



MINISTRY OF EDUCATION

Te Tāhuhu o te Mātauranga

Passing courses

Report

Passing courses

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1 Summary

In 2005, over 504,000 students enrolled in formal tertiary courses in New Zealand. Collectively these students enrolled in over 3,800,000 courses, involving nearly 62,000 different courses and 4,400 different qualifications, in over 300 tertiary education providers.

This report provides new information on how many of these students pass their courses. It also draws on existing information on qualification completion, to compare success at the course level with success at the qualification level.

Students passed 72 percent of all courses taken in 2005. Pass rates increased the higher the level of course taken. Students passed 65 percent of all courses taken at certificate level, 71 percent of courses at diploma level, 82 percent of courses at bachelors level, and 86 percent of courses at postgraduate level. Course pass rates have not changed much since 2001.

Table 1: Course and qualification completion rates

Level of study	Estimated percentage of courses passed for courses started in 2005	Estimated qualification completion rate after five years for qualifications started in 2001
Certificate	65%	36%
Diploma	71%	30%
Bachelors	82%	42%
Postgraduate	86%	58%
All levels	72%	39%

Over 60 percent of students pass all their courses each year. At postgraduate level, this increases to 74 percent. Of all the students who started any level of study in 2001, 29 percent passed all the courses they enrolled in, but had not gained a qualification after five years.

Many students undertake study without a qualification goal in mind, and many are successful at course level without gaining a qualification. But the tertiary education system is not solely focused on students gaining qualifications. Many people, especially those who are in employment and those who have already attained a qualification, are interested in acquiring further skills and knowledge through tertiary study, but are less interested in completing a qualification.

If success is extended beyond qualification completion to include those that pass all courses without gaining a qualification, then the percentage of students who are 'successful' increases from 39 percent to 68 percent. The use of qualification completion rates alone therefore, is likely to significantly underestimate the performance of the sector, in terms of successful skills and knowledge acquisition.

People enrolling in just one or two courses a year are more likely to pass them all, compared with those enrolled in a larger number of courses. Earlier studies have shown that full-time students are more likely to complete a qualification than part-time students. Findings in this report however, suggest that studying full-time does not appear to be a factor for success at the course level, and that part-time students pass courses at the same or even higher rates as students with more full-time study loads.

Table 2: Passed all courses but no qualification

Level of study	Percentage of students starting at this level in 2001 who have gained a qualification at this level after five years	Percentage of students starting at this level in 2001 who have passed all courses but not gained a qualification at this level after five years
Certificate	36%	31%
Diploma	30%	28%
Bachelors	42%	21%
Postgraduate Certificate & Diploma/Honours	60%	24%
Masters	50%	23%
Doctorate	29%	26%
All levels	39%	29%

At degree level and above, there is little difference in course pass rates between universities and institutes of technology and polytechnics (ITPs). Courses at bachelors-level (which include graduate certificates and diplomas as well as degrees) were offered at 18 of the 20 ITPs in 2005, and represented 14 percent of all bachelors-level enrolments in 2005.

However, more university students gain their bachelors degree after five years than do ITP students. A number of ITPs, in conjunction with a university, offer the first year of a bachelors programme at the ITP, with the remaining years at the university. These students are not reflected in the qualification completion rates for the ITP. Also university students are more likely to be studying full-time, and are more likely to have a bachelors degree as their goal.

At certificate level, universities have the highest pass rates, while ITPs have slightly lower pass rates than private providers and wānanga. Course pass rates at diploma level appear broadly similar across provider types, except wānanga, where rates from year to year tend to be lower than for other parts of the sector. However, more students at wānanga (along with PTEs) gain a diploma qualification after five years than other parts of the sector.

Although there is only a small amount of provision at degree level and above in private tertiary education providers, their course pass rates at these levels are similar to, or higher than other parts of the sector.

Table 3: Course and qualification completion rates by provider type and level

Provider type	Course and qualification completion rates by level – 2005							
	Certificate		Diploma		Bachelors		Postgraduate	
	Course	Qual.	Course	Qual.	Course	Qual.	Course	Qual.
University	74%	44%	75%	23%	82%	43%	86%	55%
ITP	62%	31%	71%	22%	83%	30%	84%	40%
College of Education	66%	28%	78%	33%	87%	60%	80%	24%
Wānanga	67%	37%	66%	41%	71%	27%	66%	na
Private provider	66%	33%	73%	43%	84%	27%	90%	84%
All providers	65%	36%	71%	30%	82%	42%	86%	58%

The course pass rate relates to courses started in 2005. The qualification completion rate relates to the percentage of 2001 starting students who have gained a qualification at the same level as the one they started by the end of 2005.

Institutional pass rates for public tertiary education institutions range from about 50 percent to about 95 percent, with average institutional pass rates ranging from 67 percent for certificates, 73 percent for diplomas, 80 percent for courses at bachelors level, to 81 percent for courses at postgraduate level.

Pass rates range from under 55 percent for certificate-level courses in office studies and information systems, to over 95 percent for degree courses in pharmacy, dental studies, medical studies, radiography, veterinary studies, and automotive engineering. Over all levels, courses in health or education have the highest pass rates, while courses in management and commerce or in food, hospitality and personal services have the lowest.

Asian and European students have higher pass rates than Māori at both the course and qualification level. Pasifika students have the lowest rates of completion at both course and qualification level. There does not appear to be any tendency for one ethnic group over another to be studying on a partial qualification basis, ie with specific course goals, rather than a qualification goal.

Women have higher completion rates than men, both at the course and qualification level, although this gap closes at higher levels. Women are also more likely to have passed all courses without gaining a qualification.

Older students have higher course pass rates at certificate and diploma level, while younger students have higher pass rates at degree level and above. However, older students are less likely to take out a qualification, and more likely to have passed all courses without gaining a qualification than younger students.

2 Passing Courses

How many courses and qualifications do students enrol in?

In 2005, over 504,000 students enrolled in formal tertiary courses in New Zealand.¹ Over 15 percent of New Zealanders aged 15 and over were engaged in some form of formal provider-based study. Collectively these students enrolled in over 3,800,000 courses, involving nearly 62,000 different courses and 4,400 different qualifications, in over 300 tertiary education providers. On average, each student enrolled in 8 courses, with 10 percent enrolling in more than one qualification.

Table 4: Courses, qualifications and students enrolled in 2005

Level of study	Students	Courses	Qualifications	Course enrolments	Course enrolments per student
Certificate	277,500	26,400	2,100	2,448,500	9
Diploma	68,900	12,800	800	392,100	6
Bachelors	153,200	18,700	700	882,400	6
Postgraduate	35,000	10,600	700	101,100	3
All levels	504,100	61,600	4,400	3,826,000	8

Refer to the Data and Definitions section for further technical explanation of the data and definitions used in this table.

This report analyses how many students pass their courses, and compares this to how many gain a qualification. The term 'course' used in this report, refers to a distinct module, paper, or unit of study that forms part of a larger programme of study that may or may not lead towards a recognised qualification. This is different from other countries, such as Australia or Britain, where the term 'course' is commonly used to refer to a programme of study qualification.

In this report, course 'pass' rates refer to the percentage of courses enrolled in that are successfully completed or 'passed'. For the purposes of this study, the term 'completion' is taken to mean successful completion, or passing. Those students who complete the course, that is stay until the end, but who fail the course are not included.

A margin of uncertainty is provided for each pass rate. This reflects the fact that at the time of collection, the outcome for a number of enrolments is not yet known, as the course may not yet be complete, or results are still being assessed, or there is no matching completion record for an enrolment. The upper rate bound assumes all students with unknown outcomes to have passed. Similarly, the lower rate bound assumes all students with unknown outcomes to have failed. The pass rate is then taken as the mid point between these upper and lower bounds. As such, pass rates represent estimates rather than actual rates.

This report is limited to only those enrolments for which course completion data is collected. Completion data is collected for all formally-assessed courses of more than a week's equivalent full-time duration, except those relating to training opportunities, youth training, skill enhancement, and industry training. This covers about 80 percent of all formal course enrolments. For this study, the year relates to the year in which the course started. Pass rates for 2005, for example, will exclude about 10 percent of students enrolled in 2005, who began courses in a previous year. This study covers the years 2001 to 2005.

Refer to the *Data and Definitions* section at the end of this report for more detailed information on the data and definitions used in this report. This section also includes a table showing how many enrolments are covered in this study for the year 2005.

