



Tertiary Education Commission
Te Amorangi Mātauranga Matua

**Improving Student Results
Tertiary Education Sector Performance
2008**

November 2009

Tertiary Education Sector Performance 2008

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Chair's foreword

I am pleased to introduce this report which provides an aggregated view of the performance of New Zealand's tertiary education sector during 2008 against important educational performance measures. It is the first such report and contains a rich variety of information on the performance of the sector as a whole as well as its sub-sectors. Future reports will provide comparative information about the performance of individual providers and industry training organisations.

New Zealand has a diverse tertiary education sector delivering a wide range of programmes ranging through foundation and literacy skills, trades and vocational education and undergraduate and post-graduate research and teaching. The government, through the Tertiary Education Commission (TEC), invests approximately \$3 billion dollars each year in tertiary education in the areas of teaching and learning, research, capability, and capital development. In 2008, the government invested \$1.6 billion in tertiary education providers and industry training organisations (ITOs) for approximately 630,000 students to study either full or part time.

Tertiary education makes a significant contribution to the economic and social well being of a country and its people. The TEC is focussed on ensuring New Zealanders get the best value for their investment in tertiary education. Increasingly providers are going to be judged on the educational results of their students, including the proportion of enrolments at higher levels of study, and subsequent course and qualification completions.

A new approach to funding and planning tertiary education was implemented in 2008 to improve performance and accountability. In brief, this system caps funding over a three year period, and tertiary education organisations are funded based on investment plans for up to three years.

Through these first investment plans tertiary education organisations and the TEC agreed on the type of provision and the educational performance to be achieved over the period 2008-2010. This report summarises the 2008 performance of the tertiary education sector against the commitments set out in those investment plans.

The trends outlined in this report show that during 2008 New Zealand's tertiary education sector achieved some improvements in line with the government's goals for tertiary education, such as more students studying higher level qualifications. However the changes were not large. Given the number of students already in the educational 'pipeline', there is a time lag before improvements become clear, as such, achieving change takes time. This report includes a wide range of important performance measures and data. This reflects the need to take account of a range of inter-related measures when considering tertiary education performance.

Over the coming years, the TEC will be focused on ensuring New Zealanders get the best value for our investment in tertiary education. A big part of this is ensuring students achieve optimal results from the education they receive. We will place a greater focus on providers' performance, as measured by the results achieved by their students, as well as on participation by a broad range of New Zealanders.

This report sets an important baseline for looking at future improvement.

David Shand
Chair
Tertiary Education Commission

Section One – Overview

1.1 Introduction

This report summarises the performance of the tertiary education sector in 2008 in terms of the number of students participating in tertiary education, and the number completing courses and qualifications. In doing so, it sets a baseline for measuring future performance.

This report focuses on providers' initial progress in achieving the government's main strategic priorities for improved educational performance in tertiary education. These priorities are increasing educational achievement at higher qualification levels, especially for younger New Zealanders (under 25 years), and increasing educational achievement for Māori and Pacific peoples.

1.2 Sector performance commitments

An investment plan system was introduced in 2008 for the tertiary sector. The key feature¹ of this system is that it shifted funding from a largely enrolment-driven approach to one more focused on the achievement of high quality outcomes. It has also resulted in limits being set on the number of students funded by the TEC at each tertiary education provider² by the TEC. This planning process results in an investment plan, developed by the provider or ITO, which is then approved by the TEC.

In their investment plans, providers make performance commitments for the funding they receive. These commitments include specific targets to improve the educational achievement of their students. In their 2008-2010 investment plans, most providers committed to meeting the key priorities for tertiary education as set out in the 2007 Tertiary Education Strategy. Among these key priorities were increased educational success for young New Zealanders (under 25) studying at National Qualification Framework³ (NQF) level four or higher, and increased participation and achievement by Māori and Pacific peoples.

1.3 Measuring performance

The measurement of tertiary education performance is changing from an enrolment-driven approach, to one more focused on the achievement of high quality outcomes. Future conceptions of educational performance will increasingly be measured⁴ by tracking patterns of student enrolment (participation) and the subsequent:

- successful completion of courses
- attrition (i.e. students not continuing on to the second year of their qualification)

¹ For further information on the funding system refer to Investment Guidance 2008 - 2010 which can be found on the TEC website: www.tec.govt.nz

² Tertiary education providers are universities, institutes of technology and polytechnics (ITPs), Wānanga, private training establishments (PTEs) and Other Tertiary Education Providers (OTEPs). These, along with industry training organisations (ITOs), are the sub-sectors that make up the tertiary education system.

³ For information on the National Qualifications Framework refer to the New Zealand Register of Quality Assured Qualifications at www.kiwiquals.govt.nz

⁴ For further details on the different performance indicators used by the TEC, please refer to the Performance Monitoring Methodology Papers on the TEC website: www.tec.govt.nz

- completion of qualifications.

These measures are reported for all students and specifically for the achievement of younger students (under 25 years) and for Māori and Pacific peoples.

The performance information contained in this report has been aggregated and averaged out across sub-sectors (types of tertiary education providers and ITOs). As a result, the variation in performance of individual organisations is not evident and may differ substantially from the aggregated view presented here. In addition, many tertiary education qualifications are multi-year which means that changes are often incremental. As such, reported performance from 2008 will not fully reflect the impact of any performance commitments and changes made in TEO investment plans.

Future reports will provide comparative information about the performance of individual providers and ITOs.

1.4 Tertiary education funding

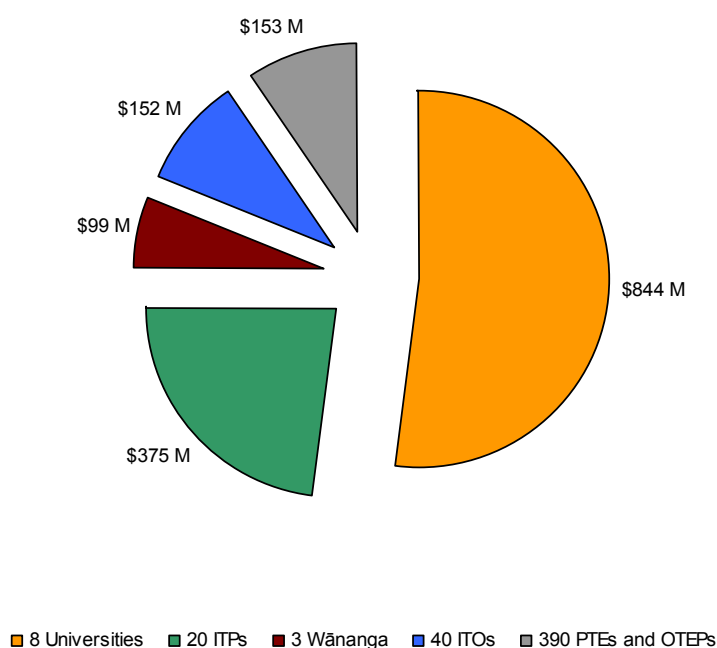
This report considers the results achieved through the use of the Student Achievement Component Fund and the Industry Training Fund. These are the two major teaching and learning funds administered by the TEC. These two funds account for approximately 65% of the funding provided to the tertiary sector. Only domestic students are eligible for this funding. Figure 1 shows how these funds are distributed among tertiary education sub-sectors.

The Student Achievement Component is the most significant part of the tertiary funding system and is the single largest source of government funding for universities, wānanga, and ITPs. It is also allocated to many PTEs and OTEPs and provides subsidies for teaching and learning in mainstream tertiary qualifications. Most learners also pay tuition fees.

Allocations are based on total student enrolments as agreed in providers' investment plans, and are calculated using a sophisticated formula with funding rates that vary significantly by the type of qualification and for each part of the sector.

The Industry Training Fund is allocated to ITOs and subsidises the development of national qualifications and the delivery of workplace learning linked to such qualifications. Industry training is subsidised at a lower rate than the Student Achievement Component, reflecting the fact that learning primarily takes place on-job using the resources of the workplace, with only a limited off-job element. It is strongly supported by employers and has made a significant contribution to New Zealand's skills base.

Figure 1: Student Achievement Component and Industry Training funding by provider 2008



1.5 Structure of this report

This report is presented in three sections. The first looks at performance across the sector and sub-sectors against the priority areas for improvement. The second looks at performance in terms of the number of students funded through the student achievement component and the industry training fund and how this provision compares with providers' investment plan commitments. The final section compares performance in key areas against an aggregated view of the sub-sector investment plan commitments and how they meet the government's priorities for improvement.

Performance associated with adult and community education, targeted vocational training, and foundation learning is not included in this report. The report also excludes international students and full fee paying domestic students as these students do not attract government funding. A full description of tertiary sector funding administered by the TEC can be found in Appendix 2.

A glossary of terms used and notes associated with reading this report can be found in Appendix 3 and 4.

Section Two – Government priorities and sector performance

One of the government's key strategic priorities for improved educational performance is to increase educational achievement at higher qualification levels especially for younger New Zealanders (under 25 years), and for Māori and Pacific peoples. This means that monitoring who is participating in tertiary education and what they are achieving is important in forming a view of performance.

Overview

In 2008 over 115,000 qualifications were completed at providers. Over 40,000 were at universities, 36,000 at ITPs, 17,000 at wānanga and 22,000 at PTEs. In addition nearly 36,000 national qualifications were completed through industry training.

Some of the trends that are evident in educational performance across the tertiary education sector by the end of 2008 are:

- an overall increase in the proportion of students studying at NQF level 4 and above
- a slight increase in the proportion of students under the age of 25 who are studying at NQF level 4 and above
- gradual improvement in the participation level of Pacific peoples while participation for Māori students was unchanged between 2007 and 2008
- improved successful course completion rates (showing the extent students are being successful in working towards their qualification) with an overall 1.1% increase from 2007 to 2008 in the proportion of students successfully completing their courses. These increases are consistent across all priority areas
- increased attrition rates across all groups. However as attrition rates are based on cohort years (the year a student starts study) they predate the start of the planning period (2008). Any commitments made in plans to decrease attrition rates would relate to students starting in 2008 for which attrition rate data will be available in 2010
- variable five year qualification completion rates across different providers. Like attrition, qualification completion rates are based on cohort years with latest rates reporting on students who started in 2004, which is well before the 2008 start date of current plans.

The performance changes seen in 2008 are consistent with the initial change expected over the period 2008 to 2010 as a result of investment plan commitments by providers to improve student retention and achievement. Further improvement is anticipated over the remaining plan period.

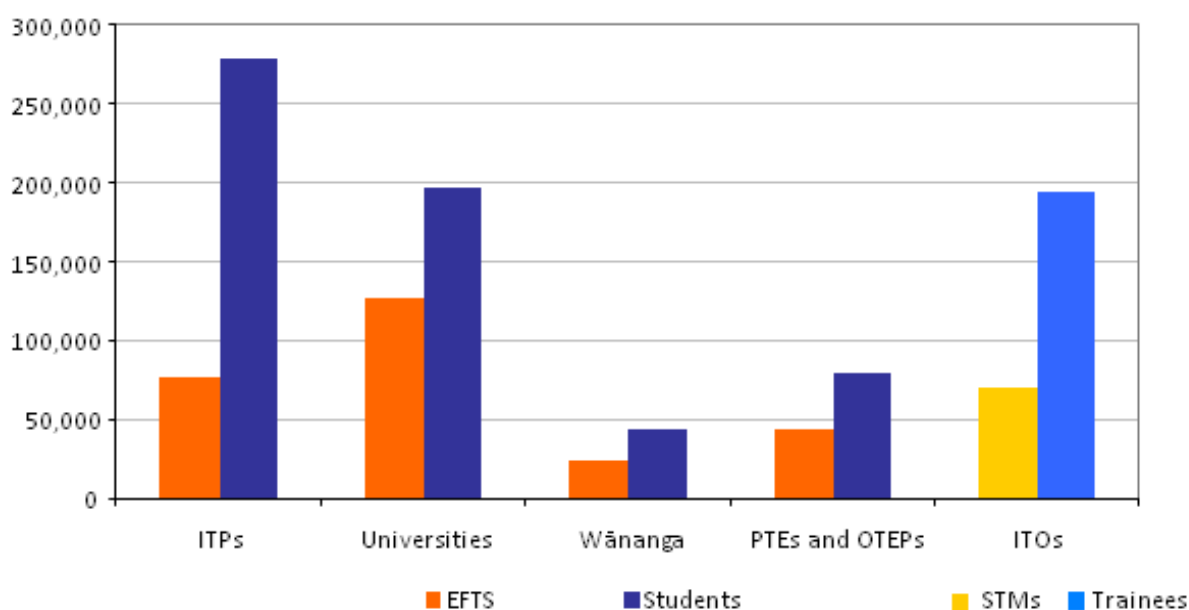
2.1 Participation – Students and trainees in tertiary education (2008)

Participation refers to the number of students and trainees in tertiary education and the make-up of the student population. The TEC monitors participation rates, measured by enrolment numbers, to ensure that the tertiary sector is providing relevant education for all New Zealanders.

Each course a student takes represents a proportion of an equivalent full-time student (EFTS) programme. The EFTS value of all courses in which students enrol are added together to determine the total volume of provision. Measuring tertiary participation using EFTS takes account of the variability of individual students' study load, such as part-time study, and courses of varying duration and intensity. As a result, one student does not generally equate to one EFTS. Counting EFTS however gives a broad picture of the volume of student participation. For Industry Training Organisations the equivalent term to EFTS is a standard training measure (or STM).

Figure 2 below sets out the total volume of provision in 2008 for different parts of the tertiary education sector and compares this with the total number of individual student enrolments.

Figure 2: 2008 Total EFTS compared with total student numbers by sub-sector



For all tertiary education sectors the number of students enrolled exceeds the number of EFTS or STMs. This is because there are part-time students and students undertaking shorter courses (less than a full year of study) enrolled in all types of tertiary education. As shown above, ITPs had the largest overall number of students enrolled (over 250,000), as well as the largest difference between EFTS and actual student numbers. This reflects the high proportion of part-time students and those undertaking shorter courses at ITPs. Conversely, universities have a smaller gap between total student numbers and EFTS volume reflecting a higher proportion of full-time students are studying full-year programmes.

Differences in enrolment patterns also lead to differences in the way that courses are completed and qualifications are gained across the sector. As a result, different types of providers need to use different methods to support their students and deliver quality teaching to produce strong student educational results.

2.1.1 Enrolments by NQF level of qualification

One of the key priorities for the sector in the period 2008-2010 is to shift tertiary education provision toward higher level qualifications. Figure 3 shows the pattern of student enrolments in qualifications at different levels over the last five years and indicates that a shift toward higher level qualifications is occurring. During 2008 overall enrolments in NQF

level 1-3 qualifications dropped by approximately five percent and there was a similar increase in enrolments in Bachelor level qualifications.

The enrolment numbers shown in Figure 3 include all students who are studying at different NQF levels. These include both new enrolments, where students are commencing their study in the stated year, and those who have enrolled in a previous year and are continuing their study.

