



MINISTRY OF EDUCATION

Te Tāhuhu o te Mātauranga

Outputs and outcomes of the government's tertiary education expenditure

2005-2009



This report forms part of a series called Supporting the tertiary education system.

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1 SUMMARY

This report synthesises the inputs, outputs and outcomes of the government's tertiary education expenditure over the period 2005 to 2009 in eight key funds. In total, these funds distributed around \$4.3 billion to providers and students in 2009. The data shows that:

Student Achievement Component (SAC) (\$1,831 million in 2009)

- Total SAC funding has increased in real terms between 2005 and 2009. This has been driven by a moderate increase in the number of equivalent full-time students (EFTS).
- The impact of the recession on enrolments is clear, with the number of delivered EFTS increasing by 7.5 percent in 2009. As a result, actual delivered EFTS were around 5 percent higher than funded EFTS in 2009.
- In 2009, the value of successful course-level study per dollar of government expenditure was higher than in 2005. This result was mainly due to the level of over-delivery in 2009.
- The five-year completion rate of SAC-funded qualifications increased between 2005 and 2009.
- Between 2005 and 2009, an increasing proportion of SAC-funded qualifications awarded were to students aged under 25 and studying at level 4 or higher. Also, an increasing proportion of Māori or Pasifika students completing SAC-funded qualifications were studying at level 4 or higher.
- People with tertiary qualifications continued to enjoy higher earnings premiums and a higher likelihood of employment than people with school-level or no qualifications.

Performance-Based Research Fund (PBRF) (\$239 million in 2009)

- There was a substantial increase in PBRF funding (including research top-ups) between 2005 and 2009 in real terms.
- Postgraduate qualification completion rates have been rising.
- The rate of citation of indexed publications by authors from New Zealand tertiary education institutions has improved.

Industry Training Fund (\$158 million in 2009)

- There was a substantial increase in funding allocated to the Industry Training Fund between 2005 and 2009 in real terms. The increase in funding has allowed a substantial increase in the volume of trainees.
- The number of credits attained by trainees increased in total between 2005 and 2009, although the number of credits attained per standard training measure (STM) fell.
- Programme and qualification completion rates have generally increased between 2005 and 2009.
- People with tertiary qualifications up to level 4-7 certificates or diplomas continued to have an earnings and employment advantage over those people with school or no qualifications.

Modern Apprenticeships (\$43 million in 2009)

- The total amount of funding allocated to Modern Apprenticeships increased by almost 50 percent between 2005 and 2009. This increase in funding has allowed for a significant increase in trainee numbers.
- The number of new trainees starting a Modern Apprenticeship declined sharply in 2009, reflecting the impact of the recession.
- The number of credits attained has increased significantly in line with increased trainee numbers.
- The number of credits attained per STM was slightly higher in 2009 than in 2005.
- The completion rate of programmes and qualifications has exhibited an increasing trend over time.
- Among the younger population, there is a significant employment advantage and generally an earnings advantage for those with tertiary qualifications compared with those people with school or no qualifications.

Training Opportunities (\$85 million in 2009)

- Total funding allocated to Training Opportunities decreased slightly in real terms between 2005 and 2009. The number of placements has also decreased, as the employment market has changed and as the criteria for acceptance into the programme have changed.
- The number of credits attained fell between 2005 and 2009. Although trainee numbers also fell, the number of credits attained per \$1,000 of real government expenditure was also lower in 2009 compared with 2005.
- The two-month post-study outcomes for placements have seen the proportion of students who do not find employment or undergo further training remain relatively constant at around one in five. However, with the onset of the recession there has been a decrease in the proportion of trainees in employment and an increase in the proportion of trainees in further training.

Youth Training (\$58 million in 2009)

- Total funding allocated to Youth Training fell in real terms between 2005 and 2009, although there was a slight increase in real terms between 2008 and 2009. There was a decrease in the number of placements between 2005 and 2009. This decrease in placements was due, in part, to a strengthening labour market up to 2008 and a tightening up in 2007 of the criteria for granting early school leaver exemptions.
- The number of credits attained fell between 2005 and 2009, although there was a slight increase in 2009.
- The number of credits attained per \$1,000 of real government expenditure was higher in 2009 than in 2005.
- Between 2005 and 2009, the proportion of placements that results in a trainee not being in further study or in employment two months post study has remained relatively constant at around 16 percent. However, with the onset of the recession, there has been a fall in the number of placements resulting in employment, while the number of placements resulting in further study has increased.

Student loans and student allowances (\$1,389 million allocated to student loans and \$515 million allocated to student allowances in 2009)

- There were substantial increases in government expenditure on student loans and student allowances between 2005 and 2009.
- There were significant increases in student loan borrowers and student allowance recipients between 2005 and 2009. Part of this increase is a result of increased participation during the recession, but changes to eligibility criteria have also had an impact.
- While the nominal value of the Student Loan Scheme increased between 2006 and 2009, the fair value of the scheme decreased.
- The representation of students from low-decile schools in tertiary education was maintained between 2005 and 2009.

2 INTRODUCTION

Purpose of the report

This report is the first of an annual series that synthesises, in one source document, the inputs, outputs and outcomes of the government's tertiary education expenditure. Although much of this information is already available in other publications,¹ in many cases outputs and outcomes are not directly linked to tertiary education funds for multiple-year periods. This can make it difficult to assess the performance of these funds over time.

The outputs and outcomes presented in this report have been selected with the Tertiary Education Strategy and the Ministry of Education's Statement of Intent in mind. The priorities from these documents that apply to tertiary education are listed below:

Tertiary Education Strategy 2010-2015

- Increasing the number of young people (aged under 25) achieving qualifications at level 4 and above, particularly degrees
- Increasing the number of Māori students enjoying success at higher levels
- Increasing the number of Pasifika students achieving at higher levels
- Increasing the number of young people moving successfully from school into tertiary education
- Improving literacy, language, and numeracy and skills outcomes from levels 1 to 3 study
- Improving the educational and financial performance of providers
- Strengthening research outcomes.

Ministry of Education Statement of Intent 2010-2015 priorities

- Every young person has the skills and qualifications to contribute to their and New Zealand's future
- Relevant and efficient tertiary education provision that meets student and labour market needs
- Māori enjoying education success as Māori.