¹ This excludes formal courses of less than one week's equivalent full-time study.

Course pass rates

Around 72 percent of courses are successfully completed or 'passed'. As with qualification completion, pass rates increase the higher the level of course taken. Students passed 65 percent of all courses taken at certificate level, while for courses at postgraduate level, students passed 86 percent of courses.

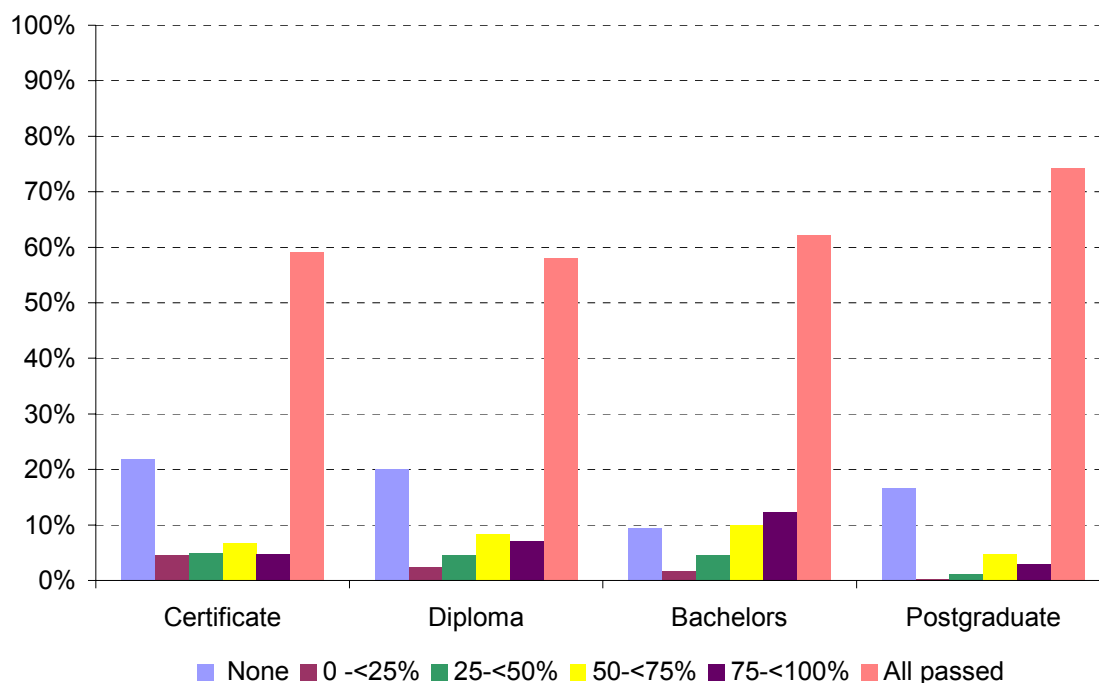
Table 5: Course pass rates – for courses started in 2005

Level of study	Estimated percentage of courses passed		Estimated qualification completion rate after five years
Certificate	65%	± 11%	36%
Diploma	71%	± 8%	30%
Bachelors	82%	± 1%	42%
Postgraduate	86%	± 7%	58%
All levels	72%	± 7%	39%

The ± figure relates to the margin of uncertainty for the pass rate. For further technical explanation of this, and other data and definitions used in this table, refer to the Data and Definitions section.

The noticeable feature in Table 5 is the difference in completion rates at course level and the qualification level. Many students will be successful in most, but not all, of the courses required for the qualification. In addition, many students do not enrol in all the courses required to gain a qualification, for example, those enrolling in vocational upskilling courses. Of these, a significant number will be successful in all of their courses, but not gain a qualification. This is discussed further in the next section.

Figure 1: Percentage of courses that are passed – for courses started in 2005



Refer to the Data and Definitions section for further technical explanation of the data and definitions used in this graph.

Broadly speaking, students are more likely to pass all, or none of their courses. At sub-degree level around 80 percent will pass all or fail all, with 58 percent passing all. Similarly at postgraduate level, where the number of courses enrolled in is generally lower, over 91 percent either pass all, or fail all – with nearly three quarters (or 74 percent) passing all.

At bachelors level this U-shaped pattern is less pronounced. About 29 percent of bachelors-level students pass some and fail some, compared with 21 percent of certificate and diploma students, and 9 percent of postgraduate students.

Table 6: Percentage of courses that are passed – for courses started in 2005

Percentage of courses passed	Certificate	Diploma	Bachelors	Post-graduate	All levels
Average number of courses enrolled in 2005	7	5	6	3	7
All failed	21%	20%	9%	17%	17%
Less than 25% passed	4%	2%	2%	0%	3%
25 to 49% passed	5%	5%	5%	1%	5%
50 to 74% passed	7%	8%	10%	5%	8%
75 to 99% passed	5%	7%	12%	3%	8%
All passed	58%	58%	62%	74%	60%

Refer to the Data and Definitions section for further technical explanation of the data and definitions used in this table.

Table 7 shows, that at levels below postgraduate level, the more courses a student enrolls in, the less likely they are to pass all of them. However, apart from those students enrolled in just one or two courses during the year, and those who enrol in a very large number of courses, this effect is very slight.

While this might be expected, Table 7 does suggest that part-time students, as measured by the number of courses enrolled in, do pass courses at a slightly higher rate than full-time students. Previous studies² have shown that full-time students have significantly higher rates of qualification completion than part-time students, even after adjusting for differences in demographic and study-related characteristics. Together with Table 8 this suggests then, that while part-time students are less successful at gaining qualifications, they appear at least as, or more successful, at passing courses. This is discussed further in the next section.

Table 7: Students by number of courses enrolled in – for courses started in 2005

No. of courses enrolled in	Certificate		Diplomas		Bachelors		Postgraduate (excluding doctorate)	
	% of all certificate students	% who passed all their courses	% of all diploma students	% who passed all their courses	% of all bachelors students	% who passed all their courses	% of all post-graduate students	% who passed all their courses
1	22%	28%	17%	20%	10%	12%	33%	33%
2	12%	13%	12%	14%	8%	9%	22%	23%
3	7%	8%	9%	9%	7%	7%	10%	10%
4	7%	7%	8%	8%	8%	8%	10%	10%
5	5%	4%	6%	6%	6%	6%	6%	6%
6	6%	5%	9%	9%	12%	11%	4%	4%
7	4%	3%	6%	6%	16%	15%	5%	5%
8	4%	4%	7%	7%	16%	15%	3%	3%
9	3%	3%	4%	4%	6%	6%	1%	1%
10-14	12%	10%	11%	10%	10%	10%	4%	4%
15+	18%	14%	10%	8%	2%	2%	2%	2%
Total	100%	100%	100%	100%	100%	100%	100%	100%

For the purposes of this table, postgraduate level excludes students enrolled in doctorates, as these students typically are not enrolled in single-year course-based study.

Refer to the Data and Definitions section for further technical explanation of the data and definitions used in this table.

² Scott (2005), *How long do people spend in tertiary education?* Also Scott and Smart (2005), *What factors make a difference to getting a degree in New Zealand?*