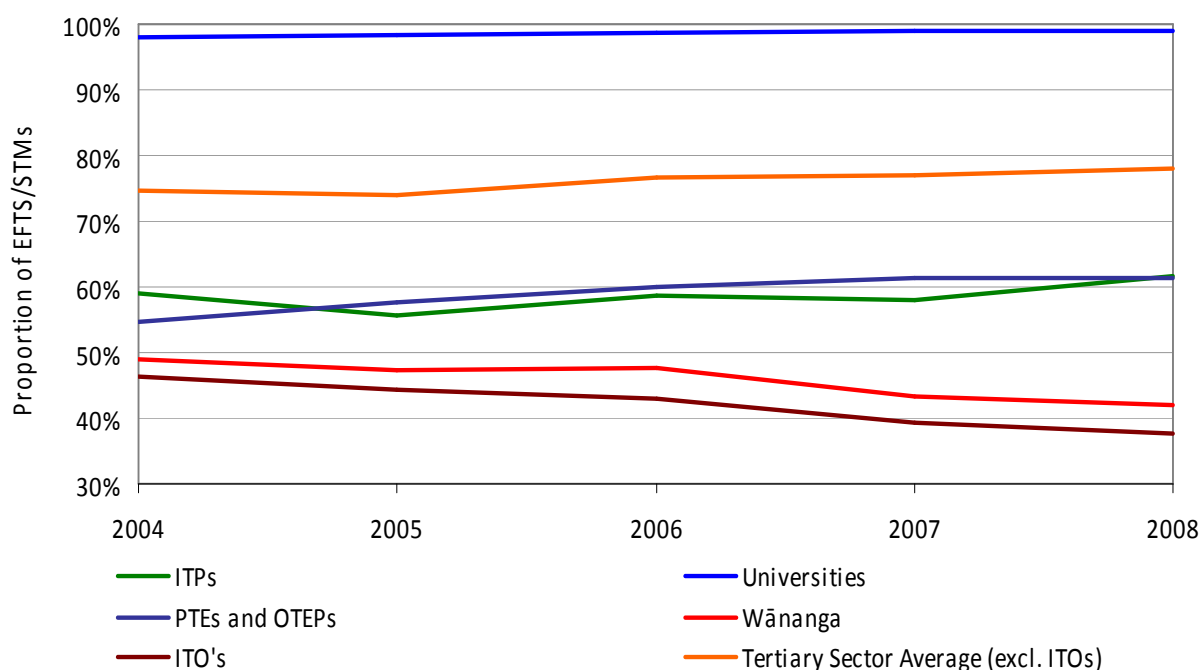
Figure 3: Enrolments by NQF level of qualification (2004-2008)



Figure 4 below shows the pattern of enrolments at NQF level 4 and above for the last five years. Almost all university provision is above level 4 which is consistent with their investment plans. ITP enrolments at level 4 and above have increased by about 3.5% between 2007 and 2008. ITO enrolments at level 4 and above have decreased by around 10%, however only 10% of the industry training fund is made available for education above level 4. Therefore, an increase in higher level provision was not part of ITO investment plan commitments.

The three wānanga have very different mixes of education provision with two of them providing much of their provision above level 4. Wānanga investment plans focused on re-engaging learners in tertiary education, which means provision below level 4 has continued to be important.

Figure 4: Enrolments in qualifications at NQF level four and above (2004-2008)



Along with increasing overall participation at NQF level 4 and above, investment plans also included commitments specifically focusing on increasing participation at higher levels for students under 25 years. As can be seen in Table 1 below, the figures for 2008 enrolments have shown a slight increase consistent with this priority.

Table 1: Proportion of enrolments at NQF level 4 and above

	2006	2007	2008
Proportion of EFTS for students aged under 25 enrolled in qualifications at level 4 and above	84.8%	85.2%	85.6%
Proportion of EFTS at level 4 and above qualifications (all students)	76.6%	76.9%	78.1%

2.1.2 Māori and Pacific peoples enrolment

A key government priority is to increase the participation and achievement of Māori and Pacific peoples in tertiary education. Participation is affected by the enrolment of new students and the retention of existing students. The enrolment figures shown in the tables and graphs below include both new enrolments in the stated year, and those students who have re-enrolled to continue their study.

These provide a clear overview of the sector's performance in delivering results for Māori and Pacific peoples. The main points to be seen from this summarised information are:

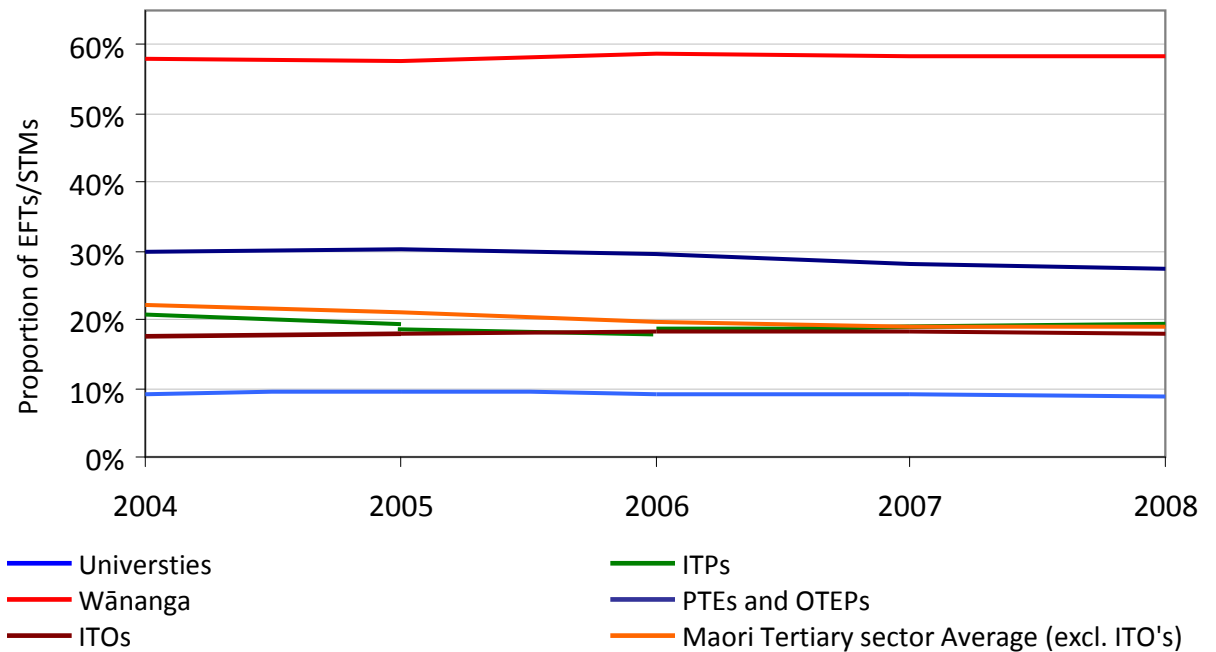
- Since 2004, the proportion of students who are Māori has remained relatively stable, at about 19% overall, with participation rates for each sub-sector remaining relatively unchanged.
- Similarly, the proportion of higher level students who are Māori has remained relatively unchanged for all types of providers.

- 2008, the first year of the investment plans, has shown only gradual improvement in participation by Pacific peoples in tertiary education and no improvement overall in Māori participation. Based on the commitments in investment plans there should be clear improvement in participation over the three year period.
- The proportion of Pacific peoples students at higher qualification levels and overall has increased slightly more in PTEs and OTEPs than in other parts of the sector.

Table 2: Proportion of students enrolled in tertiary education who are Māori and Pacific peoples¹

	2006	2007	2008
Proportion of EFTS - Māori students	19.6%	19.0%	19.1%
Proportion of EFTS - Pacific peoples students	6.8%	7.3%	7.5%

Figure 5: Māori participation in tertiary education (2004-2008)



¹ In 2008 Māori comprised 11.9% of the 18-24 year old population and Pacific peoples 12.1%.

Figure 6: Proportion of students at NQF level 4 and above who are Māori by sub-sector (excl ITOs) (2004-2008)

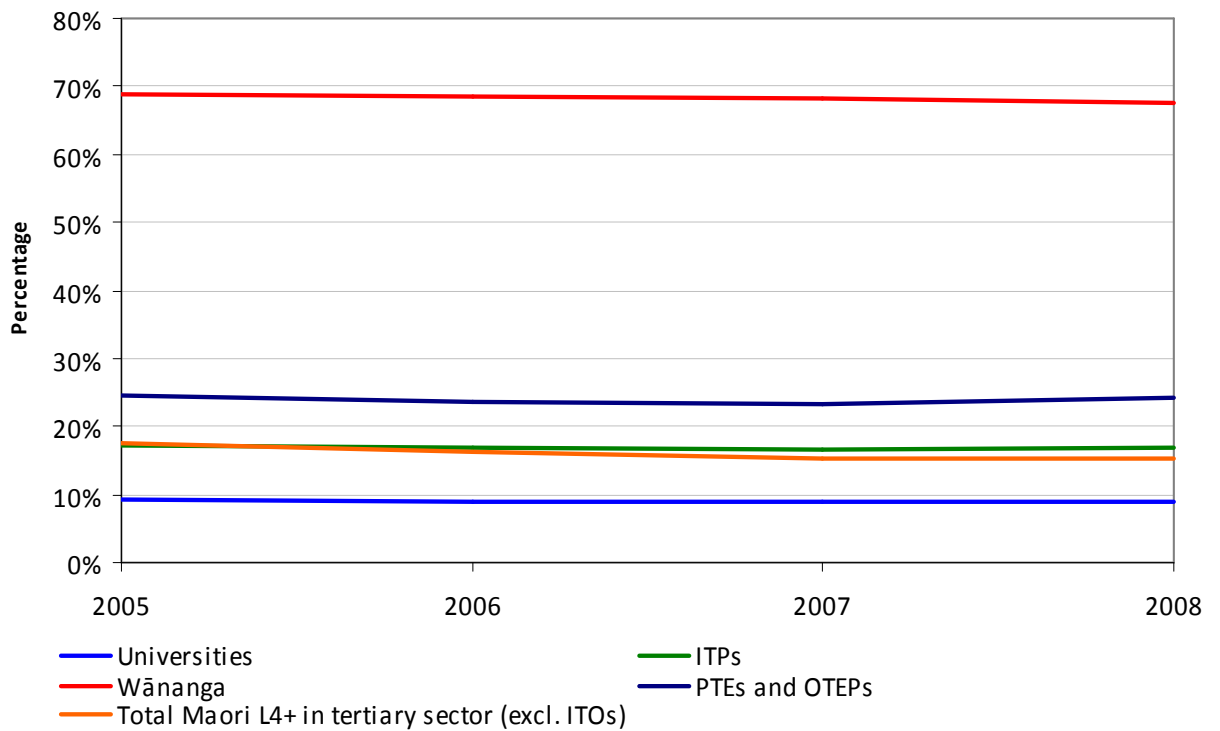


Figure 7: Pacific peoples participation in tertiary education (2004-2008)

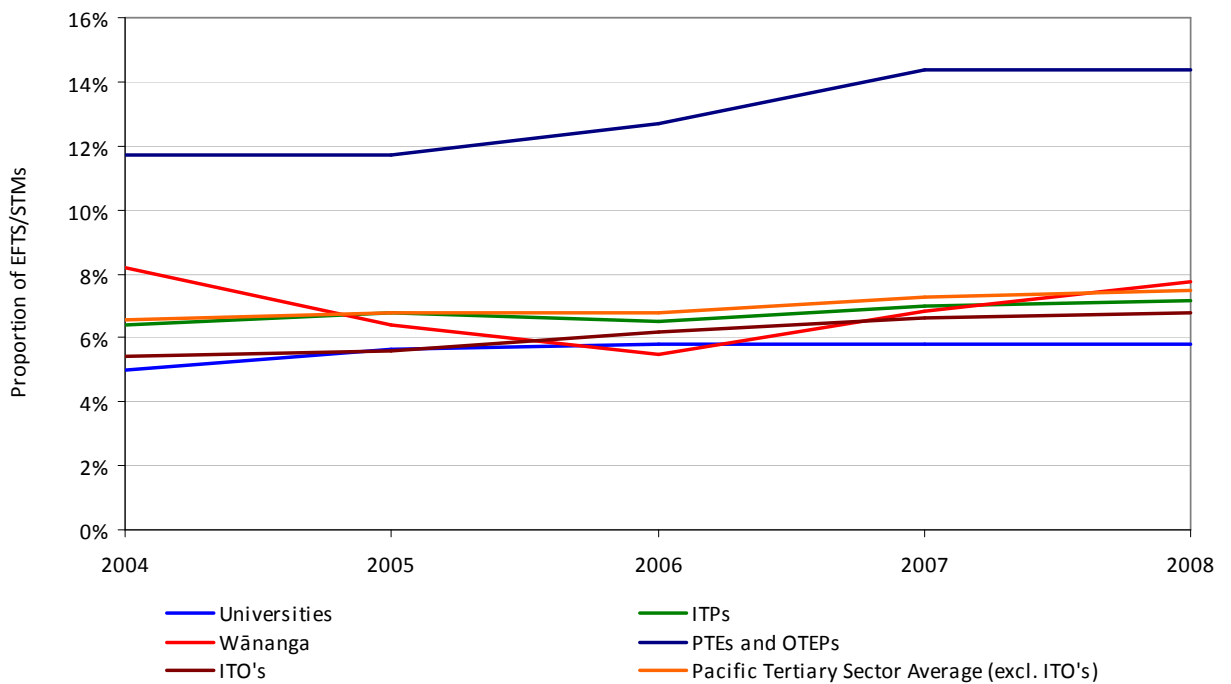
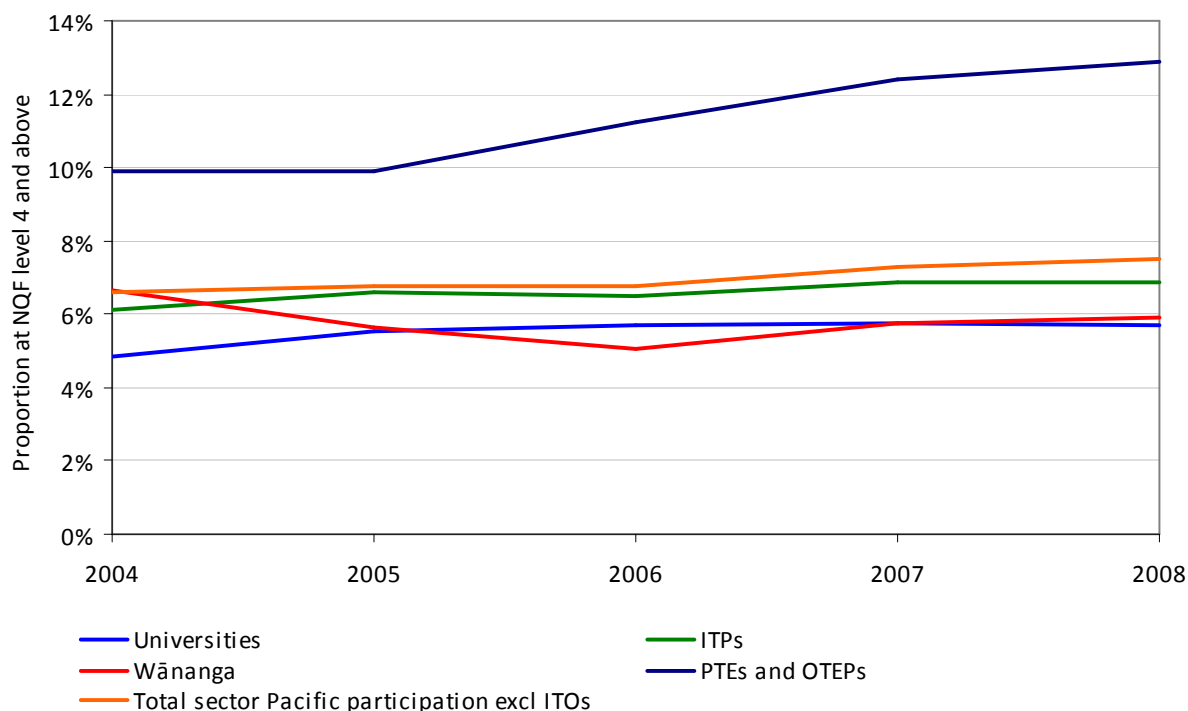