Scope of the report

This report examines the outputs and outcomes of eight of the largest funds used to allocate funding to the tertiary education sector. These funds are:

- Student Achievement Component (SAC)²
- Performance-Based Research Fund (PBRF)³
- Industry Training Fund
- Modern Apprenticeships Fund
- Training Opportunities
- Youth Training
- Student loans (capital expenditure)
- Student allowances.

¹ Such as the Ministry of Education's annual report on the tertiary system, *Profile and trends*, and the Tertiary Education Commission's *Annual reports*.

² Including TEI base investment and Tripartite-rates funding.

³ Including research top-ups.

Combined, these funds distributed around \$4.3 billion to tertiary education providers and students in 2009.

It is important to note that the emphasis in this report is on comparing the trends in performance of the individual funds over time, rather than comparing different funds. This also applies to the subsector analysis of the Student Achievement Component, where the performance of each subsector should not be compared directly with the others. The subsectors teach qualifications at different levels and have different student populations, which makes direct comparison difficult.

Data

The data used in this report has been acquired from various sources, including the Tertiary Education Commission, Statistics New Zealand and Thomson Reuters. A detailed definition of each of the measures in this report is presented in the Appendix. Note that the government expenditure in this report is presented on a GST-exclusive basis and the Consumers Price Index has been used to adjust government expenditure for inflation.

There are caveats that apply to some of the data used in this report. For example, the returns for qualifications and unemployment rates apply to the resident population, which includes more recent immigrants. This group is likely to have acquired their qualifications overseas. In addition, this data does not allow the outcomes of students who have attained qualifications via different funds to be assessed (via Industry Training or SAC funding, for example). Although some data is available on the post-study outcomes of graduates from specific tertiary funds, this is not yet available on an annual basis.⁴

The Tertiary Education Commission has recently published performance information for SAC-funded provision at the non-degree and degree level on course completion, progression, qualification completion and retention.⁵ As this performance data is available only for 2009, the data from these indicators has been excluded from this report as the focus in the report is on trends between 2005 and 2009.

Structure of the report

The structure of the report is as follows. Background information is presented on the objectives of each of the funds, as well as any substantive policy changes that have taken place over the period of this analysis. Any major planned changes to policy are also included. A data table of the inputs, outputs and outcomes of tertiary education expenditure is then presented for each fund. This is complemented with written highlights and graphs. Finally, a data appendix is presented, which defines the measures in this report.

⁴ See Scott (2009) and Crichton (2009).

⁵ This data is available at: www.tec.govt.nz/Learners-Organisations/Learners/performance-in-tertiary-education.

3 STUDENT ACHIEVEMENT COMPONENT – TOTAL

Background

The Student Achievement Component (SAC)⁶ is the single largest item of tertiary education expenditure in Vote Education. It represents the government's contribution to the direct costs of teaching, learning, and other costs at tertiary education providers and is driven by learner numbers. The total value of the SAC is determined by budget decisions, with the annual allocations to providers based on the volume and mix of provision proposed in providers' plans.⁷

Policy context

Since 2003, a number of policy changes have been made that have had an effect on the allocation of SAC funding. Before 2008, the focus was on managing growth and limiting expenditure in areas not considered high priorities for the government. This included, for example, funding private training establishments (PTEs) from a capped, ring-fenced pool between 2003 and 2007. From 2004 to 2007, caps were applied on funding for certificate and diploma-level study at the remaining SAC-funded providers.⁸

From 2008, the focus was on achieving certainty of funding, with a shift from the previous demand-driven model to one where the Tertiary Education Commission approved funding for providers through investment plans. Part of the money previously delivered through student enrolments was split off into the Tertiary Education Organisation Component (TEOC). For consistency in the trend analysis, tertiary education institution (TEI) base investment (which is part of the TEOC) is treated as part of the SAC. The government has now agreed to reverse this split. From 2011, all funding allocated for tuition will be allocated through the SAC.

The government's focus for the SAC is now on improving the effectiveness of its investment. We expect to see better course and qualification completion and progression rates for students. To encourage better performance, the government began publishing provider-level performance information in 2010.⁹ From 2012, 5 percent of SAC funding will be contingent on providers' meeting set performance benchmarks, based on indicators such as qualification completion, successful course completion and student progression to further study.

Highlights

- Government expenditure on the SAC continued to grow in 2009 in nominal (6.3 percent) and real terms (4.1 percent). In real terms, total SAC funding increased by 8.1 percent between 2005 and 2009.
- The number of funded equivalent full-time students (EFTS) in 2009 was up 0.5 percent on the 2005 level and 3.8 percent on the 2008 level. Actual delivered EFTS in 2009 were up 4.2 percent on the 2005 level and 7.5 percent on the 2008 level.
- Providers carried a far higher percentage of unfunded EFTS in 2009 than in previous years (5.1 percent in 2009 compared with 1.5 percent in 2008 and 1.4 percent in 2005). The main contributor to this over-delivery was the impact of the recession boosting participation in tertiary education.
- As a result of the greater number of unfunded EFTS, actual per EFTS funding fell by 3.2 percent in real terms in 2009, but was 3.7 percent higher than in 2005. A shift from

⁶ Note that, for data consistency, SAC funding includes the TEI base investment and Tripartite-rates funding and excludes Tripartite-adjusted funding, adult and community education funding and research top-ups funding.

⁷ The mix of provision determines the total amount of funding because funding categories reflect the different costs of provision in some subject areas.

⁸ Also note that in 2006 the government agreed, as part of the Universities Tripartite Forum, to contribute additional funding to meet universities' increasing staffing costs. Part of this funding was distributed via SAC funding rates for universities.

⁹ Performance information is available on the Tertiary Education Commission website at: www.tec.govt.nz/Learners-Organisations/Learners/performance-in-tertiary-education.

enrolments in lower-cost courses to higher-cost courses was a factor in this increase between 2005 and 2009.