Students who pass courses but do not gain a qualification

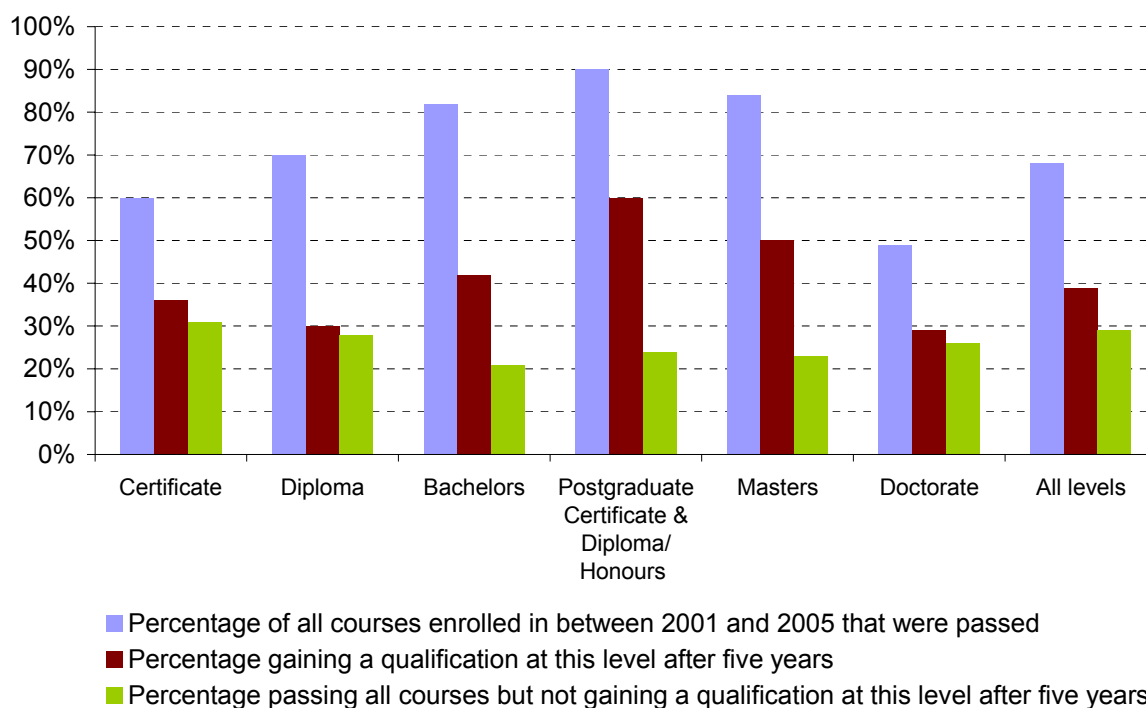
Many students undertake tertiary education without having a qualification as their main objective. These may include, for example, those who already have a qualification, or those in employment, wishing to update or gain new skills and knowledge in a specific area. For these groups, the role of the sector in providing credentials for employment is less important.

Data is not available on the numbers enrolling without qualification objectives in New Zealand, but in the United States an estimated 10 percent of those starting bachelors degrees do not have a degree as a goal.³ This is important when interpreting qualification completion rates, and making inferences about education success. Table 5 showed that pass rates at course level were around twice those at qualification level for degree courses and below, while Table 6 showed that over 60 percent of students successfully complete all of the courses they start in a year.

Figure 2 and Table 8 below show the percentage of students starting in 2001 that have passed all of their courses but not gained a qualification after five years. These include those still studying as well as those who have stopped studying.

About 30 percent of students starting certificates and diplomas are in this category, along with 21 percent of bachelors students, and about a quarter of postgraduate students. If our view of success is extended beyond qualification completion to include those that pass all courses without gaining a qualification, then the percentage of students that are 'successful' increases from 39 to 68 percent.

Figure 2: Passing courses and qualifications – for students starting qualifications in 2001



Refer to the Data and Definitions section for further technical explanation of the data and definitions used in this graph.

³ U.S. Department of Education. National Center for Education Statistics. (2002). *Descriptive summary of 1995-96 beginning postsecondary students: six years later*, (page v).

Table 8: Passing courses and qualifications – for students starting qualifications in 2001

Level of study	Percentage of all courses enrolled in between 2001 and 2005 that were passed	Percentage of students passing all courses between 2001 and 2005	Percentage gaining a qualification at this level after five years	Percentage passing all courses but not gaining a qualification at this level after five years
Certificate	60%	52%	36%	31%
Diploma	70%	48%	30%	28%
Bachelors	82%	42%	42%	21%
Postgraduate Certificate & Diploma/Honours	90%	76%	60%	24%
Masters	84%	55%	50%	23%
Doctorate	49%	37%	29%	26%
All levels	68%	52%	39%	29%

Refer to the Data and Definitions section for further technical explanation of the data and definitions used in this table.

In Australia, Shah and Burke (2003) estimated that as much as 29 percent of TAFE students had dropped out after three years after having successfully completed all of their courses without gaining a qualification. In addition to this, a further 17 percent were still studying.⁴ Foyster, Hon and Shah (2000) also estimated as many as 49 percent of TAFE students eventually successfully completed all their courses and did not gain a qualification, while 27 percent gained their qualification.⁵

Another study in Australia⁶ showed around 54 percent of all 1999 TAFE students passed all their courses, 31 percent passed some but not all, while 16 percent did not pass any of their courses. This compares with 58 percent, 28 percent and 20 percent respectively for the New Zealand certificate and diploma students in this study.

Together these results indicate that a substantial proportion of students can be viewed as successful, if course success is considered together with qualification success. The use of qualification completion rates alone is likely to significantly understate the performance of the sector in terms of its contribution towards skills and knowledge acquisition in New Zealand.

Course pass rates over the last five years

Completion rates have remained relatively constant over the last five years. The possible exception may be at certificate level, where there has been nominal improvement between the period 2001 to 2002, and the period 2003 to 2005. However, data at this level is affected by higher margins of uncertainty.

Over time, the margin of uncertainty in course completion rates should reduce, as courses whose outcomes were still unknown at time of reporting, become known and reported in subsequent years. However, uncertainty margins also occur as a result of not being able to match some enrolments to any completion record. This was more likely to have occurred in the first few years of data collection in 2001 and 2002.

⁴ Shah, C. & Burke, G. (2003). *Completion and partial completion of courses in TAFE, Australia*. Monash University-ACER Centre for the Economics of Education and Training. TAFE stands for 'Technical and Further Education'. TAFE institutes in Australia broadly fulfil a similar role to that of Institutes of Technology and Polytechnics in New Zealand.

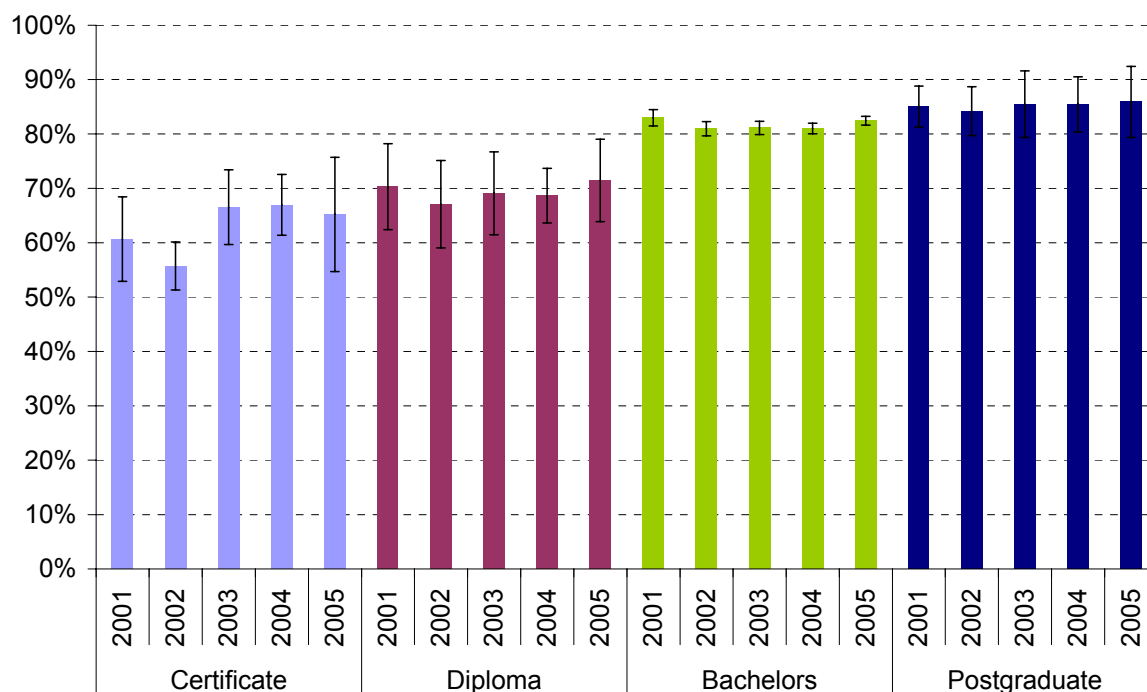
⁵ Foyster, J., K.F. Hon, & C. Shah (2000), *Student flows through Australian TAFE courses*.

⁶ Grant, Peter (2002) *Staying on course, factors which impact on students' completing their courses*.

With the introduction of national student numbers in 2003, and the improvement in collection and validation methods, we see an almost unchanged rate of completion at course level from 2003 to 2005.