Figure 8: Proportion of students at NQF level 4 and above who are Pacific peoples by sub-sector (excl ITOs) (2004-2008)



2.1.3 Participation in industry training in 2008

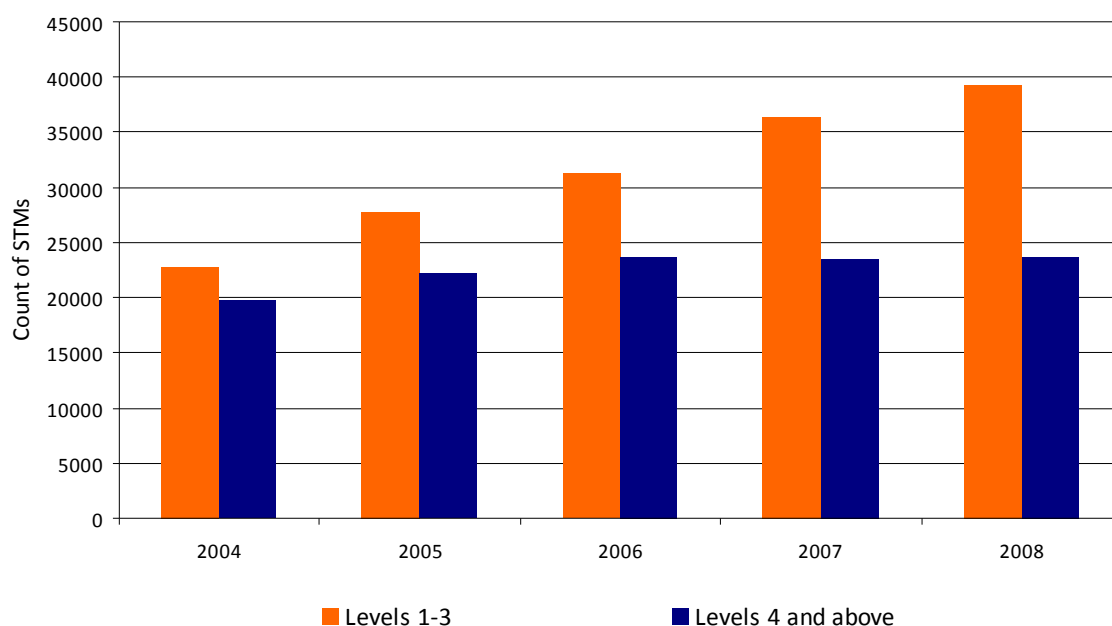
Participation in industry training is measured by both the number of trainees enrolled, and the number of employers with their employees enrolled as trainees. During 2008 although the number of employers involved in industry training decreased slightly from 37,600 to just over 36,000, there was a five percent increase in the number of enrolled trainees with 195,000 employees enrolled as industry trainees and modern apprentices.

Table 3: Number of employers involved in industry training and enrolled trainees

	2007	2008
Number of employers involved in industry training	37,600	36,200
Total number of trainees enrolled in industry training	186,000	195,000

As can be seen from Figure 9 below, the volume of industry training at NQF level 4 and above has remained relatively static over the last four years with most growth in volume being at levels 1-3. This is consistent with ITO investment plans which focus on workplace based provision at level 4 and below. The proportion of the industry training fund which can be used for NQF level 5 and above is capped at 10%.

Figure 9: Number of industry trainee STMs by NQF level (2004-2008)



2.2 Student achievement 2008

Overall, providers' investment plans have a strong focus on increasing student achievement. This is measured by the rates at which their students successfully complete their courses (an immediate measure each year) and the rate at which they complete their qualifications (a longer term measure).

2.2.1 Successful completion of courses in 2008

Successful course completion refers to students who complete a course and pass all the requirements. Courses are parts of qualifications, for example separate papers or course programmes undertaken within an academic semester. As can be seen in Table 4 below successful course completion rates across the sector showed a slight increase in 2008, consistent with commitments in investment plans.

Table 4: Sector successful course completion rates 2006-2008

	2006	2007	2008
Successful course completions - all courses	73.0%	73.2%	74.3%
Successful course completion rates - courses leading to qualifications at and above NQF level 4	77.6%	77.6%	78.4%
Successful course completion rates, students aged under 25 - courses leading to qualifications at and above NQF level 4	79.0%	79.1%	79.6%
Successful course completion rates, Māori students - all courses	62.5%	64.4%	65.0%
Successful course completion rates, Pacific peoples students - all courses	61.0%	61.8%	63.1%

Table 5 and Figures 10-12 below summarise successful course completions for different parts of the sector in 2008. The following trends are evident from the aggregated numbers:

- Successful course completion rates remained relatively unchanged in ITPs between 2007 and 2008 but there were slight increases for all other provider types.
- Successful course completion rates for Māori and Pacific peoples showed slight increases in 2008 but continued to be below the rate for all students.
- Universities, PTEs and OTEPs show the strongest improvement in successful course completion rates for Māori in 2008.
- Universities, PTEs and OTEPs showed the strongest improvement in successful course completions for Pacific peoples in 2008, with the rate for ITPs decreasing slightly.

Table 5: 2008 Successful course completion rates by sub-sector (excluding ITOs)

	All providers	Universities	ITPs	Wānanga	PTEs and OTEPs
All students	74.3%	82.1%	68.9%	71.9%	74.8%
Māori	65.0%	74.7%	59.0%	67.6%	60.5%
Pacific peoples	63.1%	63.7%	57.1%	68.2%	66.5%

Figure 10: Successful course completion rates by sub-sector (excluding ITOs), 2004-2008

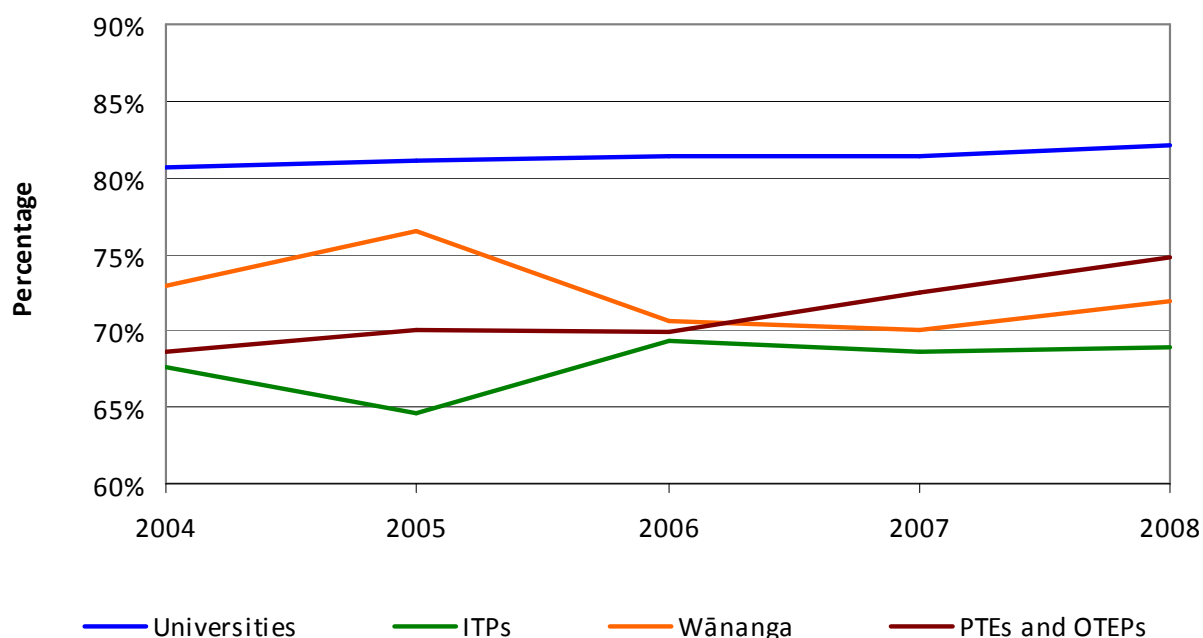


Figure 11: Māori - successful course completions by sub-sector, 2004-2008

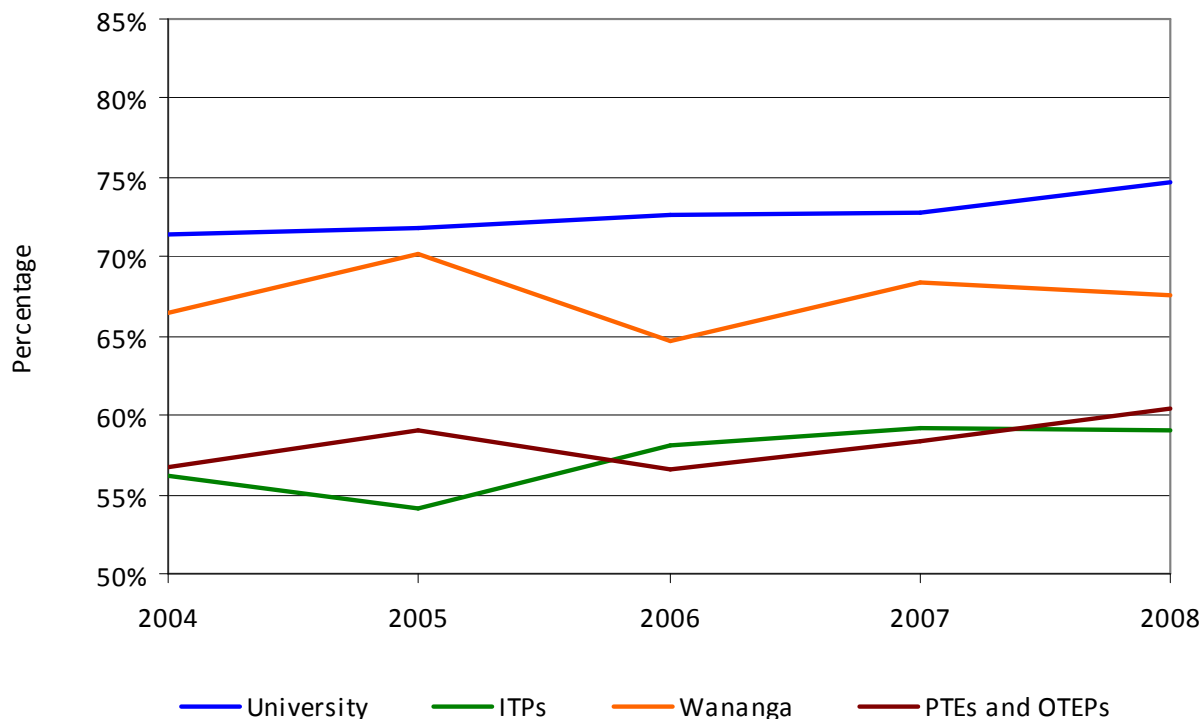
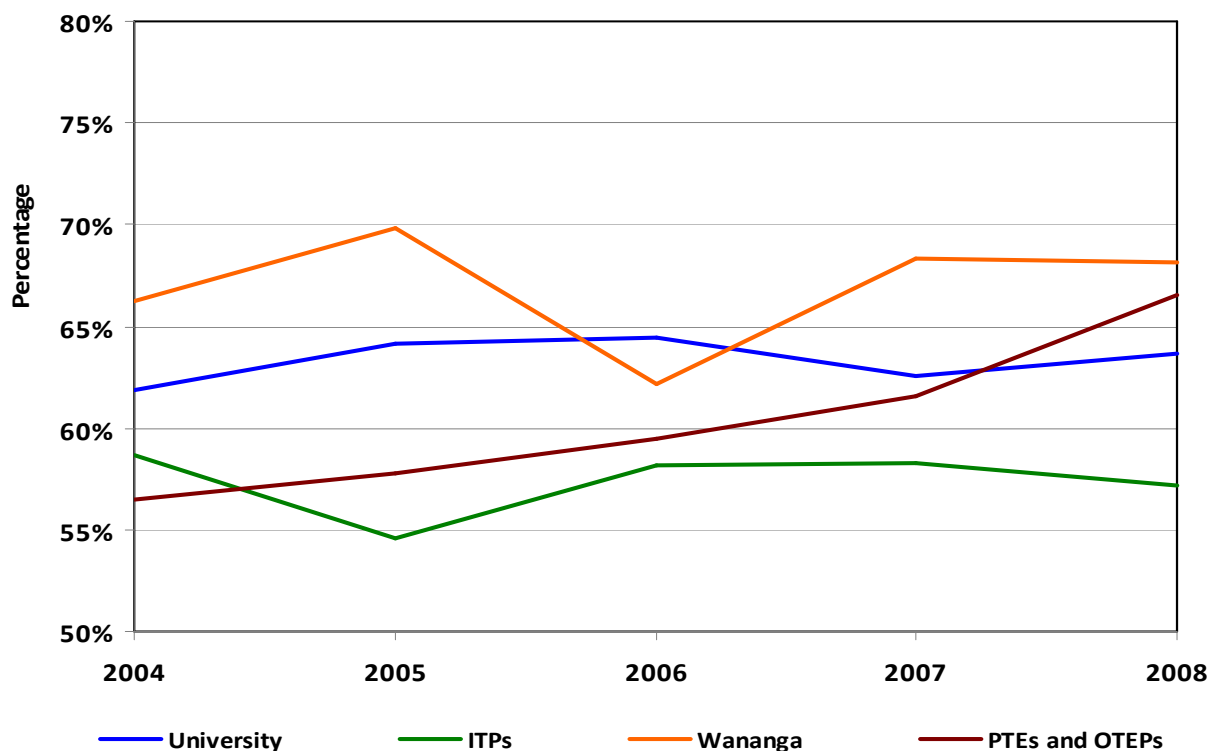


Figure 12: Pacific peoples - successful course completions by sub-sector, 2004-2008



2.2.2 Industry trainee achievement

Industry trainees enrol in structured programmes of workplace based learning, not in courses as such, so there is no successful course completion rate for industry training. The closest comparable measure is the rate at which trainees complete their programmes, as shown below in Figure 13. As programmes run over calendar years, 2007 is the most recent programme completion data that can be reported.