- In terms of the amount of successful course-level study as a percentage of actual delivered EFTS (see technical note below), the volume of courses where the outcome was 'not yet known' makes it difficult to assess whether there was any significant change between 2005 and 2009. The percentage of successful study in 2009 that excluded the 'not yet known' outcomes (75 percent) did not exceed the percentage of successful study in 2005 that included the 'not yet known' outcomes (78 percent). Therefore, we cannot be certain of any significant improvement in this measure.
- Because of the significant amount of unfunded delivery in 2009, the value of successful study per dollar of government expenditure would appear to be above the 2005 level, even after taking into account the 'not yet known' outcomes. In 2009, the value of successful study that excluded the 'not yet known' outcomes (\$0.81) was greater than the value of successful study in 2005 that included the 'not yet known' outcomes (\$0.80). This would suggest that it is likely that there was an improvement in this measure.
- As a percentage of all domestic students completing a qualification, students who were aged under 25 and who completed a qualification at level 4 or higher on the New Zealand Qualifications Framework (NZQF) increased from 22 percent in 2005 to 29 percent in 2009.
- As a percentage of all domestic Māori or Pasifika students who completed a qualification, 51 percent were Māori or Pasifika students who completed a qualification at level 4 or higher in 2009, compared with 50 percent in 2005 and 55 percent in 2006.
- In 2009, the five-year SAC-funded qualification completion rate for all SAC-funded students was 47 percent, compared with 46 percent in 2005. For those students that studied on a full-time basis, the five-year qualification completion rate improved from 60 percent in 2005 to 63 percent in 2009.
- New Zealand residents with tertiary qualifications continued to enjoy an income and employment advantage over those with no or school qualifications in 2009. Although this advantage reduced during the period of strong economic growth up till 2008, in 2009 the advantage once again widened as the recession had a greater negative impact on the likelihood of employment for those with lower qualifications.

Technical note:

Amount of successful course-level study in EFTS

This measure captures the volume of successful course-level study in each calendar year weighted by the EFTS consumed in those courses. In this analysis, successful study includes those courses that were reported as being completed successfully and also those postgraduate courses for which thesis study is ongoing and no completion was expected. These postgraduate thesis students are not expected to complete within the calendar year of analysis as their enrolment may be spread over several years. However, these students are subject to milestone reporting at their institutions during the year and so their continued enrolment is treated as a 'success'.

There are situations where course-level results are still to be reported, extensions have been granted, the enrolment has been deferred or the course has not yet finished. In addition, only formal students are required to have course completions reported. Some providers report completion outcomes for non-formal students while others do not. These categories are labelled in this analysis as 'not yet known'.

For the purposes of this analysis, two measures for the amount of successful study are reported. The first includes only those courses reported as completed successfully as well as the postgraduate students in ongoing thesis study. This provides a minimum value to the amount of successful study. The second measure adds the 'not yet knowns' to the 'successful study' amount and so indicates what the maximum amount of successful study would be if all the 'not yet knowns' ended up as successful completions. Therefore, the actual level of successful study will lie somewhere between these two categories.

Amount of successful course-level study as a percentage of actual EFTS

This is calculated by dividing the EFTS-weighted successful study outputs by the actual EFTS delivered by providers in that calendar year. This gives a sense of the efficiency of the tertiary education system. As above, two sets of data are presented: one for completed courses and ongoing thesis study and another that also includes the 'not yet knowns'. This gives a minimum and maximum limit to the percentage of successful study in that year. The actual successful study percentage will lie somewhere between these two limits.

Dollar value of successful course-level study per dollar of government funding

This is calculated by multiplying the funding rates for the various courses by the EFTS consumed and then dividing this by the amount of SAC funding in that calendar year. This is calculated to get a sense of how much value the government is getting for its expenditure, given that courses are funded at different rates depending on the subject area. As above, two sets of data are presented: one for completed courses and ongoing thesis study and another that also includes the 'not yet knowns'. This gives a minimum and maximum limit to the value of successful study in that year.

Table 1
Inputs, outputs and outcomes of the Student Achievement Component fund

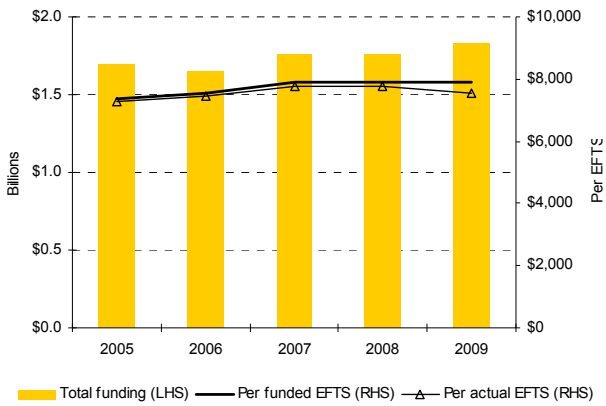
Type	Measure		Year					% change		
			2005	2006	2007	2008	2009	05-09	08-09	
Inputs	Government funding (\$m)	Nominal	\$1,508	\$1,516	\$1,661	\$1,723	\$1,831	21%	6.3%	
		Real	\$1,694	\$1,648	\$1,763	\$1,759	\$1,831	8.1%	4.1%	
	Enrolments	Funded EFTS (000s)	230.0	218.5	222.6	222.7	231.2	0.5%	3.8%	
		Actual EFTS delivered (000s)	233.2	221.5	227.0	226.0	243.0	4.2%	7.5%	
		% over/under-delivery	1.4%	1.4%	2.0%	1.5%	5.1%			
	Per EFTS funding	Funded – nominal	\$6,557	\$6,940	\$7,460	\$7,737	\$7,920	21%	2.4%	
		Funded – real	\$7,366	\$7,543	\$7,920	\$7,900	\$7,920	7.5%	0.2%	
Actual – nominal		\$6,467	\$6,846	\$7,316	\$7,623	\$7,535	17%	-1.2%		
Actual – real		\$7,265	\$7,440	\$7,767	\$7,785	\$7,535	3.7%	-3.2%		
Outputs	Amount of successful course-level study in EFTS (000s)	Completed successfully/in thesis study	166.8	163.4	168.3	172.1	183.1	9.8%	6.4%	
		Completed successfully/in thesis study/not yet known	182.2	173.7	176.2	178.2	197.0	8.1%	11%	
	Amount of successful course-level study as a % of actual EFTS	Completed successfully/in thesis study	72%	74%	74%	76%	75%			
		Completed successfully/in thesis study/not yet known	78%	78%	78%	79%	81%			
	\$ value of successful course-level study per \$ of govt funding (real)	Completed successfully/in thesis study	\$0.74	\$0.76	\$0.77	\$0.79	\$0.81	9.1%	2.6%	
		Completed successfully/in thesis study/not yet known	\$0.80	\$0.80	\$0.80	\$0.81	\$0.86	8.1%	6.1%	
	Domestic students completing qualifications	Level 4+ & age < 25 years (000s)	24.4	26.6	25.6	28.8	31.7	30%	10%	
		Total (000s)	108.6	97.3	90.7	100.2	108.9	0.2%	8.7%	
		Level 4+ & age < 25 yrs as % of total	22%	27%	28%	29%	29%			
	Domestic Māori & Pasifika students completing qualifications	Level 4+ (000s)	13.0	11.7	11.6	12.7	16.2	25%	28%	
		Total (000s)	25.7	21.2	23.0	26.6	31.6	23%	19%	
		Level 4+ as % of total	50%	55%	50%	48%	51%			
	Students completing qualifications by residency status	Domestic (000s)	108.6	97.3	90.7	100.2	108.9	0.2%	8.7%	
		Total (000s)	109.1	97.8	91.3	100.9	109.5	0.4%	8.6%	
		Domestic as % of total	100%	99%	99%	99%	99%			
Five-year qualification completion rate	Full-time students	60%	59%	62%	61%	63%				
	All students	46%	45%	47%	47%	47%				
Outcomes	Premium on median hourly earnings by highest qualification (base = no qualifications) (ages 15 and over)	Lower secondary school	8%	7%	6%	5%	6%			
		Upper secondary school	8%	7%	8%	4%	0%			
		Level 1-3 certificates	22%	17%	17%	18%	17%			
		Level 4-7 certificates/diplomas	38%	34%	38%	32%	34%			
		Bachelors	66%	57%	57%	57%	57%			
		Postgraduate	89%	83%	82%	82%	80%			
	Unemployment rate by highest qualification (ages 15 and over)	No qualifications	6.7%	5.4%	6.0%	6.1%	8.6%			
		Lower secondary school	3.9%	4.1%	4.0%	4.8%	8.2%			
		Upper secondary school	4.7%	4.1%	4.4%	4.4%	6.9%			
		Level 1-3 certificates	3.2%	3.9%	3.9%	2.9%	5.7%			
		Level 4-7 certificates/diplomas	2.4%	2.7%	2.3%	3.3%	4.2%			
		Bachelors	2.5%	2.2%	2.2%	2.4%	4.1%			
	Postgraduate	1.5%	1.9%	2.1%	1.3%	2.4%				
	Context	Qualification attainment of the working-age population (ages 15 and over)	No qualifications	26%	28%	26%	26%	26%		
			Lower secondary school	11%	10%	11%	9%	8%		
Upper secondary school			14%	14%	13%	15%	15%			
Level 1-3 certificates			9%	9%	8%	9%	10%			
Level 4-7 certificates/diplomas			25%	24%	25%	24%	23%			
Bachelors			11%	11%	12%	11%	12%			
Postgraduate			4%	4%	5%	5%	5%			
Participation rate of domestic students by selected age group		18-19	41%	41%	42%	42%	45%			
20-24	30%	30%	30%	30%	32%					
Total	13%	13%	12%	12%	12%					