Figure 3 below, shows trends by level of study from 2001 to 2005. Trends by provider type are discussed in the next section.

Figure 3: Course pass rates by level and year enrolment started



The error bars at the top of each column relate to the margin of uncertainty discussed elsewhere in this report. Refer to the Data and Definitions section for further technical explanation of the data and definitions used in this graph.

What is the range of pass rates across institutions?

The objective of this section is to provide broad statistical information on the range of pass rates across tertiary education providers. Because of the role of the Tertiary Education Commission in monitoring institutional pass rates for funding purposes, this report will limit itself to a statistical analysis only, with rates either aggregated to provider type, or with the names of institutions removed.

Table 9: Course and qualification completion rates by provider type

Provider type	Course completion rate over all levels for courses started in 2005		Five-year qualification completion rate over all levels for students starting in 2001
University	82%	± 1%	46%
ITP	67%	± 8%	31%
College of Education	85%	± 2%	49%
Wānanga	67%	± 14%	39%
Private provider	69%	± 8%	36%
All providers	72%	± 7%	39%

Refer to the Data and Definitions section for further technical explanation of the data and definitions used in this table.

Over all levels of study, colleges of education and universities have the highest rates of successful course and qualification completion. This partly reflects the fact that these types of provider offer education at higher academic levels than other types of provider, and higher level qualifications are associated with higher rates of completion.

In addition to the differences in qualification and course level mix, there are other differences that impact on completion rates. Full-time students complete qualifications at a much higher rate than part-time students, as do intramural students compared with extramural students. Students with low or no school qualifications do not do as well as those with year 12 or 13 school qualifications. Institutions with different mixes of such students are therefore likely to have different completion rates, all other things being equal.⁷

While the adjustment of course completion rates for these and other factors is beyond the scope of this study, some interesting differences can be seen when provider type rates are looked at just by level as in Table 10 below. Students at ITPs successfully complete courses at bachelors level at the same rate as, or better than students at universities. Bachelors courses at ITPs are often more vocational or applied in nature than at universities. Earlier studies have suggested that students in more vocationally-oriented degrees do better than those in more general degrees.⁸ Courses at bachelors-level (which include graduate certificates and diplomas as well as degrees) were offered at 18 of the 20 ITPs in 2005, and represented 14 percent of all bachelors-level enrolments in 2005.

Table 10: Course and qualification completion rates by level and provider type

Provider type	Course pass rate by level – for courses started in 2005			
	Certificate	Diploma	Bachelors	Postgraduate
University	74% ± 1%	75% ± 0%	82% ± 0%	86% ± 6%
ITP	62% ± 9%	71% ± 5%	83% ± 1%	84% ± 5%
College of Education	66% ± 15%	78% ± 4%	87% ± 1%	80% ± 11%
Wānanga	67% ± 14%	66% ± 15%	71% ± 16%	66% ± 29%
Private provider	66% ± 7%	73% ± 11%	84% ± 3%	90% ± 7%
All providers	65% ± 11%	71% ± 8%	82% ± 1%	86% ± 7%

Provider type	Five-year qualification completion rate by level for students starting in 2001			
	Certificate	Diploma	Bachelors	Postgraduate
University	44%	23%	43%	55%
ITP	31%	22%	30%	40%
College of Education	28%	33%	60%	24%
Wānanga	37%	41%	27%	na
Private provider	33%	43%	27%	84%
All providers	36%	30%	42%	58%

Refer to the Data and Definitions section for further technical explanation of the data and definitions used in this table.

However, five-year qualification completion rates for bachelors degrees at ITPs are significantly lower than for universities (30 percent compared 43 percent for those starting in 2001). Around 76 percent of students doing bachelors degrees at a university are studying full-time, compared with 62 percent for ITP students. Studying full-time is a significant factor in qualification completion. Also, a number of ITPs, in conjunction with a university, offer the first year of a bachelors programme at the ITP, with the remaining years at the university. These students are not reflected in the qualification completion rates for the ITP.

⁷ For more information on factors affecting completion in New Zealand see; Scott and Smart (2005), *What factors make a difference to getting a degree in New Zealand?* Also Prebble et al. (2005). *Impact of student support services and academic development programmes on student outcomes in undergraduate tertiary study: a synthesis of the research.*

⁸ Scott and Smart (2005), *What factors make a difference to getting a degree in New Zealand?*

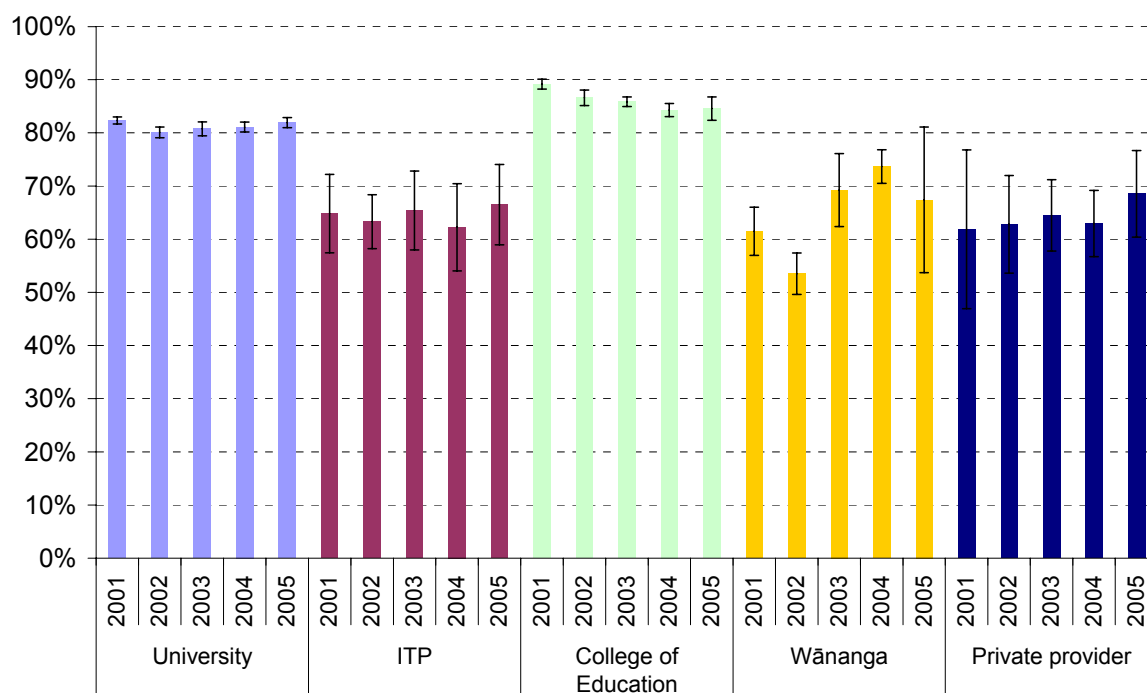
Together, these results suggest that a number of students are choosing to study in specific courses without having a qualification goal in mind, for example, for vocational upskilling reasons, and that while studying full-time is a significant factor in qualification completion, it does not appear so for course completion.

At certificate level, universities have the highest pass rates (74 percent), while ITPs (at 62 percent) have slightly lower pass rates than PTEs and wānanga (66 percent). Pass rates at diploma level appear broadly similar across provider types, except wānanga, where, although the margin of uncertainty is larger, estimates from year to year tend to be lower than other parts of the sector. However, more students at wānanga (along with PTEs) gain a diploma qualification after five years than other parts of the sector.

Private providers have the highest rates of course completion at postgraduate level. Around 90 percent of enrolments at this level are successfully completed, compared with 83 percent for universities and the sector as a whole. Private providers provide a very select and specific role at this level. Just 9 percent of all postgraduate course enrolments are offered in this part of the tertiary education sector, by just 7 providers. These include a postgraduate certificate and a postgraduate diploma in professional legal studies, and a Master of Business Administration.

