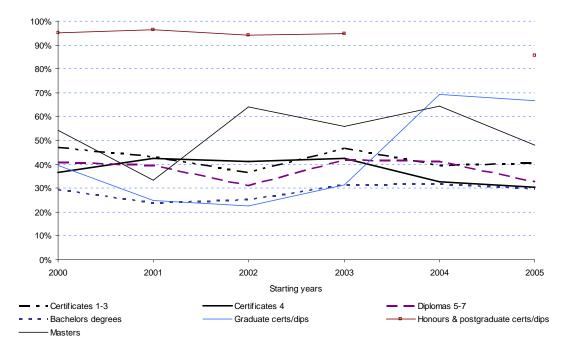


Figure 20 shows that of the part-time students who started a level 1 to 3 certificate at a private training establishment in 2005, 40 percent had completed a qualification by 2009. This compared to 47 percent of students who started study in 2000. The figures for level 4 certificates were 30 percent for students who started in 2005 and 37 percent for students who started in 2000. The figures for level 5 to 7 diplomas were 33 percent for students who started in 2005 and 41 percent for students who started in 2000.

Of part-time students who started a bachelors degree in 2005, 30 percent had completed this by 2009. The completion rate of bachelors-degree students who started study in 2000 was also 30 percent. The comparable figures for the other higher-level qualifications were: 67 percent and 40 percent for graduate certificates/diplomas, 86 percent and 95 percent for honours degrees and postgraduate certificates/diplomas and 48 percent and 54 percent for masters degrees.





#### Gender

The gender difference in tertiary education achievement of part-time students at private training establishments has widened from 2 to 11 percentage points in favour of female students. Of the students who started study in 2005, 42 percent of female students had completed a qualification by 2009, compared to 31 percent of males. This compared with 46 percent of females and 44 percent of males for students who started study in 2000.

#### Ethnic group

Comparing the people who started study in 2005 with the people who started study in 2000, the five-year qualification completion rate of part-time students at private training establishments decreased overall for all ethnic groups with the exception of the Pasifika ethnic group. The qualification completion rate of Pasifika students remained stable at 41 percent, while it fell for the other ethnic groups by: 11 percentage points to 44 percent for Asians, by 10 percentage points to 43 percent for the Other ethnic group, by 9 percentage points to 33 percent for Māori and by 9 percentage points to 36 percent for Europeans.

## 8 DISCUSSION

New Zealanders are completing their study programmes at higher rates than before. Of the domestic full-time students who started study at public tertiary education institutions in 2005, 71 percent had completed a qualification by 2009. For students who started study in 1996 the comparable rate was 62 percent.

There may be several possible reasons for the recent improvement in the qualification completion rates. Tertiary education institutions may be matching their students' interests and ability to qualifications better, in response to the increased focus on qualification completion. Another reason is associated with the publishing of qualification completions rates which only started in 2004. It was not until 2009 that rates became available publicly at provider level and this, together with the government's announcement to link some part of funding to qualification completion, has increased the focus on the rate at which students complete their qualifications. Tertiary education organisations have recently spent more time in developing reporting systems that enable accurate qualification completions data to be supplied to the Ministry of Education.

Further, there has been a switch in participation from older people to younger people. We see the number of older people declining as the number of younger people rises. Older people, for whom qualification completion may be less important and who have greater family and work commitments, tend to have lower completion rates. So the move to younger students may be a factor in the rising completion rate.

Offsetting these, there are also factors that may be working against an increase in the rate of qualification completion. The first is that increased participation in tertiary education can sometimes lower completion rates. This is because as participation increases, providers are more likely to be enrolling more people who are less likely to succeed in study. Those most likely to succeed would have enrolled anyway, so when participation expands, those drawn into the system are more likely to be those who find study difficult.