Note: All real values are in 2009 dollars.

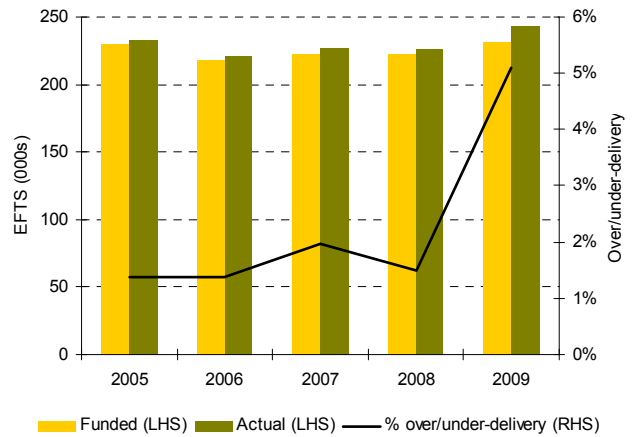
Source: Ministry of Education, Tertiary Education Commission and Statistics New Zealand

Inputs

Government funding – real (2009 dollars)

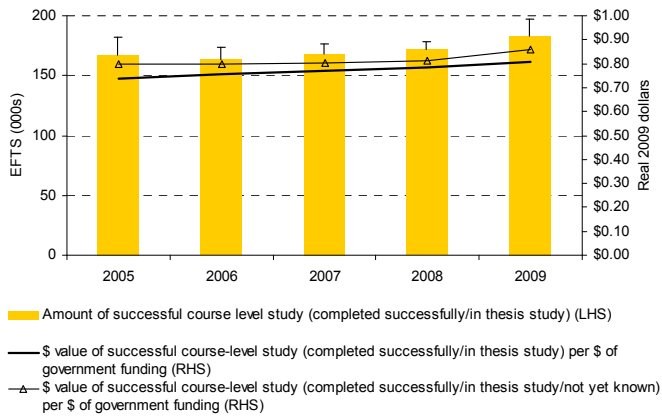


Equivalent full-time student places

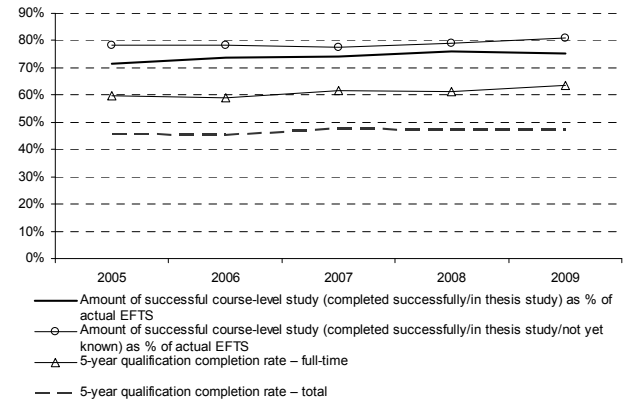


Outputs

Course-level outputs



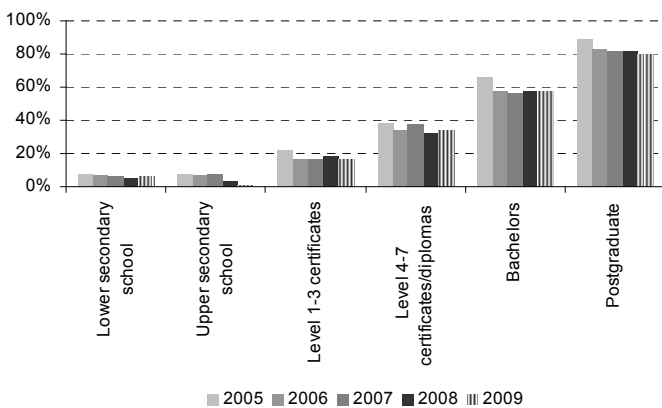
Rates



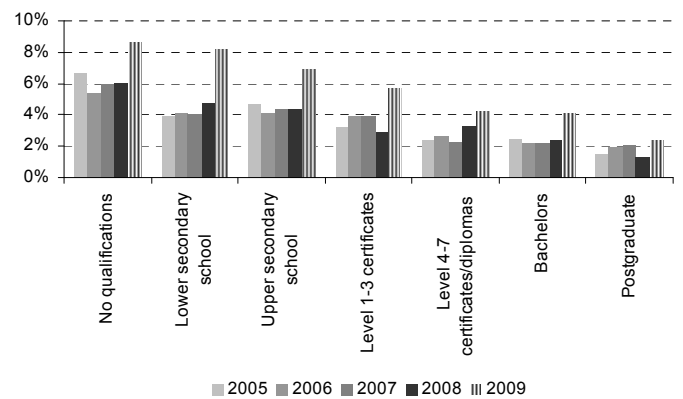
Note: The error bars in the above graph show the amount of successful study including the 'not yet knows'.

Outcomes

Premium on median hourly earnings compared with no qualifications (ages 15+)



Unemployment rates (ages 15+)



4 STUDENT ACHIEVEMENT COMPONENT – BY SUBSECTOR

4.1 Universities¹⁰

Highlights

- Total funding for universities increased in nominal (32 percent) and real terms (17 percent) between 2005 and 2009.
- Total funded EFTS increased by 7.4 percent between 2005 and 2009, while actual delivered EFTS increased by 11 percent over the same period. There was a significant increase in actual EFTS of 6.7 percent in 2009 as a result of the recession boosting participation. As a result, there was a significant amount of over-delivery (3.3 percent) of EFTS in universities in 2009.
- On a per EFTS basis, real funding per actual EFTS increased by 5.6 percent between 2005 and 2009. Part of this increase was a result of the introduction of the Tripartite-rates fund. Like most other subsectors, real funding per actual EFTS fell in universities (by 3.1 percent) due to substantial over-delivery in 2009.
- The amount of successful course-level study as a percentage of actual delivered EFTS has remained relatively stable in universities between 2005 and 2009. The percentage of successful study that excluded the ‘not yet known’ outcomes remained relatively constant at around 82 to 83 percent. When the ‘not yet known’ outcomes are included, this percentage remained at around 84 to 85 percent over the period. So there is little evidence of any significant change in this measure between 2005 and 2009.
- In 2009, the value of successful course-level study per dollar of government funding that excluded the ‘not yet known’ outcomes (\$0.87) was above the value of successful study in 2005 that included the ‘not yet known’ outcomes (\$0.84). So we can say with certainty that there was an increase in the dollar value of successful study per dollar of government funding between 2005 and 2009. This increase was a result of the over-delivery of around 3 percent rather than of any increase in the rate of successful study.
- As a percentage of all students completing a qualification, students who were aged under 25 and who completed a qualification at level 4 or higher on the NZQF increased from 50 percent in 2005 to 56 percent in 2009.