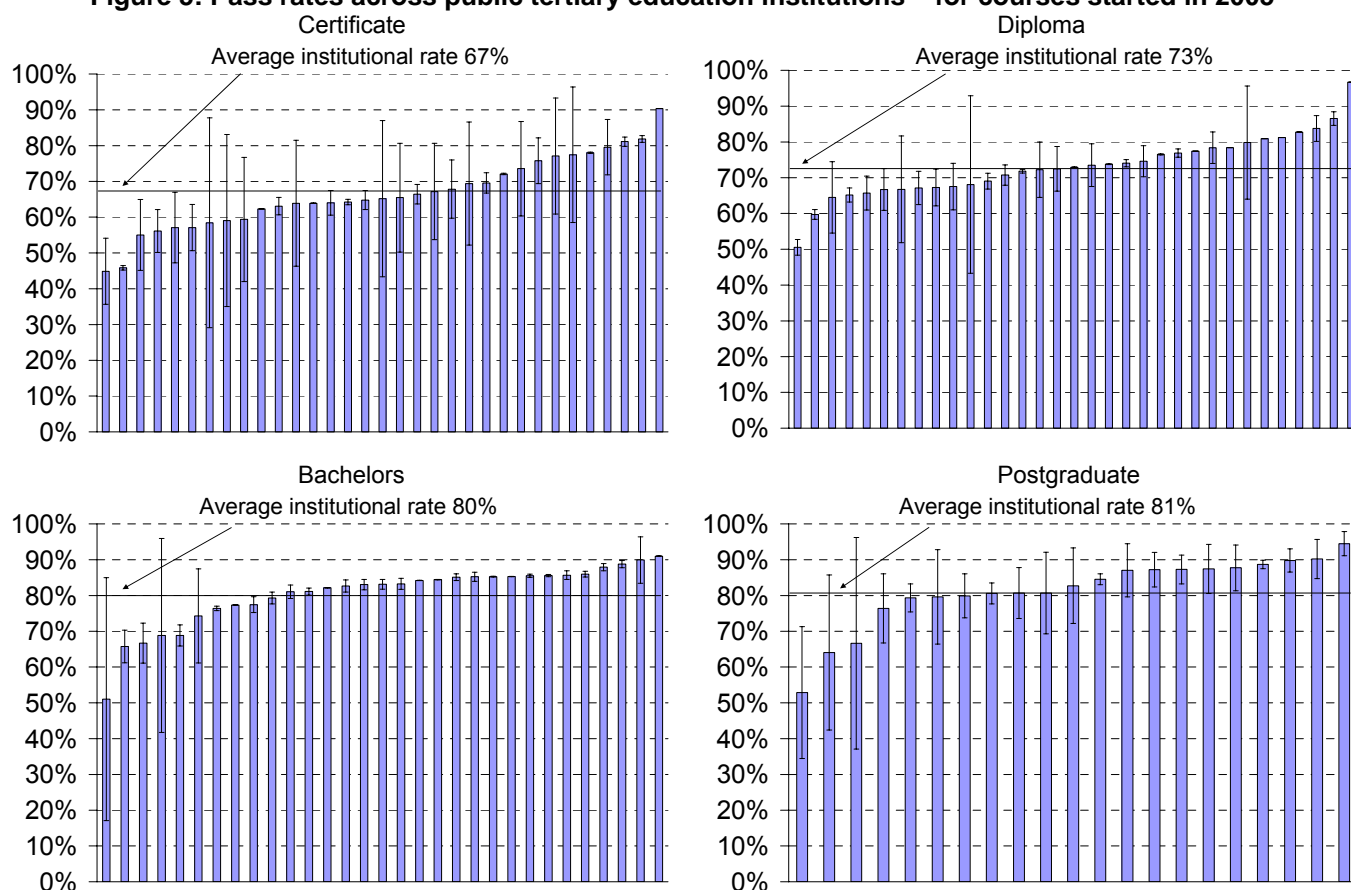
There has not been dramatic change in course pass rates by provider type over the last five years. Universities and colleges of education have maintained the highest course pass rates (and lowest margin of uncertainty) since 2001. ITPs, wānanga and PTEs have shown more variability given the nature of their provision, and the quality of data provided. Given the margins of uncertainty, it is difficult to infer that rates are either increasing or decreasing.

Figure 4: Course pass rates by provider type and year enrolment started



The error bars at the top of each column relate to the margin of uncertainty discussed elsewhere in this report. Refer to the Data and Definitions section for further technical explanation of the data and definitions used in this graph.

Figure 5: Pass rates across public tertiary education institutions – for courses started in 2005



The error bars at the top of each column relate to the margin of uncertainty discussed elsewhere in this report. Refer to the Data and Definitions section for further technical explanation of the data and definitions used in these graphs.

Figure 5 shows the range of course pass rates across the 33 public tertiary education institutions in 2005, for certificates, diplomas, bachelors and postgraduate level courses. Institutional pass rates range from around 50 percent to over 90 percent, a range of around 40 percentage points. This range is about the same across certificates, diplomas, bachelors and postgraduate levels. The standard deviation at each of the four levels is 10 percent.

The margins of uncertainty average 6 percent over all levels, but range significantly from 0 percent in some institutions to over 25 percent in others. These larger margins reflect those institutions with a larger proportion of courses whose outcomes were unknown at 31 December 2005. This occurs, for example, when the course has not ended, or when students are still being assessed. Larger institutional margins also occur at levels where there is a relatively small number of enrolments, such as at postgraduate level in wānanga.

These margins would be expected to reduce as outcomes are subsequently determined and recorded in later data returns. Unknown outcomes also occur as a result of not being able to find a completion record matching a particular enrolment. This was more likely to have occurred in the first few years of data collection in 2001 and 2002.

When the institutions with the two highest and two lowest pass rates at each level are excluded, the variation in rates reduces significantly. The range across all levels reduces from 40 to 24 percentage points, and standard deviation from 10 to 6 percentage points for levels above certificate, and 8 percentage points for certificate-level courses.

What subjects are most successful?

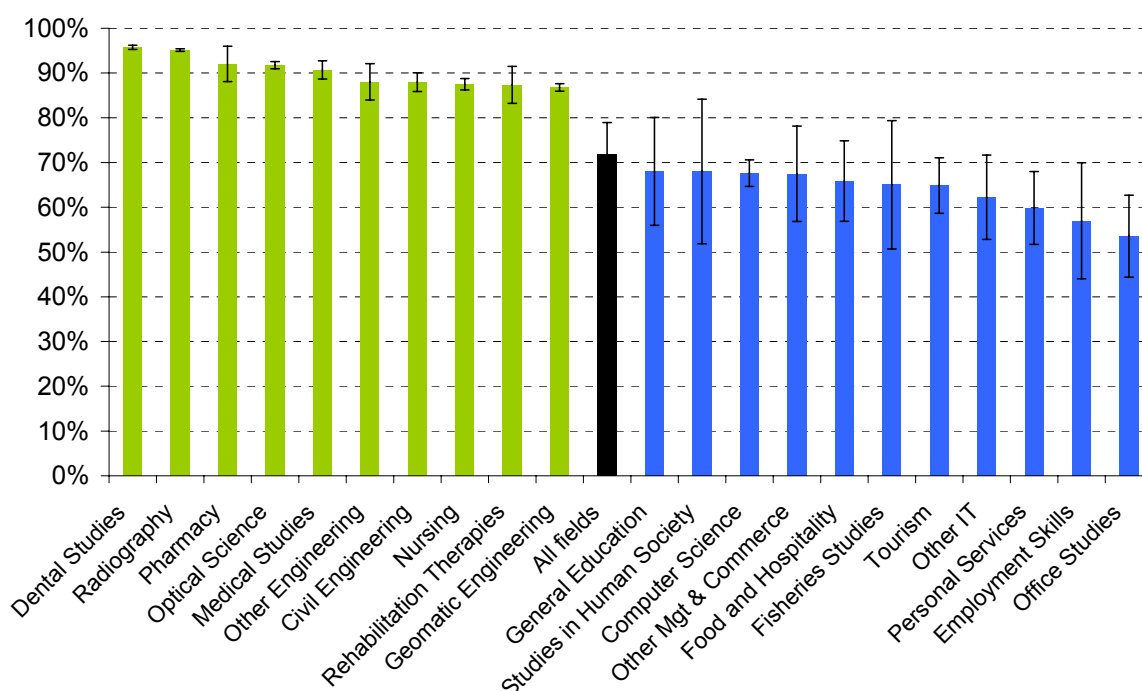
There is significant variation in course pass rates by field of study. At the broad level of the New Zealand Standard Classification of Education (NZSCED), there are 12 categories, and pass rates range from under 60 percent for certificate courses in management and commerce, and information technology, to over 88 percent for bachelors-level courses in health, engineering, and architecture. Over all levels, health and education have the highest pass rates, while management and commerce, and food, hospitality and personal services have the lowest.