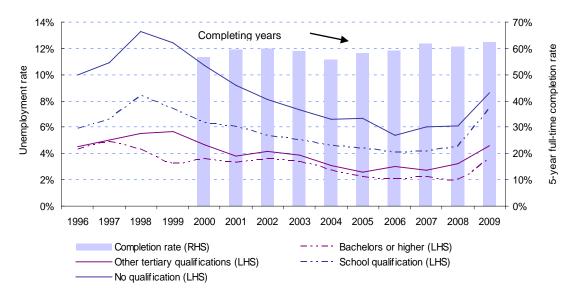
There is already some evidence of this trade-off between access and completion rates. The five-year completion rates for 18 to 19 year-olds in bachelors degrees decreased from 69 percent for students who started study in 2003 to 66 percent for students who started study in 2005. Over the period from 2003 to 2005, the number of 18 to 19 year-olds starting degrees increased, but the number completing their qualification within five years increased by a lesser amount causing the qualification completion rate for younger students to decrease (Ministry of Education, 2010).

That trade-off between access and completion is also well known in the United Kingdom where universities with best performance on access measures often have lower completion rates.

Another factor that may influence the rate of qualification completion is the economic cycle. It may be thought that during a period of strong employment growth, students may be encouraged to leave study for work, often before completing their study, and, conversely, as unemployment rises, students may stay on – and hence, complete their study – because they have fewer alternatives and because they may think they stand a better chance of employment if they gain a qualification. The data does not support that hypothesis – while completions fell off slightly in between 2002 and 2004 as unemployment fell, there was a recovery in 2005 despite continued falls in unemployment.

The rate at which students complete qualifications is influenced by all these factors and comparisons between the performances of students become more meaningful when the different types of students and the qualifications being studied are distinguished.

Figure 21
Unemployment rates by qualification level and the five-year qualification completion rates of domestic full-time students



Note: The starting year for each cohort is four years before the measured completion year. That is, the 2009 completion rate relates to the 2005 starters, and those shown in the 2000 completion data started in 1996.

Domestic students at public tertiary education institutions, who studied full-time for a full-year, without taking a break in their study, accounted for 29 percent of all the students who started study in 2005. This study showed that the qualification completion rates achieved by these students at bachelors or higher level ranged from 70 percent for bachelors degrees to 85 percent for graduate certificates and diplomas (excludes doctorates). These rates were higher than rates achieved by students who studied full-time for the full-year, without taking a break in their study, but who studied a lower-level qualification. The completion rates of these students ranged from 63 percent for level 5 to 7 diplomas to 76 percent for level 1 to 3 certificates. The rates achieved by full-time students at bachelors or higher level were, of course, substantially higher than the rates achieved by part-time students which ranged from 34 percent for graduate certificates and diplomas to 58 percent for masters degrees.

New Zealand belongs to a small group of countries where the rate of part-time higher education study is particularly high. When New Zealand's overall qualification completion rate is compared to that for other countries with low levels of part-time participation, we do not compare well. When the rates are disaggregated into full-time and part-time rates, the apparent differences are eliminated. A recent study of international comparisons which focussed on the qualification completion of full-time students (Scott, 2009) included rates calculated as far out as nine years after study. The study showed that the six-year qualification completion rate for bachelors degrees was some 5 percent higher than the five-year rate. The study also illustrates that after disaggregating rates and adjusting for study-related differences, New Zealand's bachelors-degree completion rate, at around 73 percent, compares favourably with other countries.

Adjusting the qualification completion rate for part-time students not wanting to gain a qualification remains a challenge at this time as these students are part of the reason that part-time qualification completion rates are lower and we do not collect information on students' study intentions.

# APPENDIX A COMPLETION RATES

Table 8 Five-year qualification completion rates of domestic full-time students by sub-sector (excl. private training establishments)