- As a percentage of all domestic Māori or Pasifika students who completed a qualification, 97 percent were Māori or Pasifika students who completed a qualification at level 4 or higher in 2009, compared with 96 percent in 2005.
- The five-year qualification completion rate for all SAC-funded students enrolled in universities improved from 51 percent in 2005 to 56 percent in 2009. For full-time students, the five-year completion rate improved from 68 percent to 71 percent.

¹⁰ Colleges of education are treated as universities for the entire period between 2005 and 2009.

Table 2
Inputs and outputs of the Student Achievement Component fund – universities

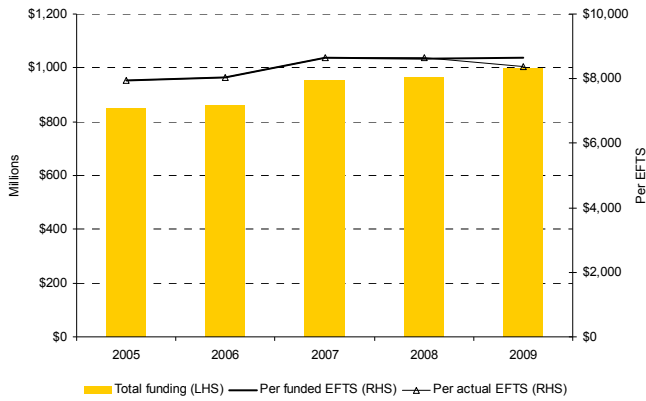
Type	Measure		Year					% change	
			2005	2006	2007	2008	2009	05-09	08-09
Inputs	Government funding (\$m)	Nominal	\$757.0	\$793.7	\$898.4	\$943.8	\$996.3	32%	5.6%
		Real	\$850.4	\$862.6	\$953.7	\$963.8	\$996.3	17%	3.4%
	Enrolments	Funded EFTS (000s)	107.2	107.3	110.3	111.7	115.1	7.4%	3.1%
		Actual EFTS delivered (000s)	107.2	107.3	110.3	111.5	119.0	11%	6.7%
		% over/under-delivery	0.0%	0.0%	0.0%	-0.2%	3.3%		
	Per EFTS funding	Funded – nominal	\$7,061	\$7,401	\$8,147	\$8,448	\$8,654	23%	2.4%
		Funded – real	\$7,932	\$8,043	\$8,648	\$8,627	\$8,654	9.1%	0.3%
		Actual – nominal	\$7,061	\$7,401	\$8,147	\$8,465	\$8,375	19%	-1.1%
		Actual – real	\$7,932	\$8,043	\$8,648	\$8,644	\$8,375	5.6%	-3.1%
Outputs	Amount of successful course-level study in EFTS (000s)	Completed successfully/in thesis study	88.2	88.7	91.1	93.0	98.7	12%	6.1%
		Completed successfully/in thesis study/not yet known	89.9	90.3	92.4	94.3	100.9	12%	7.0%
	Amount of successful course-level study as a % of actual EFTS	Completed successfully/in thesis study	82%	83%	83%	83%	83%		
		Completed successfully/in thesis study/not yet known	84%	84%	84%	85%	85%		
	\$ value of successful course-level study per \$ of govt funding (real)	Completed successfully/in thesis study	\$0.83	\$0.83	\$0.83	\$0.85	\$0.87	5.3%	2.8%
		Completed successfully/in thesis study/not yet known	\$0.84	\$0.84	\$0.85	\$0.86	\$0.89	6.1%	3.8%
	Domestic students completing qualifications	Level 4+ & age < 25 years (000s)	14.7	17.2	15.5	17.9	18.0	22%	0.6%
		Total (000s)	29.3	33.0	29.1	33.0	32.3	10%	-2.4%
		Level 4+ & age < 25 yrs as % of total	50%	52%	53%	54%	56%		
	Domestic Māori & Pasifika students completing qualifications	Level 4+ (000s)	3.1	3.5	3.3	4.0	3.9	25%	-0.3%
		Total (000s)	3.3	3.7	3.6	4.1	4.1	24%	-1.3%
		Level 4+ as % of total	96%	97%	93%	96%	97%		
	Students completing qualifications by residency status	Domestic (000s)	29.3	33.0	29.1	33.0	32.3	10%	-2.4%
		Total (000s)	29.8	33.6	29.6	33.7	32.9	11%	-2.3%
		Domestic as % of total	98%	98%	98%	98%	98%		
Five-year qualification completion rate	Full-time students	68%	69%	71%	71%	71%			
	All students	51%	53%	55%	56%	56%			