As can be seen in Figure 13, programme completion rates for industry trainees have improved over the three years 2005-2007, with noticeable improvements for Māori and Pacific peoples.

Another way to measure the achievement of industry trainees is to look at the total number of national qualifications gained each year. As shown in Figure 14 below, the number of qualifications gained roughly tracks the number of trainees.

Figure 13: Completion rates for industry trainees, 2004-2008

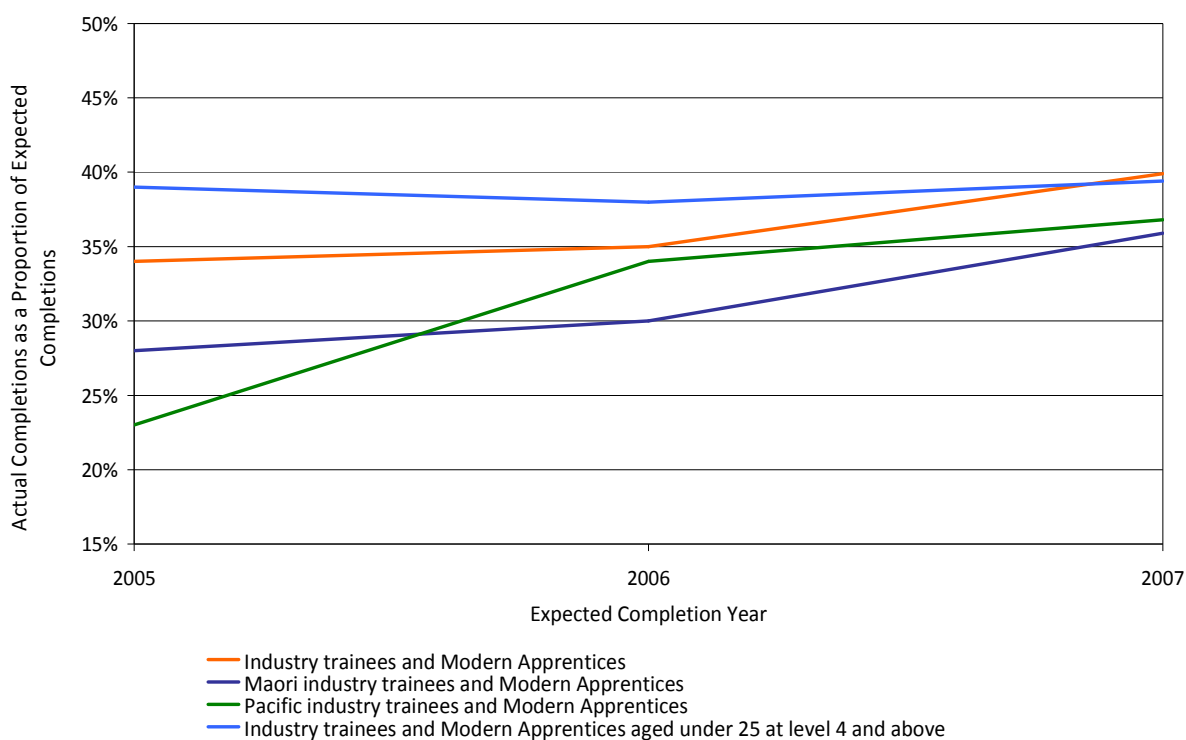
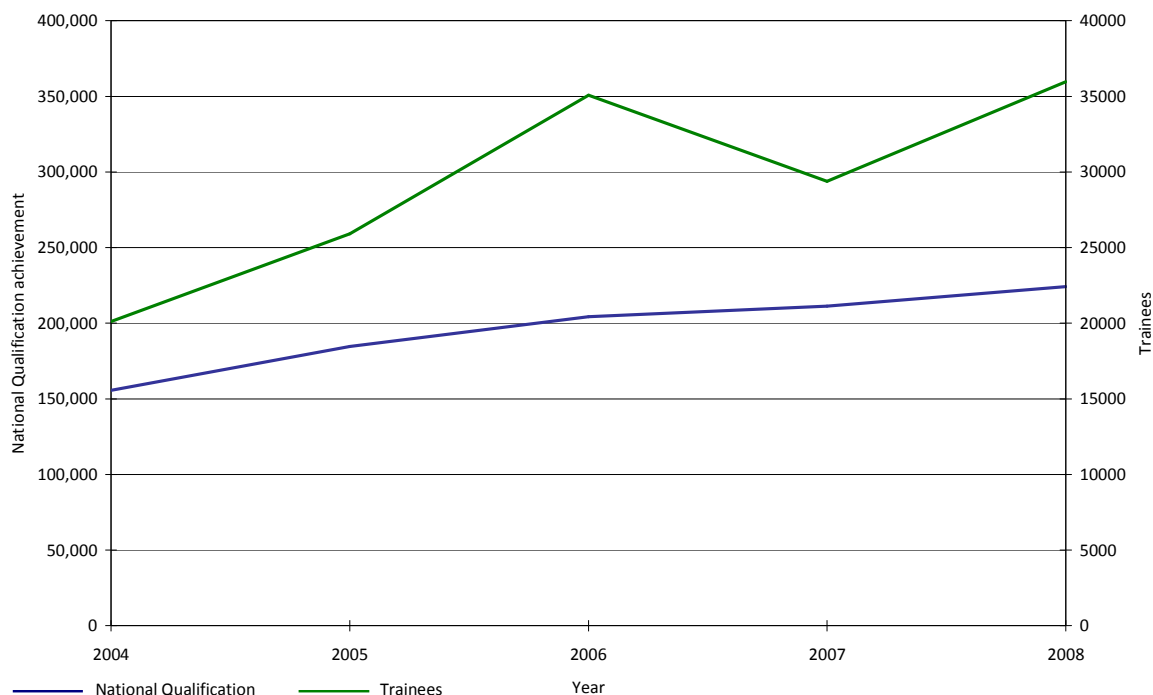


Figure 14: Trainee numbers and National Qualifications achieved (2004-2008)



2.2.3 Five year qualification completion rates

The proportion of students who complete their tertiary education qualification is a key measure of the success of tertiary education providers and industry training. Qualifications vary in length and individual students also vary considerably in how long they take to complete qualifications. A general indicator of how successful providers are in enabling their students to complete qualifications is the five-year qualification completion rate. This measure shows the percentage of students who have completed their qualification (or a higher level qualification) within five years of when they first enrolled.

The years shown in the graphs and tables below are the first year of students' enrolment. The tables and graphs show the percentage of that group of students who have completed their qualification within five years of enrolment. The qualification completion data used in this report predates investment plans. Commitments made by providers and ITOs to improve five-year qualification completion rates in investment plans will be available from 2013.

The tertiary sector's overall five-year qualification completion rates remain relatively stable at around 40%. This includes part-time students and those students who have enrolled in courses without intending to complete a full qualification. Part time students often take longer than five years to complete qualifications. As a result, providers with high proportions of part-time students tend to have lower five-year completion rates. Five year qualification rates are around 75% for full-time students studying above level 4.

Table 6 and Figures 14 to 17 summarise patterns of five year qualification completion rates across the sector. Some of the main trends evident in this summary information include:

- Qualification completion rates for Māori and Pacific peoples are lower than average rates for all students.

- Overall five year completion rates have remained relatively stable at about 40% across the whole sector for students first enrolled in 2001-2004.
- There has been a significant and constant improvement in the qualification completion rates for students enrolled at wānanga.
- For students aged under 25 years studying at higher NQF levels there has been little overall change in completion rates.
- Māori students have increased their qualification completion rates for universities and wānanga, but there has been a steady decline in ITPs.
- Pacific people have the highest qualification completion rates at PTEs and OTEPs and have shown a strong improvement in this area in recent years. Pacific peoples have consistently had the lowest completion rates at ITPs, however these figures did improve for enrolment year 2004.

Table 6: Sector five year qualification completion rates, for students initially enrolled in 2001-2004

	2001	2002	2003	2004
Qualification completion rates, all students - all qualifications	40.3%	39.2%	41.8%	41.4%
Qualification completion rates for students aged under 25 - level 4 and above qualifications	51.0%	50.1%	50.7%	50.3%
Qualification completion rates, Māori students - all qualifications	33.5%	38.5%	34.6%	36.5%
Qualification completion rates, Pacific peoples students - all qualifications	36.7%	33.2%	34.1%	34.8%

Figure 15: Five year qualification completion rates by type of provider, for students who enrolled in the years 2001-2004

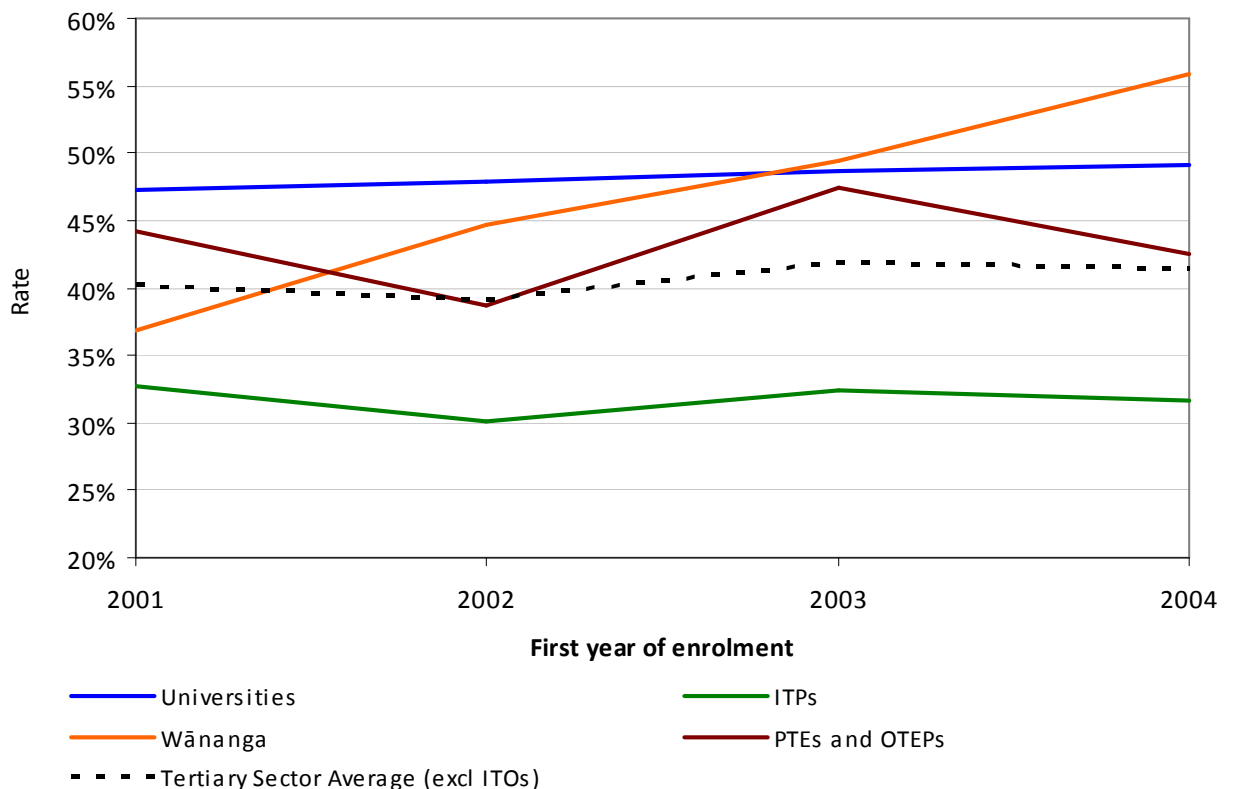


Figure 16: Five year qualification completion rates for students aged under 25 years enrolled at NQF level four and above, year of initial enrolment 2001-2004

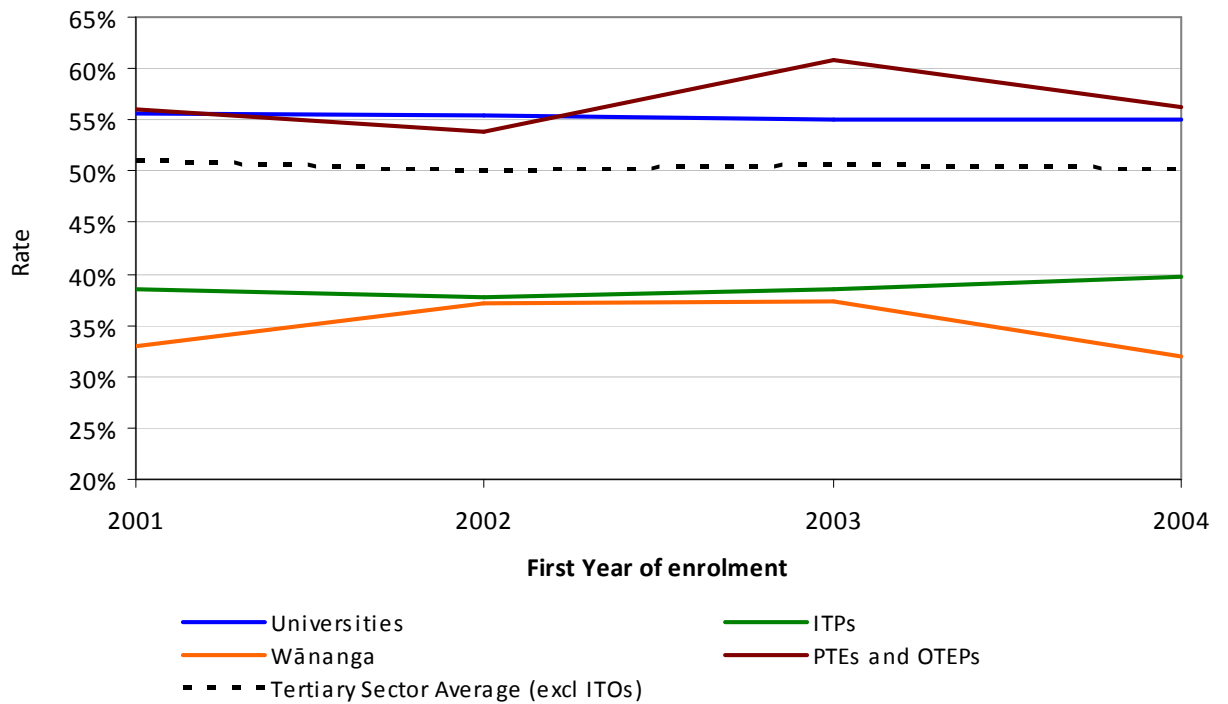


Figure 17: Five year qualification completion rates for Māori by type of provider, enrolment years 2001-2004