aubaastar	Otantia a	1000	1007	1000	1000	2000	2004	2000	2000	2004	2005
subsector	Starting years:										
Universities	Certificates 1-3				77%						
	Certificates 4	21%			39%					76%	
	Diplomas 5-7	66%	62%		59%		70%		66%	73%	
	Bachelors degrees	66%	69%		70%			74%			
	Graduate certificates/diplomas	82%	81%	83%	83%			82%	85%	86%	87%
	Honours & postgrad. certs/dips.	77%	75%	71%	69%	77%	79%	77%	82%	80%	79%
	Masters	63%	65%	67%	65%	63%	59%	67%	78%	78%	80%
	Doctorates	34%	30%	29%	24%	28%	34%	36%	33%	29%	26%
	Total	66%	68%	69%	69%	71%	73%	74%	76%	76%	75%
Polytechnics	Certificates 1-3	57%	64%	64%	63%	62%	66%	60%	76%	74%	75%
	Certificates 4	56%	62%	59%	59%	57%	59%	62%	53%	59%	66%
	Diplomas 5-7	55%	57%	56%	56%	56%	55%	56%	58%	61%	61%
	Bachelors degrees	65%	66%	67%	65%	61%	65%	63%	66%	63%	61%
	Graduate certificates/diplomas	27%	40%	63%	76%	71%	59%	60%	70%	73%	52%
	Honours & postgrad. certs/dips.			47%	67%	71%	65%	73%	61%	84%	89%
	Total	57%	63%	63%	61%	60%	62%	60%	67%	66%	69%
Wānanga	Certificates 1-3	45%	45%	43%	60%	75%	82%	76%	82%	83%	79%
	Certificates 4					65%	69%	67%	68%	46%	61%
	Diplomas 5-7	45%	53%	55%	52%	54%	50%	55%	47%	50%	56%
	Bachelors degrees	23%	38%	37%	52%	47%	40%	45%	42%	38%	36%
	Masters				33%	15%					25%
	Total	43%	47%	48%	55%	63%	66%	67%	69%	59%	65%
Public providers	Certificates 1-3	56%	65%	66%	65%	65%	69%	66%	78%	77%	76%
	Certificates 4	53%	57%	56%	57%	59%	63%	65%	62%	55%	64%
	Diplomas 5-7	60%	59%	60%	57%	57%	58%	58%	58%	62%	63%
	Bachelors degrees	66%	68%	67%	69%	69%	70%	72%	72%	71%	70%
	Graduate certificates/diplomas	80%	78%	81%	82%	81%	81%	79%	83%	85%	85%
	Honours & postgrad. certs/dips.	77%	75%	71%	69%	77%	79%	77%	81%	80%	80%
	Masters	63%	65%	66%	64%	62%	58%	66%	78%	78%	77%
	Doctorates	34%	30%	29%	24%	28%	34%	36%	33%	29%	26%
	Total	62%	66%	66%	66%	66%	68%	67%	71%	69%	71%
Total (incl. private training establishments)	Certificates 1-3	56%	65%	66%	65%	66%	71%	66%	77%	76%	76%
	Certificates 4	53%	57%	56%	57%	59%	63%	65%	63%	58%	65%
	Diplomas 5-7	60%	59%	60%	57%	60%	61%	59%	60%	64%	66%
	Bachelors degrees	66%	68%	67%	69%	69%	70%	72%	72%	71%	70%
	Graduate certificates/diplomas	80%	78%	81%	82%	81%	81%	78%	82%	86%	86%
	Honours & postgrad. certs/dips.				69%						
	Masters	63%			64%			66%		77%	
	Doctorates				24%						
	Total				66%						
		,5	- 3 , 3	- 3,0		- 3,0		, 0	. 5,0	. 3,3	/

# APPENDIX A CONTINUED - COMPLETION RATES

 Table 9

 Five-year qualification completion rates of domestic part-time by sub-sector (excl. private training establishments)