Table 11: Course pass rates by broad field of study – for courses started in 2005

Broad field of study	Course pass rate				
	Certificate	Diploma	Bachelors	Postgraduate	All levels
Natural and Physical Sciences	66% ± 5%	70% ± 4%	78% ± 0%	84% 11%	76% ± 2%
Information Technology	58% ± 9%	69% ± 4%	74% ± 1%	85% ± 5%	67% ± 5%
Engineering and Related Technologies	73% ± 6%	75% ± 4%	88% ± 0%	78% ± 15%	78% ± 5%
Architecture and Building	70% ± 16%	72% ± 5%	88% ± 1%	87% ± 5%	75% ± 10%
Agriculture, Environmental and Related Studies	79% ± 5%	70% ± 12%	84% ± 1%	84% 9%	79% ± 5%
Health	75% ± 10%	78% ± 8%	89% ± 1%	86% ± 5%	83% ± 5%
Education	80% ± 7%	76% ± 6%	86% ± 2%	85% ± 5%	82% ± 4%
Management and Commerce	56% ± 10%	67% ± 7%	81% ± 1%	87% ± 5%	63% ± 7%
Society and Culture	67% ± 13%	70% ± 11%	80% ± 1%	87% 6%	73% ± 8%
Creative Arts	71% ± 7%	73% ± 7%	86% ± 1%	85% ± 9%	79% ± 4%
Food, Hospitality and Personal Services	62% ± 7%	71% ± 14%	81% ± 9%	56% ± 44%	64% ± 9%
Mixed Field Programmes	69% ± 14%	70% ± 9%	69% ± 16%	67% ± 27%	69% ± 14%
All fields of study	65% ± 11%	71% ± 8%	82% ± 1%	86% ± 7%	72% ± 7%

Refer to the Data and Definitions section for further technical explanation of the data and definitions used in this table.

Figure 6: The 10 highest and the 10 lowest course pass rates by narrow field of study – for courses started in 2005



The error bars at the top of each column relate to the margin of uncertainty discussed elsewhere in this report. Refer to the Data and Definitions section for further technical explanation of the data and definitions used in this graph.

At the more detailed 'narrow' level of the NZSCED classification there are around 70 categories. Figure 6 shows the 10 highest and lowest rates of completion in these categories. Course pass rates range from under 55 percent for certificate-level courses in office studies and information systems, to over 95 percent for degree courses in pharmacy, dental studies, medical studies, radiography, veterinary studies, and automotive engineering. Some of the fields with higher pass rates are associated with more selective academic entry requirements, and so are more likely to have higher proportions of more academically able students.

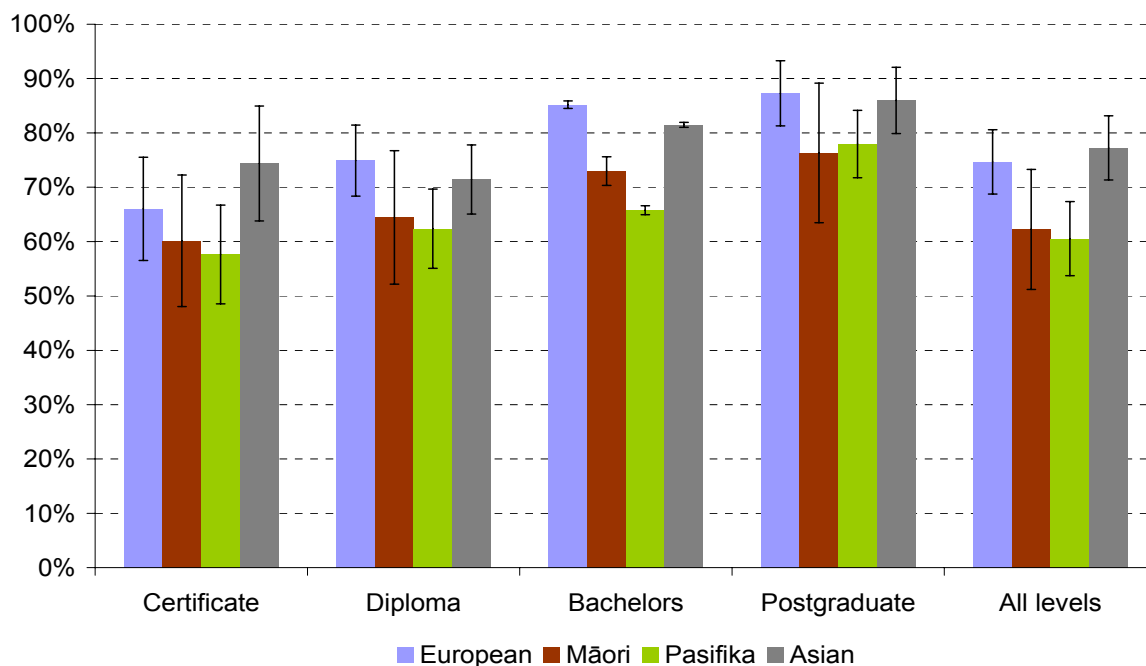
The full range of completion rates for all 'narrow' fields by level of study can be found in the supplementary tables that accompany this report on the Education Counts website.

Ethnic, age and gender differences

Earlier studies looking at qualification completion have showed that in general, European and Asian students have higher completion rates after five years than Māori and Pasifika students, with Pasifika students generally having the lowest rates of qualification completion. At bachelors level, this pattern holds even after adjusting for differences in demographic and study-related characteristics.⁹

The graph below shows this pattern also holds at course level. Asian students have the highest course pass rates, and Pasifika students have the lowest. Differences reduce at postgraduate levels of study, but at bachelors level and below, the course pass rate for Māori and Pasifika students is around 10 percentage points lower than that of European and Asian students. In particular, the course pass rate for Pasifika students at bachelors level is 18 percentage points lower than that of European students, and the five-year degree completion rate is 13 percentage points lower.

Figure 7: Course pass rates by ethnic group and level – for courses started in 2005



The error bars at the top of each column relate to the margin of uncertainty discussed elsewhere in this report. Refer to the Data and Definitions section for further technical explanation of the data and definitions used in this graph.

⁹ Scott and Smart (2005), *What factors make a difference to getting a degree in New Zealand?*

Table 12 below shows, by ethnic group and level, those that pass all their courses, but do not complete a qualification. This also shows similar pattern to overall course pass rates and five-year qualification completion rates. There does not appear to be any tendency for one ethnic group over another to be studying on a partial qualification basis, ie with specific course goals, rather than a qualification goal.

Table 12: Passing courses and qualifications by level of study and ethnic group – for students starting qualifications in 2001

Level of study and ethnic group	Percentage of all courses enrolled in between 2001 and 2005 that were passed	Percentage of students passing all courses between 2001 and 2005	Percentage gaining a qualification at this level after five years	Percentage passing all courses but not gaining a qualification at this level after five years
Certificate				
European	63%	54%	36%	31%
Māori	57%	43%	34%	28%
Pasifika	54%	50%	32%	31%
Asian	71%	56%	44%	28%
Total	60%	52%	36%	31%
Diploma				
European	73%	51%	30%	31%
Māori	60%	39%	28%	23%
Pasifika	62%	32%	26%	16%
Asian	71%	44%	32%	25%
Total	70%	48%	30%	28%
Bachelors				
European	85%	46%	43%	23%
Māori	73%	30%	30%	16%
Pasifika	67%	24%	30%	13%
Asian	80%	39%	46%	19%
Total	82%	42%	42%	21%
Postgraduate Certificate and Diploma/Honours				
European	93%	80%	62%	25%
Māori	84%	67%	59%	18%
Pasifika	82%	66%	58%	18%
Asian	88%	69%	59%	22%
Total	90%	76%	60%	24%
Masters				
European	85%	57%	49%	25%
Māori	68%	44%	33%	25%
Pasifika	74%	46%	47%	18%
Asian	87%	56%	60%	18%
Total	84%	55%	50%	23%
Doctorate				
European	49%	35%	29%	25%
Māori	49%	43%	13%	38%
Pasifika	45%	35%	18%	24%
Asian	50%	41%	29%	27%
Total	49%	37%	29%	26%
All levels				
European	73%	54%	39%	29%
Māori	59%	43%	34%	27%
Pasifika	58%	44%	33%	26%
Asian	76%	53%	46%	25%
Total	68%	52%	39%	29%