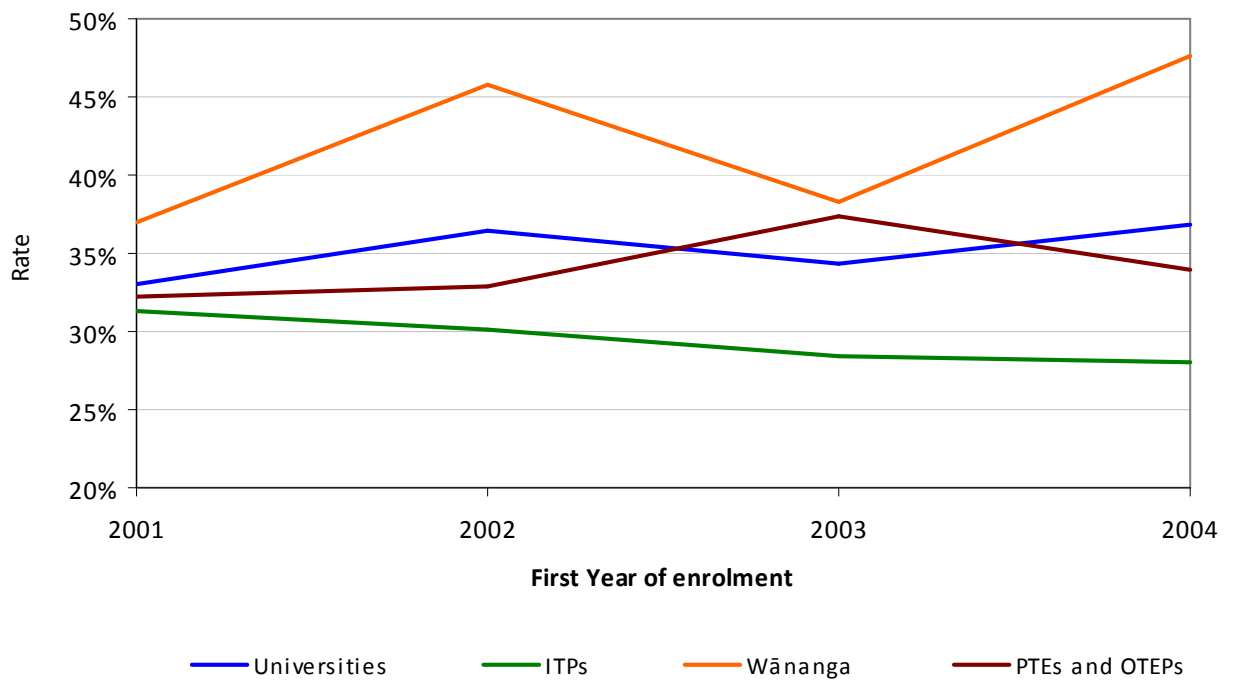
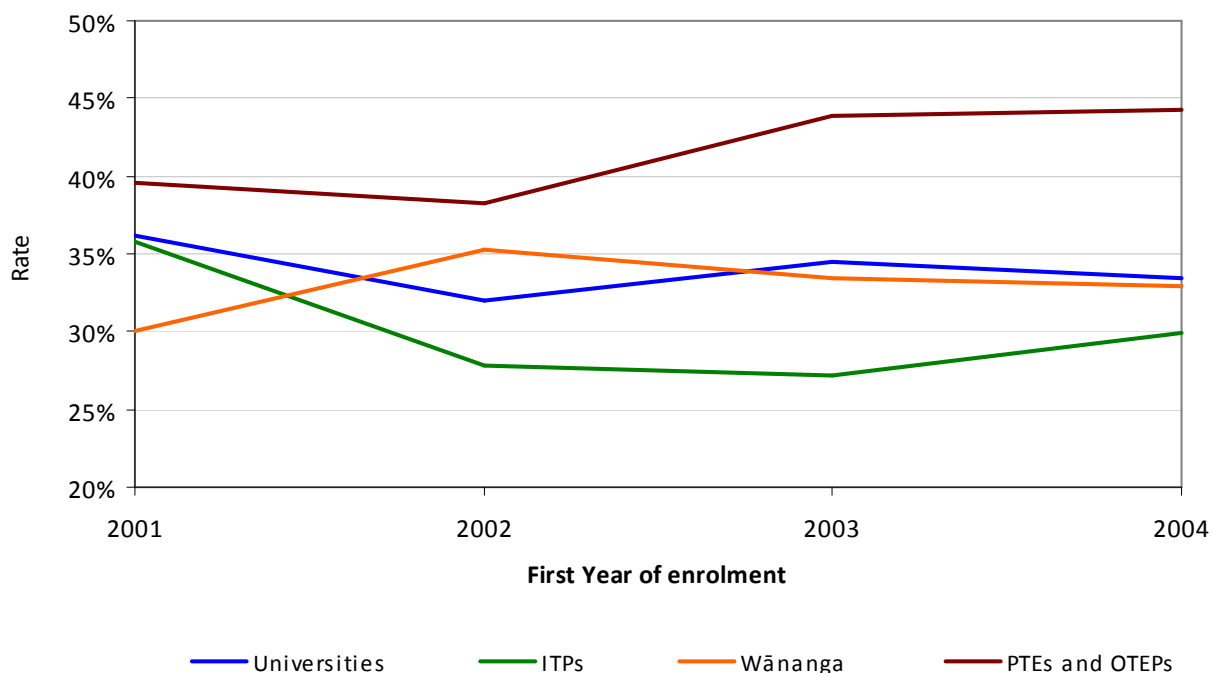


Figure 18: Five year qualification completion rates for Pacific peoples by type of provider, year of enrolment 2001-2004



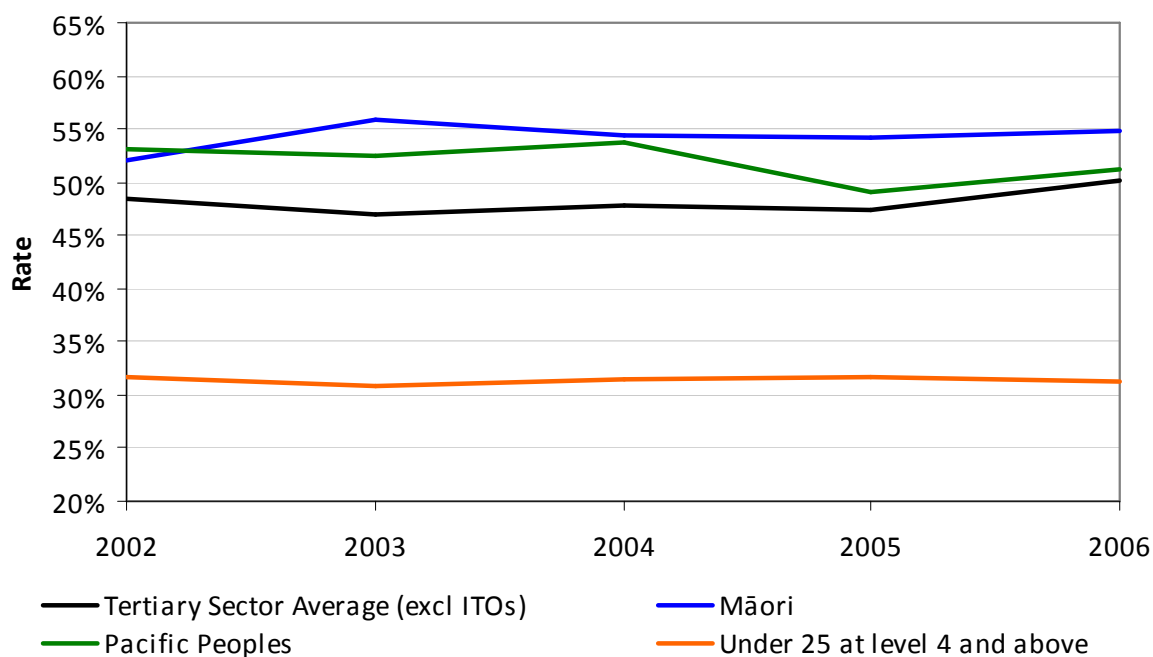
2.3 Retaining students in study – First year attrition

First year attrition refers to the proportion of students who have enrolled at a tertiary provider but do not enrol at the provider during the following year. If the student enrolls at the provider in the subsequent year in a lower level qualification than they had originally enrolled in, this is also counted as attrition.

The higher the attrition rate the greater the number of students who are leaving tertiary study without completing their qualification. While students leave study for all sorts of reasons, attrition rates provide an indication of how well students are engaged and supported in their study. As such, attrition rates are an important aspect of educational performance.

The importance of attrition is reflected in providers' investment plans which included commitments to improve the retention of students in their study. This should show up as a decreasing attrition rate. Attrition is calculated two years following the date of enrolment and is based on the year a student starts a qualification. As such, provider progress toward reducing attrition rates from 2008 onwards will be available from 2010. Small decreases in attrition are expected for the first year of investment plans, with a reduced attrition rate becoming more visible over the duration of the plan period.

Figure 19: Sector attrition rates



Note: The 2002-2006 years shown in the graph and the table refer to the years in which students first enrolled.

Table 7: Sector attrition rates

	2002	2003	2004	2005	2006
First year attrition - all students	48.4%	46.9%	47.9%	47.3%	50.2%
First year attrition for students aged under 25 - level 4 and above qualifications	31.6%	30.8%	31.5%	31.6%	31.2%
First year attrition, Māori students - all qualifications	52.0%	55.8%	54.5%	54.1%	54.8%
First year attrition, Pacific peoples students - all qualifications	53.1%	52.5%	53.7%	49.0%	51.2%

Across the whole tertiary sector there has been an increase in first year attrition rates over the last five years. Rates for Māori and Pacific peoples continue to be higher than the average rates for all students and this is an area of particular focus for 2008-2010 investment plans.

Section Three – Performance against planned delivery

This section summarises the number of students funded through the student achievement component and industry training funds, what they are studying, and how this education provision compares with providers' plan commitments. The number of students and what they study, as set out in investment plans, determines the amount of funding a provider receives. The subject areas, and the types of qualifications that are offered should reflect the needs of students individually, and the collective requirements of New Zealand employers and communities for tertiary education.

3.1 Participation

To enable comparisons to be made between providers and sub-sectors, the term equivalent full time student (or EFTS) is used. This is because the actual number of enrolments will differ due to the mix of full time and part time students at each provider. Each course in which students enrol has an EFTS value and the EFTS value of the courses are added together to determine the total EFTS for a provider. A student whose EFTS value adds to one is considered a full time student. For Industry Training Organisations the equivalent term to EFTS is standard training measure (or STM).

3.1.1 Overall participation

In 2008 the Tertiary Education Commission funded approximately 211,000 EFTS and nearly 55,000 standard training measures.

As can be seen in Table 8, universities, wānanga, PTEs / OTEPs and ITOs delivered close to, or above their planned number of EFTS or STMs. The under delivery for ITPs reflects lower enrolments in a small number of these institutions.

Table 8: Equivalent Full Time Students by sub-sector

	2006 Actual	2007 Actual	2008 Actual	2008 Planned	2008 Actual as a % of Planned
Universities	103,706	110,271	111,498	112,031	99.52%
ITPs	65,537	67,330	62,821	66,385	94.63%
PTEs & OTEPs	12,647	13,505	14,188	not applicable	not applicable
Wānanga	23,430	22,044	22,517	22,978	97.99%
ITO STM	54,926	59,940	62,923	55,060	114.28%

Note: Not all PTEs and OTEPs were funded through plans in 2008, so there are no figures in the plan columns

3.2 Field of study

In recent years there have been some significant changes in the number of student's participating in different tertiary education subject areas. Changes in the type of tertiary

education being provided are measured by the changes in patterns of students' enrolment. Changes in enrolment over the last three years can be considered in two ways:

- The change in the number of EFTS from one year to the next (each course has an associated EFTS value).
- The change in the funded value of course enrolments from one year to the next (different courses are funded at different rates, as some cost more to provide than others).

Courses are classified into 39 subject categories. Table 9 shows those courses where there has been a change of 100 EFTS or more (plus or minus) from 2007 to 2008. Table 10 shows where the change in the percentage of total funding for a course classification has changed by 0.2% or more (plus or minus). The changes in EFTS and funding for courses in all 39 subject categories is set out in Appendix 3.

Table 9: Subject categories where there has been a change of 100 or more EFTS between 2007 and 2008

Subject Category	2006	2007	2008	Change 2006 to 2007	Change 2007 to 2008	% change from 2007
Arts; Advanced Studies for Teachers; Health Therapies; Humanities; Languages; Social Sciences	66,552	66,050	63,839	- 502	- 2,211	- 3.3%
Short Awards	2,161	1,803	1	- 358	- 1,802	- 99.9%
Business; Accountancy; Office Systems/Secretarial; Management	45,207	47,117	47,724	1,910	607	1.3%
Teaching: Primary Recognised Degree/Diploma of Teaching.	3,746	4,992	4,649	1,246	- 343	- 6.9%
Computer Science	6,227	6,185	6,515	- 42	330	5.3%
Science	17,523	18,330	18,638	807	308	1.7%
Fine Arts; Design	8,119	8,286	8,566	167	280	3.4%
Agriculture; Horticulture	6,675	6,567	6,813	- 108	246	3.7%
Architecture; Quantity Surveying	2,746	3,017	3,196	271	179	5.9%
Nursing	4,233	4,347	4,499	114	152	3.5%
Trades 2: All trade courses other than for apprentices under Part III of the Industry Training Act 1992 and Agricultural, Horticultural, Forestry, and Primary Industry Cadets.	9,828	10,127	9,987	299	- 140	- 1.4%
Teaching: Secondary and Specialist Recognised Degree/Diploma of Teaching.	1,391	1,833	1,700	442	- 133	- 7.3%
Health Related Professions	2,508	2,520	2,648	12	128	5.1%
Law	4,959	5,268	5,163	309	- 105	- 2.0%

While there was a drop in the overall number of EFTS between 2007 and 2008 some courses increased in enrolments in 2008. The most significant increases in numbers occurred in Business (including accountancy, office systems/secretarial and management), computer science and science.

The course areas that declined the most in the number of EFTS enrolled between 2007 and 2008 were Arts, Health Therapies, Humanities, Languages, Social Sciences and Teaching. This continued the trend shown between 2006 and 2007. While there was a decline in Teaching EFTS between 2007 and 2008, the 2008 volume was still higher than in 2006. Similarly trade and law enrolments in 2008 were at or slightly above 2006 levels, despite a slight drop between 2007-2008.