subsector	Starting years:	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Universities	Certificates 1-3	31%	37%	37%	40%	42%	41%	44%	48%	46%	44%
	Certificates 4	26%	36%	49%	46%	55%	49%	47%	54%	49%	48%
	Diplomas 5-7	24%	27%	30%	32%	27%	27%	32%	31%	34%	33%
	Bachelors degrees	35%	38%	38%	39%	37%	36%	38%	38%	40%	42%
	Graduate certificates/diplomas	24%	28%	34%	36%	33%	29%	30%	37%	38%	38%
	Honours & postgrad. certs/dips.	50%	52%	52%	53%	55%	54%	55%	59%	57%	57%
	Masters	48%	48%	50%	47%	47%	48%	53%	56%	58%	61%
	Doctorates	29%	26%	25%	22%	28%	27%	30%	30%	30%	34%
	Total	33%	37%	39%	40%	39%	38%	40%	42%	44%	45%
Polytechnics	Certificates 1-3	16%	21%	23%	23%	26%	28%	25%	27%	26%	34%
	Certificates 4	11%	12%	19%	21%	24%	22%	24%	20%	24%	23%
	Diplomas 5-7	16%	17%	19%	20%	20%	20%	22%	19%	22%	22%
	Bachelors degrees	34%	37%	35%	37%	29%	29%	30%	29%	31%	30%
	Graduate certificates/diplomas	32%	28%	28%	34%	36%	35%	40%	38%	26%	23%
	Honours & postgrad. certs/dips.		21%	67%	66%	60%	66%	69%	70%	61%	55%
	Masters			42%	28%	23%	26%	36%	32%	39%	39%
	Total	17%	21%	23%	24%	25%	26%	25%	24%	25%	30%
Wānanga	Certificates 1-3	13%	18%	27%	35%	40%	39%	46%	55%	65%	63%
	Certificates 4					22%	46%	47%	38%	47%	38%
	Diplomas 5-7	17%	19%	22%	21%	23%	23%	29%	44%	43%	44%
	Bachelors degrees	8%	19%	27%	19%	36%	17%	20%	15%	22%	31%
	Total	14%	19%	24%	26%	37%	40%	45%	51%	59%	56%
Public providers	Certificates 1-3	18%	23%	25%	26%	29%	32%	33%	38%	38%	39%
	Certificates 4	13%	15%	27%	26%	29%	28%	33%	25%	30%	26%
	Diplomas 5-7	19%	21%	23%	23%	23%	23%	26%	24%	27%	26%
	Bachelors degrees	34%	38%	37%	38%	35%	34%	36%	36%	38%	39%
	Graduate certificates/diplomas	25%	28%	33%	35%	33%	30%	32%	37%	35%	34%
	Honours & postgrad. cerst/dips.	50%	52%	53%	53%	55%	54%	56%	60%	57%	57%
	Masters	48%	48%	50%	47%	46%	47%	52%	55%	57%	58%
	Doctorates	29%	26%	25%	22%	28%	27%	30%	30%	30%	33%
	Total	23%	27%	30%	31%		32%	34%	34%	36%	36%
Total (incl. private training establishments)	Certificates 1-3	18%	23%	25%				34%	40%	39%	
	Certificates 4	13%	15%					34%			
	Diplomas 5-7							28%			
	Bachelors degrees							36%			
	Graduate certificates/diplomas							32%			
	Honours & postgrad. certs/dips.	50%			53%			58%			
	Masters	48%			47%		47%			57%	
	Doctorates							30%		30%	
	Total							35%			
	i Olul	2370	2170	3070	3170	J4 70	3470	3370	JU 70	31 70	30%

## REFERENCES

Engler, R. (2009), Future demand for tertiary education in New Zealand 2009 to 2025 and beyond, Wellington: Ministry of Education.

Engler, R., and Smyth, R. (2011), *Occasional paper – comparison of student performance by sub-sector*, Wellington: Ministry of Education.

Ministry of Education (2007) Improving the relevance of tertiary education provision, *Profile & Trends 2006: New Zealand's Tertiary Education Sector*, Wellington: Ministry of Education.

Ministry of Education (2009) Trends in the demand for tertiary education, *Profile & Trends 2008: New Zealand's Tertiary Education Sector*, Wellington: Ministry of Education.

Min of Education (2010) Facing the challenge: tertiary education strategy monitoring, Wellington: Ministry of Education.

Scott, D. (2009) A closer look at qualification completion in higher education in New Zealand, Wellington: Ministry of Education.

Smart, W. (2007) Persistence in doctoral research, Wellington: Ministry of Education.

Smart, W. (2009) Ebbs and flows: participation in post-compulsory education over the economic cycle, Wellington: Ministry of Education.



Te Tāhuhu o te Mātauranga