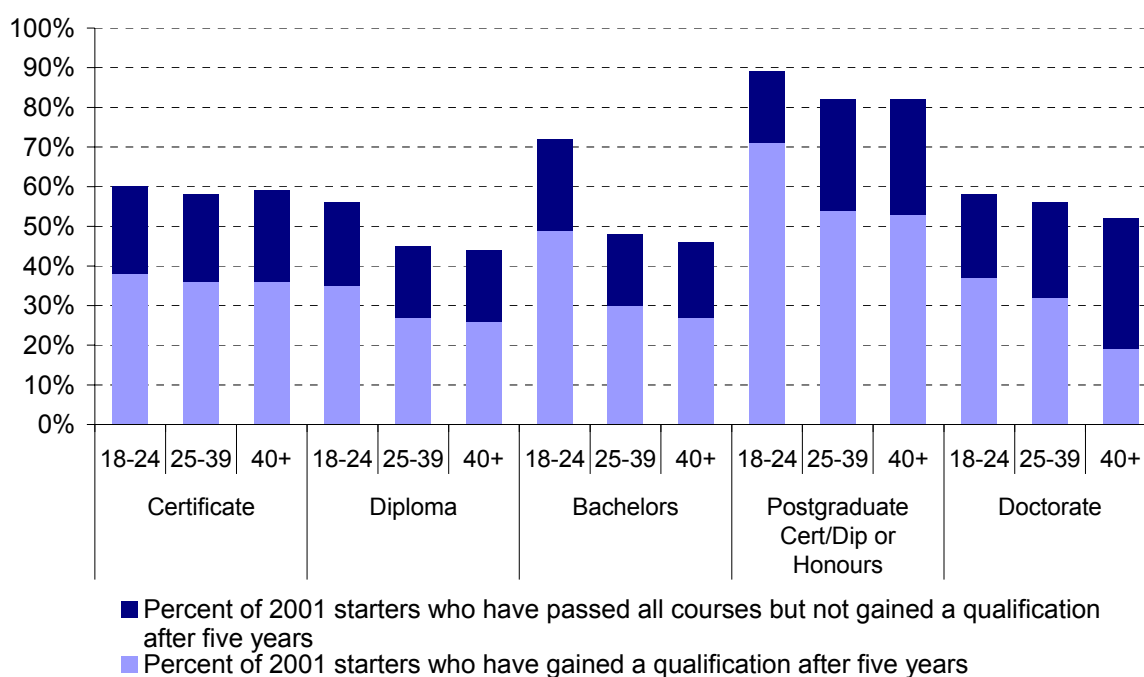
Refer to the Data and Definitions section for further technical explanation of the data and definitions used in this table.

Table 13 below shows women have higher completion rates than men, both at the course and the qualification level, although this gap closes at higher levels. Table 15 also shows that women are also more likely to have passed all their courses without gaining a qualification, except at certificate level, which may indicate a part-time, vocational bias for males starting courses at this level in 2001.

Table 13 also shows that older students have higher course pass rates at certificate and diploma level, while younger students have higher pass rates at degree level and above. However, younger students have higher five-year qualification completion rates over all levels.

One might expect that older students are more likely to be undertaking more course-based study without a qualification as an objective. Older students have higher rates of part-time study than younger students, are more likely to already have a qualification, or an established employment record, and therefore more likely to be studying for upskilling reasons, than younger students. One might expect, therefore, to see a higher percentage of older students passing all their courses but not gaining a qualification, all other things being equal. Table 15 below supports this, with the exception of under 18 year olds in certificate level study, where over 40 percent have passed all their courses and not gained a certificate, compared with about 30 percent for older students.

Figure 8: Course pass rates by age group and level – for courses started in 2005



Refer to the Data and Definitions section for further technical explanation of the data and definitions used in this graph.

Table 13: Course pass rates by gender, age group and level – for courses started in 2005

Gender, age and level	Course pass rate				
	Certificate	Diploma	Bachelors	Postgraduate	All levels
Females					
Under 18	57% ± 6%	69% ± 7%	85% ± 2%	na	59% ± 6%
18-24	61% ± 9%	73% ± 7%	86% ± 0%	93% ± 3%	77% ± 4%
25-39	65% ± 12%	74% ± 9%	82% ± 2%	85% ± 7%	70% ± 10%
40 plus	67% ± 12%	75% ± 9%	83% ± 2%	82% ± 8%	70% ± 11%
Total	64% ± 11%	74% ± 8%	85% ± 1%	87% ± 6%	72% ± 8%
Males					
Under 18	61% ± 5%	65% ± 7%	84% ± 1%	na	62% ± 5%
18-24	63% ± 7%	67% ± 5%	80% ± 0%	90% ± 4%	73% ± 3%
25-39	68% ± 11%	70% ± 8%	76% ± 1%	83% ± 8%	71% ± 8%
40 plus	71% ± 12%	71% ± 11%	77% ± 3%	78% ± 12%	71% ± 11%
Total	67% ± 10%	68% ± 7%	79% ± 1%	84% ± 7%	71% ± 7%
Total					
Under 18	59% ± 5%	67% ± 7%	85% ± 2%	na	61% ± 5%
18-24	62% ± 8%	70% ± 6%	83% ± 0%	92% ± 3%	75% ± 4%
25-39	66% ± 12%	73% ± 8%	80% ± 1%	84% ± 8%	70% ± 9%
40 plus	68% ± 12%	73% ± 10%	81% ± 2%	81% ± 10%	70% ± 11%
Total	65% ± 11%	71% ± 8%	82% ± 1%	86% ± 7%	72% ± 7%

'na' refers to categories where there are too few enrolments to produce reliable estimates.

Refer to the Data and Definitions section for further technical explanation of the data and definitions used in this table.

Table 14: Passing courses and qualifications by level of study and gender – for students starting qualifications in 2001

Level of study and gender	Percentage of all courses enrolled in between 2001 and 2005 that were passed	Percentage of students passing all courses between 2001 and 2005	Percentage gaining a qualification at this level after five years	Percentage passing all courses with no qualification at this level after five years
Certificate				
Females	62%	51%	39%	27%
Males	57%	54%	32%	35%
Total	60%	52%	36%	31%
Diploma				
Females	72%	49%	31%	29%
Males	67%	46%	28%	28%
Total	70%	48%	30%	28%
Bachelors				
Females	85%	46%	44%	22%
Males	79%	36%	38%	19%
Total	82%	42%	42%	21%
Postgraduate Certificate and Diploma/Honours				
Females	92%	78%	62%	24%
Males	89%	73%	57%	25%
Total	90%	76%	60%	24%
Masters				
Females	84%	56%	48%	26%
Males	84%	54%	52%	20%
Total	84%	55%	50%	23%
Doctorate				
Females	49%	37%	29%	26%
Males	49%	38%	28%	27%
Total	49%	37%	29%	26%
All levels				
Females	69%	52%	41%	27%
Males	66%	52%	35%	31%
Total	68%	52%	39%	29%

Refer to the Data and Definitions section for further technical explanation of the data and definitions used in this table.

Table 15: Passing courses and qualifications by age group and level – for students starting qualifications in 2001

Level of study and age group	Percentage of all courses enrolled in between 2001 and 2005 that were passed	Percentage of students passing all courses between 2001 and 2005	Percentage gaining a qualification at this level after five years	Percentage passing all courses but not gaining a qualification at this level after five years
Certificate				
Under 18	54%	58%	29%	42%
18-24	57%	50%	38%	28%
25-39	61%	50%	36%	29%
40 and over	67%	54%	36%	31%
Total	60%	52%	36%	31%
Diploma				
Under 18	65%	37%	30%	20%
18-24	69%	41%	35%	20%
25-39	71%	50%	27%	32%
40 and over	73%	55%	26%	38%
Total	70%	48%	30%	28%
Bachelors				
Under 18	87%	44%	56%	14%
18-24	82%	39%	49%	16%
25-39	80%	45%	30%	28%
40 and over	80%	52%	27%	33%
Total	82%	42%	42%	21%
Postgraduate Certificate and Diploma/Honours				
18-24	93%	79%	71%	18%
25-39	88%	74%	54%	28%
40 and over	87%	74%	53%	29%
Total	90%	76%	60%	24%
Masters				
18-24	83%	50%	58%	19%
25-39	85%	57%	51%	23%
40 and over	82%	56%	41%	28%
Total	84%	55%	50%	23%
Doctorate				
18-24	49%	35%	37%	21%
25-39	48%	36%	32%	24%
40 and over	51%	41%	19%	33%
Total	49%	37%	29%	26%
All levels				
Under 18	58%	56%	31%	40%
18-24	70%	48%	44%	23%
25-39	66%	52%	36%	30%
40 and over	69%	57%	35%	33%
Total	68%	52%	39%	29%

Refer to the Data and Definitions section for further technical explanation of the data and definitions used in this table.