Table 10: Subject categories where there has been a change in the funded value of course enrolments of 0.2% or more between (note brackets indicate a decrease i.e. a negative number)

Subject category	\$million			Change 2006 - 07 \$million	Change 2007 - 08 \$million	Change as a % of total funding
	2006	2007	2008			
Arts; Advanced Studies for Teachers; Health Therapies; Humanities; Languages; Social Sciences	\$366.8	\$365.9	\$303.7	(\$1.0)	(\$62.2)	(1.3%)
Short Awards	\$14.6	\$12.8	\$0.0	(\$1.8)	(\$12.8)	(0.8%)
Science	\$172.9	\$179.0	\$168.6	\$6.1	(\$10.4)	0.8%
Trades 2: All trade courses other than for apprentices under Part III of the Industry Training Act 1992 and Agricultural, Horticultural, Forestry, and Primary Industry Cadets.	\$83.4	\$91.5	\$73.4	\$8.2	(\$18.2)	(0.5%)
Business; Accountancy; Office Systems/Secretarial; Management	\$246.8	\$259.7	\$230.9	\$12.9	(\$28.8)	0.2%
Fine Arts; Design	\$69.0	\$69.3	\$63.3	\$0.3	(\$6.0)	0.2%
Health Sciences (excluding classifications #07, #15, and #17)	\$30.1	\$29.0	\$27.9	(\$1.1)	(\$1.1)	0.2%
Dentistry	\$7.5	\$11.4	\$13.0	\$3.9	\$1.6	0.2%
Medicine (years 2-3, excluding intermediate/first year)	\$15.7	\$25.4	\$25.7	\$9.7	\$0.3	0.2%
Computer Science	\$54.5	\$52.5	\$49.7	(\$2.0)	(\$2.8)	0.2%

The greatest changes in funded value (between 2007 and 2008) occurred in the areas of:

- the Arts (including Advanced Studies for Teachers; Health Therapies; Humanities; Languages; Social Sciences), which saw a 1.3% drop in investment (or \$62.223m)
- Short Awards, which saw a 0.8% decrease (or \$12.777m)
- science, where although investment dropped by \$10.354m, its overall share of the total funding increased by 0.8%.

Section Four – Sub-sector performance against government priorities and plan commitments

In their plans for 2008-10, tertiary education providers and industry training organisations set out performance commitments based on the priorities in the 2007-2012 Tertiary Education Strategy. This section summarises the aggregated average performance for each sub-sector against the priority areas for improvement in the Tertiary Education Strategy. The Strategy sets out slightly different priorities for different sub-sectors, as such, there are differences in the reported performance measures for each sub-sector.

4.1 Universities

The government's priority areas for universities were to increase educational success for younger adults and for Māori and Pacific peoples. Universities responded in their 2008-2010 investment plans by committing to continue their strong enrolment figures for students aged under 25 and to maintain high course completion rates.

Universities also committed to increased participation and success for Māori and Pacific peoples at degree and post-graduate levels, however relatively modest targets were set. For example the average commitment was less than 1% growth in the proportion of Māori students and the highest was 3%. Given the lead in times for increased participation to appear in the data, it is difficult to determine whether or not performance is on track towards these commitments.

Tables 11 to 14 set out the average performance of universities in 2008 (compared with 2006 and 2007) against the educational performance measures in their 2008-10 investment plans

Some of the main trends evident in this summary information are:

- Compared to the performance of the wider tertiary sector, universities had the highest rate of successful course completions.
- There was a slight improvement in the proportion of students enrolled in degree level and above, as a result of a corresponding decrease in sub-degree enrolments.
- Māori participation has remained static, however given the lead in times for increased participation to appear in the data, it is difficult to determine whether or not performance is on track toward meeting commitments to increase Māori participation.

Table 11: Universities - participation and successful course completion

Performance indicator		2006	2007	2008
EFTS - Proportion of sub-degree provision	University	7.5%	7.1%	6.4%
	Sector	48.5%	47.4%	46.2%
EFTS - Students aged under 25 - proportion studying degree, graduate diploma, and post-graduate qualifications	University	93.1%	93.3%	94.0%
	Sector	65.3%	65.9%	66.6%
EFTS - Proportion Māori students	University	9.0%	9.0%	8.9%
	Sector	19.6%	19.0%	19.1%
EFTS - Proportion Pacific students	University	5.8%	5.8%	5.8%
	Sector	6.8%	7.3%	7.5%
Māori students - successful course completion rates for degree	University	73.6%	74.0%	75.8%

Performance indicator		2006	2007	2008
and grad diploma qualifications	Sector	74.1%	72.0%	73.5%
Pacific students - successful course completion rates for degree and grad diploma qualifications	University	64.2%	63.4%	64.3%
	Sector	65.9%	65.2%	66.0%
All students - successful course completion rates for degree and grad diploma qualifications	University	82.2%	82.4%	82.8%
	Sector	82.5%	82.3%	82.8%
Students aged under 25 - successful course completion rates for degree and grad diploma qualifications	University	83.2%	83.2%	83.4%
	Sector	83.3%	83.2%	83.4%

Table 12: Universities – first year attrition

Performance indicator		Year enrolled		
		2004	2005	2006
Māori students - first year attrition for degree, grad diploma and post-graduate qualifications	University	34.4%	33.0%	32.7%
	Sector	35.9%	35.6%	35.1%
Pacific students - first year attrition for degree, grad diploma and post-graduate qualifications	University	30.8%	28.4%	28.8%
	Sector	32.6%	31.0%	31.3%
All students - first year attrition for degree, grad diploma and post-graduate qualifications	University	26.1%	24.9%	24.6%
	Sector	28.2%	27.7%	27.0%
Students aged under 25 - first year attrition for degree, grad diploma and post-graduate qualifications	University	19.7%	18.9%	19.0%
	Sector	20.8%	20.0%	20.1%

Table 13: Universities – two year qualification completion rate for short qualifications (those with a value of 1 EFTS or less) at degree, graduate diploma and post-graduate levels

Performance indicator		Year enrolled		
		2005	2006	2007
Māori students - Qualification completion rates in one EFTS and under degree, grad diploma and post-graduate qualifications (over a 2 year period)	University	34.6%	35.3%	37.0%
	Sector	36.4%	37.5%	38.7%
Pacific students - Qualification completion rates in one EFTS and under degree, grad diploma and post-graduate qualifications (over a 2 year period)	University	36.6%	40.6%	41.0%
	Sector	37.7%	41.8%	43.7%
All students - Qualification completion rates in one EFTS and under degree, grad diploma and post-graduate qualifications (over a 2 year period)	University	42.5%	40.1%	45.7%
	Sector	41.5%	39.8%	46.9%
Students aged under 25 - Qualification completion rates in one EFTS and under degree, grad diploma and post-graduate qualifications (over a 2 year period)	University	60.5%	58.2%	66.6%
	Sector	63.2%	60.4%	70.5%

Table 14: University five year qualification completion rate

Performance indicator		Year enrolled		
		2002	2003	2004
Māori students - Qualification completion rates for all degree, grad diploma and post-graduate qualifications (over a 5 year period)	University	36.8%	35.3%	37.7%
	Sector	36.5%	35.5%	36.9%
Pacific students - Qualification completion rates for all degree, grad diploma and post-graduate qualifications (over a 5 year period)	University	32.5%	34.5%	35.2%
	Sector	32.2%	34.0%	35.6%
All students - Qualification completion rates for all degree, grad diploma and post-graduate qualifications (over a 5 year period)	University	48.6%	49.3%	49.8%
	Sector	47.6%	48.7%	49.3%
Students aged under 25 - Qualification completion rates for all degree, grad diploma and post-graduate qualifications (over a 5 year period)	University	57.1%	56.4%	56.7%
	Sector	56.5%	56.4%	56.2%

4.2 Institutes of Technology and Polytechnics (ITPs)

Government priorities for improved performance in the ITP sector are to increase provision of qualification programmes at level 4 and above, and to increase course and qualification completion rates, especially for students under 25 years old. Specific ITP plan commitments varied considerably, but many committed to improve participation rates for younger adults and successful course completions for all students.

Many ITPs also targeted the progression of their students from entry level courses (level 1-3) into higher level study (level 4-7), either within that ITP or at another provider. The level of performance commitments made by ITPs was generally relatively modest - being either to maintain their current performance or to improve to meet the average level for all ITPs.

Tables 15 to 18 summarise the 2008 performance of the ITPs (compared to 2006 and 2007) against the educational performance measures in investment plans and relevant to the priorities set out in the Tertiary Education Strategy 2007-2012.

Some of the main trends evident in this summary information include:

- In 2008 the ITP sub-sector had approximately 10% lower successful course completion rates on average than universities, although there is a wide variation in rates for different levels of provision across the ITPs as a group.
- Overall there was an improvement in the proportion of students studying at level 4 and above.

Table 15: ITPs - participation and successful course completion

Performance indicator		2006	2007	2008
Proportion of EFTS for level 4 certificates and level 5 – 7 diplomas, degrees and grad diplomas	ITP	57.7%	57.2%	60.7%
	Sector	66.6%	66.9%	67.8%
Students aged under 25 - Proportion of EFTS enrolled in qualifications at level 4 and above	ITP	63.0%	62.5%	64.5%
	Sector	84.8%	85.2%	85.6%
All students - Successful course completion rates for level 4 certificates and level 5 – 7 diplomas, degrees and grad diplomas	ITP	74.1%	74.0%	74.7%
	Sector	77.6%	77.6%	78.4%
Students aged under 25 - Successful course completion rates for level 4 certificates and level 5 – 7 diplomas, degrees and grad diplomas	ITP	72.5%	73.1%	72.8%
	Sector	79.0%	79.1%	79.6%

Table 16: ITPs - first year attrition

Performance indicator		Year enrolled		
		2004	2005	2006
All students - First year attrition for level 4 certificates and level 5 – 7 diplomas, degrees and grad diplomas	ITP	54.2%	54.8%	51.7%
	Sector	44.0%	43.2%	42.2%
Students aged under 25 - First year qualification attrition for level 4 and above qualifications	ITP	44.9%	46.2%	45.1%
	Sector	31.5%	31.6%	31.2%

Table 17: ITPs - two year qualification completion rate, for short qualifications (those with a value of 1 EFTS or less) level 4 and above

Performance indicator		Year enrolled		
		2005	2006	2007
All students - Qualification completion rates level 4 certificates and level 5 - 7 diplomas, degrees, and grad diplomas (over a 2 year period)	ITP	26.1%	28.8%	23.9%
	Sector	32.6%	33.8%	33.0%
Students aged under 25 - Qualification completion rates in one EFTS and under level 4 and above qualifications (over a 2 year period)	ITP	35.8%	37.2%	36.0%
	Sector	44.2%	43.4%	45.2%

Table 18: ITPs - five year qualification completion rate

Performance indicator		Year enrolled		
		2002	2003	2004
Qualification completion rates for all level 4 and above qualifications for students aged under 25 (over a 5 year period)	ITP	37.8%	38.5%	39.7%
	Sector	50.1%	50.7%	50.3%
Qualification completion rates for all level 4 certificates and level 5 – 7 diplomas, degrees and grad diplomas (over a 5 year period)	ITP	29.5%	29.3%	31.4%
	Sector	39.7%	40.4%	39.8%

4.3 Wānanga

Any wānanga sector analysis is significantly skewed due to the relative size of two of the wānanga with the third representing eighty one percent of total wānanga provision. The focus of the two smaller wānanga is at levels four and above while the largest of the wānanga has the bulk of its provision at levels one to three.

Government priorities for the wānanga were to increase participation and achievement in programmes at level 4 and above, particularly for younger adults and with a continued focus on educational achievement for Māori. Collectively in their plans wānanga anticipated modest improvement in participation and completion rates for students under the age of 25 studying at level 4 and above. In their plans they also committed to decreased attrition rates and improved course and qualification completions for students over the age of 25 - the majority of students studying at wānanga.

In the first year of the 2008-2010 investment plans, the wānanga overall had approximately 10% lower successful course completion rates on average than universities. However, many individual programmes had similar or better rates than the average for universities and overall there was a noticeable improvement in successful course completion rates. During 2008 the largest wānanga reduced its level four and above provision as part of refocusing its mix of provision. This coupled with the two smaller wānanga under-delivering against their original Plans resulted in a drop in the proportion of students studying at level four and above in 2008.

Tables 19 to 22 below summarise the 2008 educational performance of the wānanga, compared to 2006 - 2007, in terms of government priorities for improvement as set out in investment plans 2008-10.

Table 19: Wānanga - participation and successful course completion

Performance indicator		2006	2007	2008
		Wānanga	47.7%	43.2%
Proportion of EFTS at diploma level 4 and above	Sector	76.5%	76.8%	77.9%
	Wānanga	48.8%	45.9%	43.8%
Students aged under 25 - Proportion of EFTS for level 4 and above qualifications	Sector	84.6%	85.1%	85.4%
	Wānanga	55.7%	50.4%	48.4%
Māori students - Proportion of EFTS at diploma level 4 and above qualifications	Sector	63.0%	61.7%	62.3%
	Wānanga	69.4%	64.9%	67.0%
All students - Successful course completion rates for level 4 certificates and level 5 - 7 diplomas, degrees and grad diplomas	Sector	77.6%	77.6%	78.4%
	Wānanga	70.3%	64.1%	64.5%
Māori students - Successful course completion rates for level 4 certificates and level 5 - 7 diplomas, degrees and grad diplomas	Sector	68.1%	66.5%	67.2%
	Wānanga	63.1%	53.9%	54.9%
Students aged under 25 - Successful course completion rates for level 4 certificates and level 5 - 7 diplomas, degrees and grad diplomas	Sector	79.0%	79.1%	79.6%

Table 20: Wānanga first year attrition

Performance indicator		Year enrolled		
		2004	2005	2006
All students - First year attrition for level 4 and above	Wānanga	53.0%	48.2%	50.1%
	Sector	41.6%	41.1%	40.1%
Māori students - First year attrition for level 4 and above qualifications	Wānanga	51.6%	47.1%	51.1%
	Sector	49.0%	47.9%	48.1%
Students aged under 25 - First year attrition for level 4 and above qualifications	Wānanga	62.5%	58.9%	61.2%
	Sector	31.5%	31.6%	31.2%

Table 21: Wānanga two year qualification completion rates for short qualifications (those with a value of 1 EFTS or less) level 4 and above

Performance indicator		Year enrolled		
		2005	2006	2007
All students - Qualification completion rates in one EFTS and under level 4 and above qualifications (over a 2 year period)	Wānanga	34.7%	37.5%	42.3%
	Sector	34.6%	35.5%	35.5%
Māori students - Qualification completion rates in one EFTS and under level 4 and above qualifications (over a 2 year period)	Wānanga	41.0%	44.5%	47.8%
	Sector	33.1%	33.3%	33.0%
Students aged under 25 - Qualification completion rates in one EFTS and under level 4 and above qualifications (over a 2 year period)	Wānanga	26.6%	27.9%	28.9%
	Sector	44.2%	43.4%	45.2%

Table 22: Wānanga five year qualification completion rate, level 4 and above

Performance indicator		Year enrolled		
		2002	2003	2004
All students - Qualification completion rates for all level 4 and above qualifications (over a 5 year period)	Wānanga	50.5%	50.3%	40.5%
	Sector	42.1%	42.9%	42.2%
Māori students - Qualification completion rates in all level 4 and above qualifications (over a 5 year period)	Wānanga	50.8%	50.0%	39.7%
	Sector	39.9%	39.9%	36.5%
Students aged under 25 - Qualification completion rates for all level 4 and above qualifications (over a 5 year period)	Wānanga	37.1%	37.3%	32.0%
	Sector	50.1%	50.7%	50.3%

4.4 Private Training Establishments (PTEs) and Other Tertiary Education Providers (OTEPs)

This is a large and diverse group of providers (over 350 receive government funding), which makes it difficult to make generalised comments about either plan commitments or performance. PTEs receive both SAC funding and targeted funds, and work with a wide range of students and programmes.