Note: All real values are in 2009 dollars.

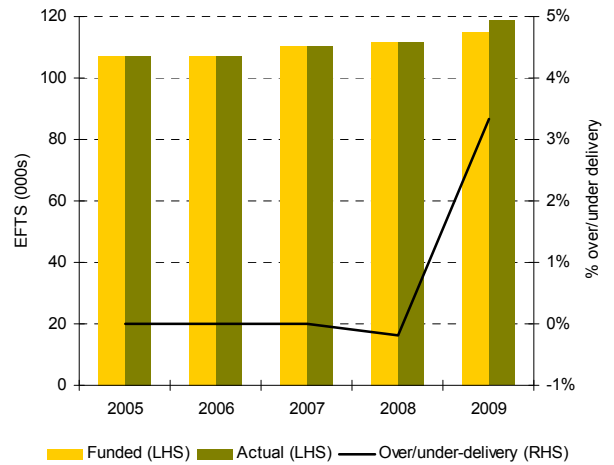
Source: Ministry of Education and Tertiary Education Commission

Inputs

Government funding – real (2009 dollars)

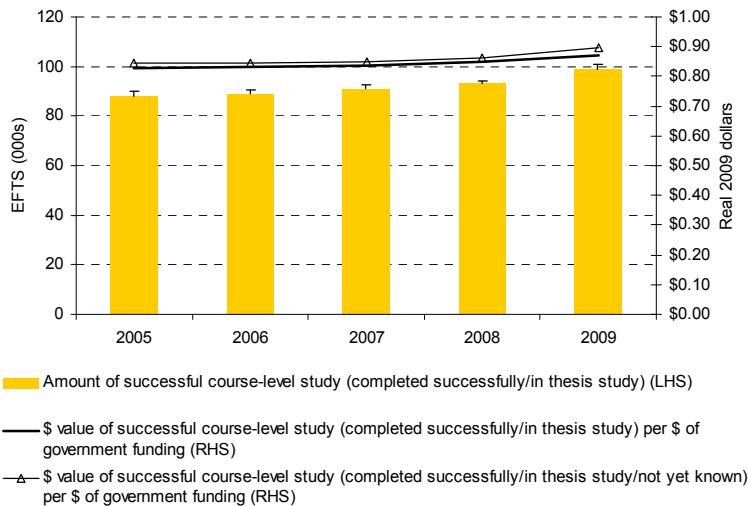


Equivalent full-time student places

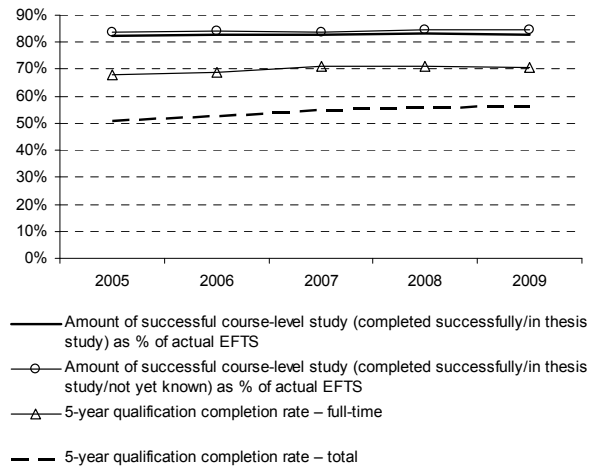


Outputs

Course-level outputs



Rates



Note: The error bars in the above graph show the amount of successful study including the 'not yet knows'.

4.2 Polytechnics

Highlights

- Total funding for polytechnics increased in nominal (15 percent) and real terms (2.2 percent) between 2005 and 2009.
- Total funded EFTS decreased by 3.7 percent between 2005 and 2009, while actual EFTS fell by 3.1 percent over the same period. This decrease reflects the government's focus on relevance and quality of provision, especially at the non-degree level.
- There was a significant increase in actual EFTS of 7.5 percent in 2009 as a result of the recession boosting participation. The over-delivery (1.3 percent) of EFTS in 2009 followed substantial under-delivery (2.0 percent) in 2008.
- On a per EFTS basis, real funding per actual EFTS increased by 5.5 percent between 2005 and 2009. As in most other subsectors, real funding per actual EFTS fell (by 3.2 percent) as a result of substantial over-delivery in 2009.
- Because of the amount of course-level study outcomes that are 'not yet known', it is difficult to assess whether there was any significant change in the percentage of successful study between 2005 and 2009.
- The dollar value of successful course-level study outputs per dollar of government funding appears likely to have improved between 2008 and 2009. In 2009, the value of successful study per dollar of government funding that excluded outcomes that were 'not yet known' was equivalent to the value of successful study including courses where the outcome is 'not yet known' in 2008. The over-delivery in 2009 was a factor in this result.
- As a percentage of all students completing a qualification, students who were aged under 25 and who completed a qualification at level 4 or higher on the NZQF increased from 14 percent in 2005 to 18 percent in 2009.
- As a percentage of all domestic Māori or Pasifika students who completed a qualification, 41 percent were Māori or Pasifika students who completed a qualification at level 4 or higher in 2009, compared with 42 percent in 2005.
- The five-year SAC-funded qualification completion rate for full-time students increased from 51 percent in 2005 to 59 percent in 2009. For all SAC-funded students, the five-year qualification completion rate was 39 percent in 2009, compared with 38 percent in 2005.