3 Data and definitions

Scope of data

This study is based on the Single Data Return survey of providers, conducted three times a year. This study utilises the course-level enrolments and completions collected in this survey, covering the period 2001 to 2005. The survey covers all students enrolled in tertiary education providers who receive tuition subsidies from the government or who have courses that are eligible for Student Loans or Allowances.

This report limits its analysis to those enrolments for which course completion data is required to be collected. Completion data is collected for all formally-assessed courses of more than a week's equivalent full-time duration, except those relating to training opportunities, youth training, skill enhancement, industry training, and students in formal qualifications in private training establishments that receive no funding assistance from government. This covers about 80 percent of all formal course enrolments.

This study covers the period 2001 to 2005. For this study, the year relates to the year in which the course started, regardless of when it finished. Pass rates for 2005, for example, will exclude about 10 percent of students enrolled in 2005 who began courses in a previous year. These students not counted in the 2005 rates, will be counted in the rates for the year in which the course started.

Table 16: Courses, qualifications and students covered in this study – for the year 2005

Level of study	Students	Courses	Qualifications	Course enrolments	Course enrolments per student
Certificate	226,800	25,300	2,000	1,674,600	7
Diploma	62,500	12,300	800	333,600	5
Bachelors	150,500	18,500	700	864,400	6
Postgraduate	33,400	10,400	700	95,300	3
All levels	449,600	59,800	4,300	2,969,800	7

Course

The term 'course' used in this report, refers to a distinct module, paper, or unit of study that forms part of a larger programme of study that may or may not lead towards a recognised qualification. This is different from other countries, such as Australia or Britain, where the term 'course' is commonly used to refer to a programme of study qualification.

Course pass (or completion) rate

The course pass rate is the percentage of students starting a course who successfully complete or pass it. For the purposes of this study, the term *completion rate* is used to refer to successful completion, or passing, as opposed to those students who complete the course but are academically unsuccessful, ie fail. The rate for a year relates to the year that the course began, as discussed above.

The rates used in this report refer to overall rates, as opposed to averaged course pass rates. The overall pass rate for certificates, for example, is the percentage of the total number of enrolments in all certificate courses that were passed. This will be slightly different to a rate that averages the pass rates for every certificate course. With the large numbers of enrolments generally involved with most rates used in this study, the differences between the two measures are usually small.

Course pass rate margin of uncertainty

The outcome for a number of enrolments is not always able to be determined. This occurs when, for example, the course is not yet complete, or when students are still being assessed. This is more likely to affect data in later years. Unknown outcomes also occur as a result of not being able to match a particular enrolment to a completion record. This was more likely to have occurred in the first few years of data collection in 2001 and 2002.

In these cases, a margin of uncertainty is provided. The upper rate bound assumes all students with unknown outcomes to have passed. Similarly, the lower rate bound assumes all students with unknown outcomes to have failed. The pass rate is then taken as the mid point between these upper and lower bounds. As such, pass rates represent estimates rather than actual rates. Margins are also affected where there are a relatively small number of enrolments such as at postgraduate-level in wānanga. For the purposes of this study, any rates based on fewer than 30 enrolments are not used, and are marked 'na' in tables in this report.

Qualification completion rate

For the purposes of this study, the latest five-year qualification completion rates are used. These are defined as the percentage of students starting at a particular level in 2001, who have successfully gained a qualification at that level by the end of 2005. Under this definition, a student does not need to have completed the same qualification as the one they started, as long as they complete a qualification at that same level. Students who complete a qualification at a lower or higher level are not counted, but students who complete at the same level in a different provider to the one they started are included. The five-year qualification completion rates also do not take account of those still studying (such as part-time students), and those who may return in later years to complete.

Level of study

Most of the rates used in this study are aggregated into four groups. *Certificate* level includes all enrolments undertaken as part of certificate qualifications at levels 1 to 3 on the New Zealand Register of Quality Assured Qualifications. *Diploma* level includes all enrolments undertaken as part of certificate and diploma qualifications at levels 5 to 7 on the Register. *Bachelors* level includes all bachelor degree enrolments, as well as all graduate certificates and diplomas. *Postgraduate* level courses relate to all enrolments whether course-based or research-based undertaken as part of qualifications at levels 8 to 10 on the Register.

The level of study relates to the level of the qualification that the student is enrolled in as a result of enrolling in a course. For example, first year bachelors degree courses, while at levels 5 or 6 on the Register, are treated in this study as level 7 (or bachelors degree level). This is in order to make the comparative analysis between course completion and qualification completion on a consistent basis. Students are counted at each level they were enrolled in, but only once in the totals.

In the analysis which tracks course and qualification completion for 2001 starters over five years, course and qualification completion rates at bachelors-level rates relate to bachelors degrees only. In all other tables, course pass rates at bachelors level include graduate certificates and diplomas as well as degrees. Similarly, both course and qualification rates for 2001 doctorate starters relate to PhDs only, and exclude higher doctorates. Certificates of Proficiency are not included at either diploma or bachelors level.

Provider type

A university, institute of technology or polytechnic (ITP), college of education, wānanga, or private training establishment (PTE). Other tertiary education providers (OTEPs) are included with PTEs. Providers who have merged or become part of other providers over the period 2001 to 2005 have been treated according to the type of provider they were for each year in question.

Ethnic group

A student is counted in each ethnic group they affiliated with, but only once in the total. Ethnic group relates to the ethnicity at initial enrolment. Students whose ethnicity is unknown or who belong to a group other than European, Māori, Pasifika or Asian are not listed separately, but are included in the totals.

4 Want more information?

There is a range of additional, related information on attrition, retention, completion and progression available on the Ministry of Education's Education Counts website www.educationcounts.edcentre.govt.nz. This includes:

['Passing courses' supplementary tables](#)

A set of downloadable statistical tables that supplement this report. These contain fuller and additional breakdowns on course and qualification completion rates.

[Tertiary Education Statistics on Education Counts](#)

The tertiary education statistics section of Education Counts has a full range of the latest statistics on tertiary education available as downloadable excel files. Included are the latest statistics on qualification attrition and completion rates, as well as one-year and five-year progression rates.

[Profile & Trends: New Zealand's Tertiary Education Sector](#)

This annual publication provides a comprehensive review of New Zealand's tertiary education sector, with almost anything you need to know about tertiary education in New Zealand, including analyses of the latest trends in participation, completion, attrition and progression.

[What factors make a difference to getting a degree in New Zealand?](#)

This report looks at some of the factors that make a difference to one's chances of getting a bachelors degree in New Zealand. It includes a review of the literature from New Zealand and other countries.

[Impact of Student Support Services and Academic Development Programmes on Student Outcomes in Undergraduate Tertiary Study: A Synthesis of the Research](#)

This project researched the characteristics of academic staff development programmes and student support services that make a difference for undergraduate tertiary students, in terms of such things as participation, progression, retention and completion. It includes a comprehensive review of the relevant literature on this topic.

[Outcomes of the New Zealand tertiary education system - a synthesis of the evidence](#)

This report provides a synthesis of the evidence on the outcomes of the New Zealand tertiary education system.

[From school, work or unemployment: A comparison of pathways in tertiary education](#)

This report looks at how pathways through tertiary education followed over the course of seven years differ, depending on what students were doing before starting study.

[How long do people spend in tertiary education?](#)

This report looks at how long New Zealand tertiary students study for, and compares differences in study duration, attrition and completion between different groups.

[Pathways in Tertiary Education 1998-2002](#)

This report tracks the tertiary education pathways followed over the course of five years by students starting in tertiary study for the first time in 1998.

[Retention, Completion and Progression in Tertiary Education 2003](#)

This earlier report looks at trends in retention, completion, and progression in tertiary education up to 2002.