Government priorities for PTEs and OTEPs were increased educational achievement for Māori, Pacific and younger students. In their investment plans, PTEs and OTEPs undertook to increase provision at higher levels of learning and improve the participation and achievement of younger learners.

While participation rates are relatively static across the period shown, successful course completion rates have increased. Tables 23 to 26 summarise the educational performance of PTEs and OTEPs against the educational performance measures relevant to the priorities set out in the Tertiary Education Strategy 2007-2012 and reflected in their investment plans 2008-10.

Table 23: PTEs and OTEPs - participation and successful course completion

Performance indicator		2006	2007	2008
Students aged under 25 - Proportion of EFTS for level 4 and above qualifications	PTE/OTEP	58.3%	60.2%	59.8%
	Sector	84.8%	85.2%	85.6%
Māori students - Proportion of EFTS	PTE/OTEP	29.3%	28.2%	27.3%
	Sector	19.6%	19.0%	19.1%
Pacific students - Proportion of EFTS	PTE/OTEP	12.7%	14.3%	14.4%
	Sector	6.8%	7.3%	7.5%
All students - Successful course completion rates	PTE/OTEP	70.0%	72.4%	74.8%
	Sector	73.0%	73.2%	74.3%
Māori students - Successful course completion rates	PTE/OTEP	56.6%	58.4%	60.5%
	Sector	62.5%	64.4%	65.0%
Pacific students - Successful course completion rates	PTE/OTEP	59.5%	61.6%	66.5%
	Sector	61.0%	61.8%	63.1%
Students aged under 25 - Successful course completion rates for level 4 certificates and level 5 - 7 diplomas, degrees and grad diplomas	PTE/OTEP	75.6%	76.5%	77.3%
	Sector	79.0%	79.1%	79.6%

Table 24: PTEs and OTEPs - first year attrition

Performance indicator		Year enrolled		
		2004	2005	2006
All students - First year attrition	PTE/OTEP	51.7%	52.7%	51.7%
	Sector	47.9%	47.3%	50.2%
Māori students - First year attrition	PTE/OTEP	60.9%	61.9%	60.2%
	Sector	54.5%	54.1%	54.8%
Pacific students - First year attrition for	PTE/OTEP	49.6%	49.9%	57.1%
	Sector	53.7%	49.0%	51.2%
Students aged under 25 - First year qualification attrition for level 4 and above qualifications	PTE/OTEP	37.0%	38.5%	38.2%
	Sector	31.5%	31.6%	31.2%

Table 25: PTEs and OTEPs - two year qualification completion rate for short qualifications (those with a value of 1 EFTS or less)

Performance indicator		Year enrolled		
		2004	2005	2006
All students - Qualification completion rates in one EFTS and under qualifications (over a 2 year period)	PTE/OTEP	42.1%	41.0%	45.2%
	Sector	36.9%	31.9%	33.1%
Māori students - Qualification completion rates in one EFTS and under qualifications (over a 2 year period)	PTE/OTEP	34.0%	32.8%	39.5%
	Sector	33.1%	31.6%	34.8%
Pacific students - Qualification completion rates in non-one EFTS and under qualifications (over a 2 year period)	PTE/OTEP	44.0%	35.1%	46.9%
	Sector	32.6%	31.3%	36.6%
Students aged under 25 - Qualification completion rates in one EFTS and under level 4 and above qualifications (over a 2 year period)	PTE/OTEP	55.2%	54.7%	58.9%
	Sector	44.2%	43.4%	45.2%

Table 26: PTEs and OTEPs - five year qualification completion rate

Performance indicator		Year enrolled		
		2002	2003	2004
All students - Qualification completion rates for all qualifications (over a 5 year period)	PTE/OTEP	38.7%	47.5%	42.5%
	Sector	39.2%	41.8%	41.4%
Māori students - Qualification completion rates for all qualifications (over a 5 year period)	PTE/OTEP	32.9%	37.4%	33.9%
	Sector	38.5%	34.6%	36.5%
Pacific students - Qualification completion rates for all qualifications (over a 5 year period)	PTE/OTEP	38.3%	43.9%	44.3%
	Sector	33.2%	34.1%	34.8%
Students aged under 25 - Qualification completion rates for all level 4 and above qualifications (over a 5 year period)	PTE/OTEP	53.8%	60.7%	56.3%
	Sector	50.1%	50.7%	50.3%

4.5 Industry Training Organisations (ITOs)

For ITOs, Government priorities were to improve trainee achievement and strengthen their leadership in managing the delivery of industry training to meet industry needs.

In 2008-2010 investment plans, ITOs committed to a modest improvement in trainee success. The focus on improving trainee achievement is complicated because ITOs do not deliver programmes, but rather co-ordinate the supply of training, which is often delivered in the workplace and generally involves other providers.

Approximately 200,000 trainees participated in industry training in 2008, a 5% increase on the number of trainees in 2007. Of these 18% were aged 21 years or younger, compared to only 7% in this age group in 2000. ITOs investment plans committed to improvement in participation and completion rates however indicators have remained relatively stable across the period shown.

There is a high variation between ITOs in the rates of completion of training programmes within the expected completion date and in the proportion of Māori and Pacific trainees participating in and completing industry training qualifications.

Table 27: Industry Training Organisation participation

Performance indicator	2006	2007	2008
Participation of female trainees	28.7%	29.7%	29.4%
Participation of Māori trainees	18.2%	18.2%	18.0%
Participation of Pacific trainees	6.2%	6.6%	6.8%
Participation of trainees aged under 25 enrolled in national qualifications at level 4 and above	38.9%	33.2%	33.9%
Average number of credits achieved per trainee	22	19	19
Employers with employees involved in industry training	15.7%	17.0%	16.4%
Standard Training Measures (STM) achieved against contracted volume	119.4%	116.1%	114.3%
	Year enrolled		
	2005	2006	2007
Completion rates of industry trainees and Modern Apprentices		35%	33%
Completion rates of female industry trainees and Modern Apprentices		40%	33%
Completion rates of Māori industry trainees and Modern Apprentices		30%	36%
Completion rates of Pacific industry trainees and Modern Apprentices		34%	28%
Completion rates of industry trainees and Modern Apprentices aged under 25 at level 4 and above		38%	39%

Appendix 1 – The tertiary sector in New Zealand

The New Zealand tertiary education system encompasses all post-school education and training. There are five groups of tertiary education providers and ITOs (sub-sectors) that form the tertiary sector in New Zealand. These are Universities, Institutes of Technology and Polytechnics (ITPs), Wānanga, Private Training Establishments (PTEs) / Other Tertiary Education Providers (OTEPEs), and Industry Training Organisations (ITOs). Each has their role to play, for example:

- Universities provide a wide range of research-led degree and postgraduate education, and undertake research in a broad range of fields inter-dependently with teaching and learning.
- Wānanga provide education in accordance with kaupapa Māori philosophies, principles and approaches, maintaining and developing teaching, learning and research environments based on āhuetanga Māori in accordance with tikanga Māori and having a continuing role in re-engaging learner into education.
- Institutes of Technology and Polytechnics provide skills for employment and productivity, and supporting progression to higher levels of learning or work through foundation education.
- ITOs provide industry leadership on matters relating to skill and training need, designing national qualifications and standards for registration on the National Qualifications Framework and arranging for the delivery of industry training.
- Private training establishments/Other Tertiary Education Providers are privately owned organisations and provide education to particular communities of students and in some cases provide education that is technically specialised which is not provided by any other tertiary education providers.

Universities, Institutes of Technology and Polytechnics and Wānanga are crown entities and are established under the Education Act.

It is important to note that the roles of each of the groups that make up the sector is different and only limited conclusions can be drawn from comparing information found in this report across the provider types.

For further information on the tertiary funding system please refer to Tertiary Education Commission's web site www.tec.govt.nz.

Appendix 2 – Tertiary education funding system

Over 2008/09 the Government will invest approximately \$2.789 billion⁶ in direct subsidies to tertiary education providers and ITOs, most of which is administered by the TEC. This funding meets a wide range of educational objectives for different groups of learners, and is distributed through a number of different funding mechanisms.

Most funding is distributed through a bulk funding arrangement, involving a small number of separate but closely related funds. These funds are all linked to investment plans and have a three-year baseline that is updated at each Budget.

- The Student Achievement Component is the most significant part of the tertiary funding system. It is the single largest source of revenue for universities, wānanga, and institutes of technology and polytechnics, and is also allocated to many private training establishments and other tertiary education providers. It provides subsidies for teaching and learning in mainstream tertiary qualifications (with most learners also paying tuition fees). Allocations are based on total student enrolments agreed in investment plans, and are calculated using a sophisticated formula with funding rates that vary significantly by the type of qualification and for each part of the sector.
- The Tertiary Education Organisation Component provides funding (mainly for universities, wānanga, and institutes of technology and polytechnics) to support a range of core roles, capability needs and innovation not directly related to student enrolments. There are six elements within this component, of which the largest two are:
 - The Performance-Based Research Fund which ensures that teaching is underpinned by excellent research and is allocated (mainly to universities) based on research outputs. This was reviewed in 2008. The review found that in general it was performing well.
 - The TEI Base Investment which focuses institutions on their core roles and distinctive contributions. Until 2011 it is allocated via a transitional formula that is largely related to student enrolments.
 - The four other elements include funding for innovative projects and priority outcomes from the *Tertiary Education Strategy*, supporting major change programmes and the strategic leadership role of industry training organisations.
 - The Industry Training Fund funds industry training organisations and subsidises the development of national qualifications and the delivery of workplace learning linked to their qualifications. Industry training is subsidised at a lower rate than the Student Achievement Component, reflecting the fact that learning primarily takes place on-job using the resources of the workplace, with only a limited off-job element. It is strongly supported by employers and has made a significant contribution to New Zealand's skills base.

Outside the main bulk funding arrangements, the Government also operates a number of other funds (some of which are allocated via investment plans). The most important of these funds are as follows:

⁶ Except where noted, all figures in this section are for the 2008/09 fiscal year, are GST exclusive and include capital and operating funding.

- A range of Targeted Training Funds including Training Opportunities and Youth Training. These provide fully funded targeted vocational training places to people with low qualifications who are seeking work. These long-standing and successful programmes are largely focused on unemployed people and school leavers. Training Opportunities is administered by the TEC on behalf of the Ministry of Social Development, and is funded via Vote: Social Development.
- Modern Apprenticeships which are funded alongside industry training. The Modern Apprenticeships programme is a key initiative that increases the participation of young employees in industry training. Modern Apprentices are supported by a Modern Apprenticeships Co-ordinator, who assists the apprentice to progress through their training programme. A number of industry training organisations also act as Modern Apprenticeships Co-ordinators.
As of June 2008, there were 17,287 Modern Apprentices either in training or completed. Funding in the baseline will support approximately 14,000 active Modern Apprentices at any one time.
- Adult and Community Education funding which mainly subsidises non-assessed learning in a wide range of settings including schools (including adult education classes), universities, wānanga, and institutes of technology and polytechnics.
- Funding for seven university-led Centres of Research Excellence providing world-class leadership in specific research areas.
- Foundation Learning funds allowing specialised interventions for learners with literacy and numeracy needs, including workplace literacy.
- Gateway which provides workplace learning opportunities for senior secondary school students. It has a strong relationship with the Youth Apprenticeships concept and is important when considering issues related to school to tertiary education transitions.
- The Capital Investment Fund which contributes to the costs of strategic capital developments at universities, wānanga, and institutes of technology and polytechnics, and includes a provision for situations where the Government needs to make capital injections to at-risk institutions to protect its interest. This fund was established in 2008, and allocation decisions are made by Ministers on the advice of the TEC and an expert panel.
- In addition, the TEC administers a number of small grants for a wide range of specific purposes, including tertiary student scholarships, funding for developing research capability, capital grants for tertiary institutions (established prior to the introduction of the capital fund), funding for the National Centre for Tertiary Teaching Excellence, and funding for English language tuition for new migrants.

Appendix 3 – Investment by course classification

The tables contained in this section of the report provide a breakdown on the value of the EFTS enrolled at a course level for Universities, Institutes of Technology and Polytechnics, Private Training Establishments/Other Tertiary Education Providers and Wānanga.

Table 28: Course Category Investment: Number of EFTS by Course Classification – sub-sector and sector view

Classification		EFTS						Funding \$m					
		ITP	University	PTE	Wānanga	Sector Total	Change from previous year	ITP	University	PTE	Wānanga	Sector Total	Change from previous year
Agriculture; Horticulture	2006	4,794	1,141	740		6,675		42.3	13.7	6.2		62.1	
	2007	4,464	1,293	810		6,567	(108)	42.8	15.8	7.3		65.9	3.8
	2008	4,675	1,267	871		6,813	246	35.4	14.7	8.1		58.2	(7.8)
Architecture; Quantity Surveying	2006	1,314	1,430		2	2,746		11.9	15.2			27.1	
	2007	1,475	1,542			3,017	271	13.5	15.9			29.4	2.3
	2008	1,567	1,629		-	3,196	179	11.3	15.9			27.2	(2.2)
Arts; Advanced Studies for Teachers; Health Therapies; Humanities; Languages; Social Sciences	2006	18,135	27,681	3,218	17,518	66,552		97.7	158.4	16.2	94.5	366.8	
	2007	18,756	27,930	3,286	16,078	66,050	(502)	103.3	157.2	16.9	88.5	365.9	(1.0)
	2008	15,839	28,238	3,467	16,295	63,839	(2,211)	68.9	148.1	18.2	68.4	303.7	(62.2)
Audiology	2006		23			23			0.3			0.3	
	2007		23			23	0		0.3			0.3	(0.0)
	2008		22			22	(1)		0.3			0.3	(0.0)
Business; Accountancy; Office Systems/Secretarial; Management	2006	14,661	21,639	4,329	4,578	45,207		79.1	121.9	21.2	24.6	246.8	
	2007	14,944	22,728	4,565	4,880	47,117	1,910	82.3	127.7	22.9	26.9	259.7	12.9
	2008	14,585	23,287	4,821	5,031	47,724	607	63.4	121.6	24.7	21.1	230.9	(28.8)
Clinical Psychology	2006		83			83			0.8			0.8	
	2007		69			69	(14)		0.7			0.7	(0.1)
	2008		47			47	(22)		0.5			0.5	(0.2)