Table 3

Inputs and outputs of the Student Achievement Component fund – polytechnics

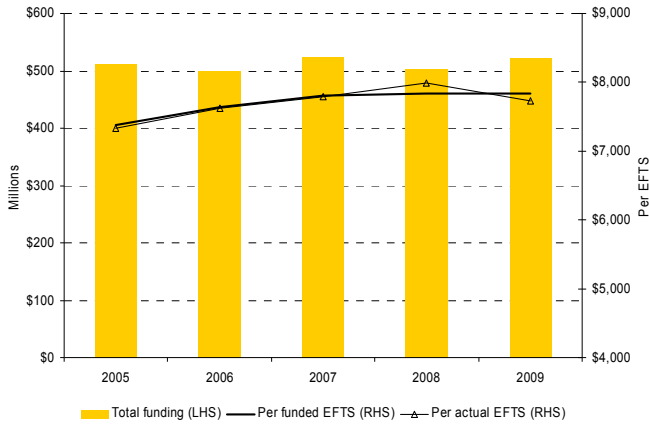
Type	Measure		Year					% change	
			2005	2006	2007	2008	2009	05-09	08-09
Inputs	Government funding (\$m)	Nominal	\$455.2	\$460.0	\$494.1	\$492.0	\$522.5	15%	6.2%
		Real	\$511.4	\$499.9	\$524.5	\$502.4	\$522.5	2.2%	4.0%
	Enrolments	Funded EFTS (000s)	69.2	65.5	67.2	64.1	66.7	-3.7%	4.0%
		Actual EFTS delivered (000s)	69.7	65.5	67.3	62.8	67.5	-3.1%	7.5%
		% over/under-delivery	0.7%	0.1%	0.1%	-2.0%	1.3%		
	Per EFTS funding	Funded – nominal	\$6,574	\$7,024	\$7,348	\$7,673	\$7,839	19%	2.2%
		Funded – real	\$7,385	\$7,634	\$7,801	\$7,835	\$7,839	6.1%	0.0%
		Actual – nominal	\$6,530	\$7,019	\$7,338	\$7,831	\$7,737	18%	-1.2%
		Actual – real	\$7,336	\$7,628	\$7,790	\$7,997	\$7,737	5.5%	-3.2%
Outputs	Amount of successful course-level study in EFTS (000s)	Completed successfully/in thesis study	44.4	43.7	44.8	43.3	46.2	4.1%	6.7%
		Completed successfully/in thesis study/not yet known	50.0	47.4	47.7	44.8	50.9	1.7%	14%
	Amount of successful course-level study as a % of actual EFTS	Completed successfully/in thesis study	64%	67%	67%	69%	68%		
		Completed successfully/in thesis study/not yet known	72%	72%	71%	71%	75%		
	\$ value of successful course-level study per \$ of govt funding (real)	Completed successfully/in thesis study	\$0.65	\$0.67	\$0.68	\$0.68	\$0.70	7.2%	2.8%
		Completed successfully/in thesis study/not yet known	\$0.72	\$0.73	\$0.72	\$0.70	\$0.77	5.9%	9.2%
	Domestic students completing qualifications	Level 4+ & age < 25 years (000s)	5.6	5.6	5.8	6.1	7.2	28%	18%
		Total (000s)	39.8	32.5	32.7	34.2	39.0	-2.0%	14%
		Level 4+ & age < 25 yrs as % of total	14%	16%	17%	17%	18%		
	Domestic Māori & Pasifika students completing qualifications	Level 4+ (000s)	3.2	3.3	3.1	3.1	4.0	26%	29%
		Total (000s)	7.5	6.5	6.8	7.4	9.9	32%	34%
		Level 4+ as % of total	42%	50%	46%	42%	41%		
	Students completing qualifications by residency status	Domestic (000s)	39.8	32.5	32.7	34.2	39.0	-2.0%	14%
		Total (000s)	39.8	32.5	32.7	34.2	39.0	-2.0%	14%
		Domestic as % of total	100%	100%	100%	100%	100%		
Five-year qualification completion rate	Full-time students	51%	50%	54%	55%	59%			
	All students	38%	36%	37%	36%	39%			

Note: All real values are in 2009 dollars.

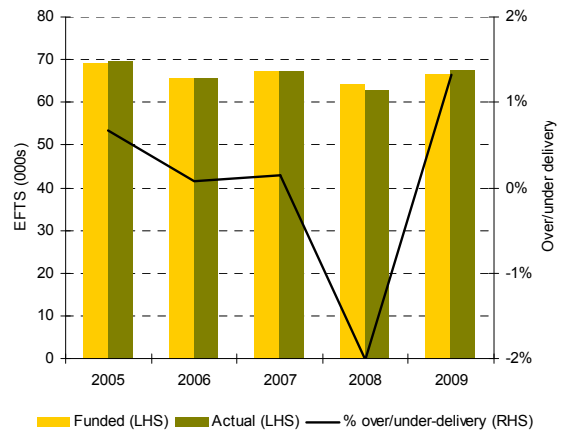
Source: Ministry of Education and Tertiary Education Commission

Inputs

Government funding – real (2009 dollars)