Classification		EFTS						Funding \$m					
		ITP	University	PTE	Wānanga	Sector Total	Change from previous year	ITP	University	PTE	Wānanga	Sector Total	Change from previous year
Computer Science	2006	1,672	3,700	659	196	6,227		14.0	33.9	4.9	1.6	54.5	
	2007	1,573	3,725	706	181	6,185	(42)	13.3	32.3	5.4	1.5	52.5	(2.0)
	2008	1,660	3,854	763	238	6,515	330	11.0	31.2	5.9	1.5	49.7	(2.8)
Dental Therapy	2006		103			103			1.1			1.1	
	2007		122			122	19		1.5			1.5	0.3
	2008		134			134	12		1.5			1.5	
Dentistry	2006		241			241			7.5			7.5	
	2007		269			269	28		11.4			11.4	3.9
	2008		278			278	9		13.0			13.0	1.6
Dietetics	2006		46			46			0.6			0.6	
	2007		47			47	1		0.6			0.6	(0.0)
	2008		48			48	1		0.6			0.6	0.0
Engineering; Technology	2006	3,205	5,761	147		9,113		29.8	63.4	1.2		94.4	
	2007	3,659	6,165	168		9,992	879	37.1	64.2	1.5		102.8	8.4
	2008	3,581	6,293	174		10,048	56	28.7	61.4	1.6		91.7	(11.1)
Fine Arts; Design	2006	2,650	3,674	1,091	704	8,119		22.5	32.3	8.3	5.8	69.0	
	2007	2,593	3,887	1,151	655	8,286	167	21.8	33.1	8.8	5.5	69.3	0.3
	2008	2,627	4,041	1,199	699	8,566	280	17.5	31.9	9.4	4.5	63.3	(6.0)
Foreign-Going Nautical	2006	76				76		1.2				1.2	
	2007	76				76	0	1.3				1.3	0.0
	2008	123				123	47	1.6				1.6	0.4
General Education	2006	31	190	39		260		0.2	1.0	0.2		1.4	
	2007	26	111	313		450	190	0.1	0.6	1.7		2.5	1.1
	2008	51	134	241		426	(24)	0.2	0.7	1.3		2.2	(0.2)
Health Related Professions	2006	1,098	1,397	13		2,508		9.8	14.1	0.1		24.0	

Classification		EFTS						Funding \$m					
		ITP	University	PTE	Wānanga	Sector Total	Change from previous year	ITP	University	PTE	Wānanga	Sector Total	Change from previous year
	2007	896	1,611	13		2,520	12	7.6	14.9	0.1		22.5	(1.4)
	2008	923	1,699	26		2,648	128	6.2	15.4	0.2		21.8	(0.8)
Health Sciences (excluding classifications #07, #15, and #17)	2006	157	2,334			2,491		1.6	28.5			30.1	
	2007	168	2,497			2,665	174	1.7	27.3			29.0	(1.1)
	2008	174	2,522			2,696	31	1.4	26.5			27.9	(1.1)
Law	2006	301	4,460	174	24	4,959		1.6	24.8	0.9	0.1	27.5	
	2007	313	4,730	202	23	5,268	309	1.7	26.3	1.1	0.1	29.3	1.8
	2008	304	4,664	173	22	5,163	(105)	1.3	24.0	1.0	0.1	26.4	(2.9)
Medical Imaging	2006	275				275		2.3				2.3	
	2007	276				276	1	2.3				2.3	0.0
	2008	282				282	6	1.9				1.9	(0.4)
Medical Laboratory Science (MLS)	2006		271			271			2.8			2.8	
	2007		250			250	(21)		2.5			2.5	(0.2)
	2008		246			246	(4)		2.3			2.3	(0.3)
Medical Radiation Therapy (MRT)	2006		83			83			1.3			1.3	
	2007		74			74	(9)		1.2			1.2	(0.1)
	2008		61			61	(13)		0.9			0.9	(0.3)
Medical Undergraduate (Years 4, 5 & 6)	2006		875			875			21.5			21.5	
	2007		932			932	57		35.7			35.7	14.2
	2008		957			957	25		33.5			33.5	(2.2)
Medicine (years 2-3, excluding intermediate/first year)	2006		833			833			15.7			15.7	
	2007		854			854	21		25.4			25.4	9.7
	2008		930			930	76		25.7			25.7	0.3
Midwifery (3 Year)	2006	180	191			371		1.8	1.9			3.8	
	2007	187	229			416	45	1.9	2.3			4.2	0.4

Classification		EFTS						Funding \$m					
		ITP	University	PTE	Wānanga	Sector Total	Change from previous year	ITP	University	PTE	Wānanga	Sector Total	Change from previous year
	2008	197	261			458	42	1.6	2.4			4.0	(0.2)
Music And Performing Arts	2006	307	1,801	12	25	2,145		2.6	16.1	0.1	0.2	19.0	
	2007	430	1,952	14	10	2,406	261	3.6	16.8	0.1	0.1	20.6	1.7
	2008	385	2,080	13	-	2,478	72	2.6	16.7	0.1		19.4	(1.3)
Nursing	2006	3,310	923			4,233		30.8	8.6			39.4	
	2007	3,399	948			4,347	114	32.2	9.0			41.2	1.8
	2008	3,498	1,001			4,499	152	26.2	8.7			34.8	(6.3)
Occupational Therapy	2006	149	232			381		1.3	2.0			3.3	
	2007	149	239			388	7	1.3	2.0			3.3	0.0
	2008	153	250			403	15	1.0	1.9			3.0	(0.3)
Optometry	2006		153			153			1.8			1.8	
	2007		187			187	34		2.3			2.3	0.5
	2008		186			186	(1)		2.1			2.1	(0.2)
Osteopathy	2006	54				54		0.5				0.5	
	2007	56				56	2	0.5				0.5	(0.0)
	2008	81				81	25	0.6				0.6	0.1
Pharmacy Professionals	2006		589			589			6.5			6.5	
	2007		508			508	(81)		5.6			5.6	(0.9)
	2008		522			522	14		5.3			5.3	(0.3)
Physiotherapy	2006		753			753			6.3			6.3	
	2007		762			762	9		6.4			6.4	0.1
	2008		771			771	9		5.9			5.9	(0.5)
Science	2006	1,680	15,685	115	43	17,523		14.8	156.8	0.9	0.4	172.9	
	2007	1,881	16,310	108	31	18,330	807	17.8	160.0	0.9	0.3	179.0	6.1
	2008	1,868	16,634	119	17	18,638	308	14.0	153.5	1.0	0.1	168.6	(10.4)

Classification		EFTS						Funding \$m					
		ITP	University	PTE	Wānanga	Sector Total	Change from previous year	ITP	University	PTE	Wānanga	Sector Total	Change from previous year
Short Awards	2006	1,919	51	44	147	2,161		13.3	0.3	0.2	0.8	14.6	
	2007	1,654	149	-	-	1,803	(358)	12.0	0.8			12.8	(1.8)
	2008	1	-	-	-	1	(1,802)	0.0				0.0	(12.8)
Specialist Large Animal Science	2006		52			52			0.9			0.9	
	2007		55			55	3		0.9			0.9	0.0
	2008		51			51	(4)		0.8			0.8	(0.1)
Speech And Language Therapy	2006		182			182			1.9			1.9	
	2007		183			183	1		1.9			1.9	(0.0)
	2008		206			206	23		1.9			1.9	0.1
Teaching: Early Childhood Education Recognised Degree/Diploma of Teaching.	2006	1,058	1,413	1,103	4	3,578		8.1	11.0	8.1	0.0	27.3	
	2007	1,302	2,482	1,249	8	5,041	1,463	10.2	19.7	9.4	0.1	39.4	12.1
	2008	1,264	2,320	1,383	12	4,979	(62)	7.8	17.0	10.6	0.1	35.5	(3.9)
Teaching: Primary Recognised Degree/Diploma of Teaching.	2006	14	3,545		187	3,746		0.1	27.6		1.5	29.2	
	2007	-	4,812		180	4,992	1,246		38.0		1.4	39.4	10.3
	2008	-	4,448		201	4,649	(343)		32.4		1.2	33.6	(5.8)
Teaching: Secondary and Specialist Recognised Degree/Diploma of Teaching.	2006		1,391			1,391			11.2			11.2	
	2007		1,833			1,833	442		14.9			14.9	3.7
	2008		1,700			1,700	(133)		13.2			13.2	(1.8)
Trades 1: All Trade Courses For Apprentices Under Part III Of The Industry Training Act 1992 And Agricultural, Horticultural, Forestry, And Primary Industry Cadets	2006	14				14		0.1				0.1	
	2007	183				183	169	1.5				1.5	1.4
	2008	229				229	46	1.5				1.5	(0.0)
Trades 2: All trade courses other than for apprentices under Part III of the Industry Training Act 1992 and Agricultural, Horticultural, Forestry, and Primary Industry Cadets.	2006	8,486	377	965		9,828		72.6	3.2	7.6		83.4	
	2007	8,867	340	920		10,127	299	80.7	3.1	7.7		91.5	8.2
	2008	8,752	299	936		9,987	(140)	62.9	2.5	8.0		73.4	(18.2)

Classification		EFTS						Funding \$m					
		ITP	University	PTE	Wānanga	Sector Total	Change from previous year	ITP	University	PTE	Wānanga	Sector Total	Change from previous year
Veterinary (Excluding Intermediate)	2006		92			92			1.7			1.7	
	2007		92			92	0		1.8			1.8	0.1
	2008		103			103	11		2.0			2.0	0.2
Veterinary Science Undergraduate (years 3, 4 & 5)	2006		313			313			7.7			7.7	
	2007		324			324	11		8.0			8.0	0.3
	2008		320			320	(4)		7.2			7.2	(0.8)
Total 2006		65,543	103,708	12,649	23,428	205,328		460.1	824.4	76.2	129.6	1,490.2	0.0
Total 2007		67,327	110,264	13,505	22,046	213,142	7,814	490.5	888.2	83.9	124.4	1,587.0	96.8
Total 2008		62,819	111,503	14,186	22,515	211,023	(2,119)	367.0	843.2	90.2	97.1	1,397.5	(189.5)

Appendix 4 – Reading this report

Data Sources

This report draws on the following data sources:

- Single Data Return, 2004 through 2008
- Industry Liaison Unit 2004 through 2008
- Investing in a Plan database that holds mix of provision and key performance indicator data supplied by Tertiary education providers and ITOs as part of their Investment Plan
- Tertiary Contact Management system.

Conventions

Conventions for presenting graphs and tables are that dollar figures are GST exclusive unless otherwise stated.

General and Specific Annotations

General

- EFTS presented are restricted to Student Achievement Funded EFTS (formerly Student Component Funded) and exclude non-formal and Notional EFTS. This means that the EFTS values presented here may not be exactly the same as the EFTS funded for a Tertiary education provider because the funding calculations include non-formal and Notional EFTS.
- Only Student Component Funded enrolments for students who are enrolled in formal qualifications with an EFTS value greater than 0.035 for the qualification are included in the data.
- EFTS funded historically under the Strategic Priority Fund are included in the data presented in this report.

Specific

Delivery

- Note that the Government's contribution to funding students was made via the Student Component Fund prior to 2008 and full-year SAC dollars are not comparable across years. In particular, a portion of SCF was "top-sliced" in 2008 to form the Tertiary education provider Component.
- Delivery figures are based on actuals in the SDR and have not been adjusted for historical or current funding caps (e.g., enrolment caps for high-cost programmes or the cap of 200 EFTS growth in certificate and diploma courses). Because of these figures given here may not align with actual funding.
- Figures have not been adjusted for enrolment caps for high-cost programmes or the cap of 200 EFTS growth in certificate and diploma courses. As a result figures may decrease when these are taken into account in full year calculations. Also figures for historic years are based on actuals in the Single Data Return (SDR)

and have not been adjusted for historical funding caps. Historical figures given here may not align with actual funding.

- Only Private Training Establishments (PTEs) and Other Training Education Providers (OTEPs) that have an investment plan are included in the information contained in this section.

Level of study

- Foreign research-based postgraduates and on-shore international PhD students commencing on or after 19 April 2005 are included in research postgraduate data. Those commencing prior to this date are included in foreign research based postgraduate data.

Key performance Indicators

- Ethnicity is self reported by students. Variation in self-reported data from year to year can occur.
- Enrolments that are still to complete are excluded from the cohort used to calculate successful course completion rates (i.e. only known results are used). As completion codes for these enrolments become available through the SDR, they are added to the cohort used to calculate rates. High proportions still to complete in a recent cohort suggest that successful course completion rates may change in future reports.
- Current data supplied does not record a qualification enrolment event or track movement between related qualification enrolment events. While business rules and definitions have been adopted to minimise the effects, first year qualification attrition rates should be interpreted with caution.
- The calculation of qualification completion, attrition and progression utilises a statistically derived identifier because the National Student Number (NSN) was not introduced until 2003. While error rates over the system incurred during the NSN matching process are small, the TEC plans to investigate differences at the Tertiary education provider level. Qualification completion, attrition and progression rates should be interpreted with caution until error rates are established.
- There is some indication that protocols in effect for the submission of qualification completions prior to 2005 have resulted in some qualification completions not being reported historically and that qualifications that are not awarded by tertiary education providers, such as those awarded by the New Zealand Qualifications Authority or Industry Training Organisations, may be under reported.
- Qualification level is derived from Qualification Award Category Codes. While in general these appear to be robust, there may be a small number of cases where the codes for individual qualifications are incorrect.
- Progression does not cover all outcomes that might be achieved from provision. It only covers progression to other Student Component Funded provision (i.e. excludes Industry Training funded provision). It does not cover provision outside of the New Zealand education system (progression to overseas institutions are not included). Employment outcomes are also not included.

Glossary

Attrition Rate (First-year qualification attrition rate): The proportion of students who start a qualification and are no longer studying a qualification at the same level or higher in their second year.

Equivalent Full Time Student (EFTS): The measure of tertiary teaching input for Student Achievement Component funding. Equivalent Full-Time Student (EFTS) units are the time, in part or whole academic years, that it would take an average, full-time learner to complete a qualification. One (1.0) EFTS unit is defined as the learner workload that would normally be carried out in a single academic year (12-month period) by a learner enrolled full-time, for example a bachelor's degree is normally completed in three years and has an EFTS value of 3.0.

Investment Plan: An investment plan is the funding agreement between a Tertiary education provider or industry training organisation and the TEC. The plan outlines the mix of education and training, performance standards and outcomes. The plan links the provider's or ITO's education provision and performance to the desired outcomes of the government, learners, businesses and communities.

Participation Rate: The proportion of number of EFTS out of the sum of all EFTS.

Qualification Completion (Two and Five year Rates): The proportion of students who start a qualification in a given year and complete a qualification at the same level or higher at the same institution within two or five year years.

Standard Training measure (STM): The amount of training that is required for a trainee to achieve 120 register credits (or its equivalent) in an approved structured training programme.

Student Achievement Component (SAC): This is the largest funding pool supporting delivery of investment plans. The Student Achievement Component (SAC) is the government's contribution to the direct costs of teaching and learning and other costs driven by student numbers within approved tertiary education investment plans.

Successful Course Completion: 'Completion' measures the pass rate of learners on a given course expressed as a percentage of total valid learner enrolments and where a final outcome has been established. It is a measure of whether learners succeed in meeting all the course requirements.