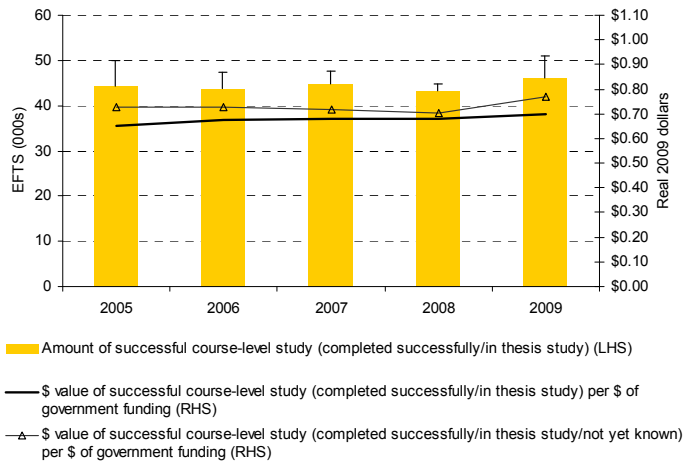


Equivalent full-time student places

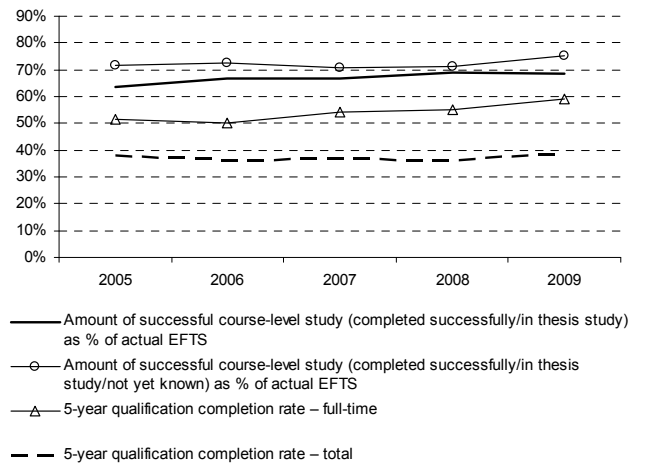


Outputs

Course-level outputs



Rates



Note: The error bars in the above graph show the amount of successful study including the 'not yet knowns'.

4.3 Wānanga

Highlights

- Total funding for wānanga decreased in nominal (-7.7 percent) and real terms (-18 percent) between 2005 and 2009.
- Total funded EFTS decreased by 18 percent between 2005 and 2009, while actual EFTS fell by a similar rate over the same period. This decrease reflects the managed decrease in EFTS at Te Wānanga o Aotearoa.
- There was a significant increase in actual EFTS of 11 percent in 2009 as a result of the recession boosting participation. However, there was only a small amount of over-delivery by wānanga in 2009 (0.5 percent). This followed substantial under-delivery of 2.1 percent in 2008.
- On a per EFTS basis, real funding per actual EFTS decreased by 0.1 percent between 2005 and 2009.
- Because of the amount of course-level outputs that are ‘not yet known’, it is difficult to assess whether the amount of successful study as a percentage of actual delivered EFTS has changed between 2005 and 2009 in wānanga.
- Similarly, because of the number of courses where the outcome is ‘not yet known’, it is difficult to assess whether the value of successful course-level study per dollar of government funding was higher in 2009 than in 2005. Note that wānanga did not exhibit the same degree of over-delivery in 2009 that was experienced in the other subsectors, which is one reason for the lack of clear improvement in this measure.
- The student population at wānanga has traditionally been older, so the proportion of domestic students that are aged under 25 and studying at level 4 or higher completing a qualification is relatively low. In 2009, 4 percent of domestic completers studied at level 4 or higher and were aged under 25.
- Because of the reduction in delivery in wānanga, there is some volatility in the percentage of Māori or Pasifika students that are completing qualifications at level 4 or higher. Although the percentage in 2009 (40 percent) was lower than in 2005 (46 percent), it was an improvement over the 2008 result (30 percent).
- The five-year qualification completion rate for all SAC-funded students increased from 45 percent in 2005 to 59 percent in 2009. For those students studying full-time, the five-year completion rate in 2009 (49 percent) was slightly higher than in 2005 (48 percent).¹¹

¹¹ The significant drop in the five-year completion rate in 2008 was mainly confined to qualifications at level 4.

Table 4
Inputs and outputs of the Student Achievement Component fund – wānanga

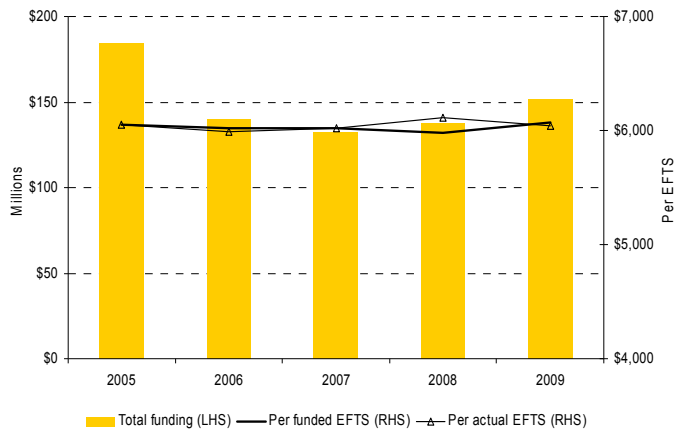
Type	Measure		Year					% change	
			2005	2006	2007	2008	2009	05-09	08-09
Inputs	Government funding (\$m)	Nominal	\$164.3	\$129.2	\$125.1	\$134.8	\$151.6	-7.7%	12%
		Real	\$184.6	\$140.4	\$132.8	\$137.7	\$151.6	-18%	10%
	Enrolments	Funded EFTS (000s)	30.5	23.3	22.0	23.0	25.0	-18%	8.5%
		Actual EFTS delivered (000s)	30.5	23.4	22.0	22.5	25.1	-18%	11%
		% over/under-delivery	0.0%	0.4%	0.0%	-2.1%	0.5%		
	Per EFTS funding	Funded – nominal	\$5,385	\$5,537	\$5,674	\$5,859	\$6,073	13%	3.7%
		Funded – real	\$6,049	\$6,017	\$6,023	\$5,983	\$6,073	0.4%	1.5%
		Actual – nominal	\$5,385	\$5,513	\$5,674	\$5,985	\$6,041	12%	0.9%
Actual – real		\$6,049	\$5,991	\$6,023	\$6,112	\$6,041	-0.1%	-1.2%	
Outputs	Amount of successful course-level study in EFTS (000s)	Completed successfully/in thesis study	18.3	14.2	14.5	15.7	17.2	-6.1%	9.6%
		Completed successfully/in thesis study/not yet known	23.1	17.6	16.2	17.0	19.7	-15%	16%
	Amount of successful course-level study as a % of actual EFTS	Completed successfully/in thesis study	60%	61%	66%	70%	68%		
		Completed successfully/in thesis study/not yet known	76%	75%	73%	75%	78%		
	\$ value of successful course-level study per \$ of govt funding (real)	Completed successfully/in thesis study	\$0.60	\$0.61	\$0.66	\$0.67	\$0.68	14%	1.5%
		Completed successfully/in thesis study/not yet known	\$0.75	\$0.75	\$0.73	\$0.73	\$0.78	3.8%	7.4%
	Domestic students completing qualifications	Level 4+ & age < 25 years (000s)	0.6	0.4	0.4	0.4	0.7	23%	70%
		Total (000s)	24.5	18.1	14.9	16.8	17.6	-28%	4.4%
		Level 4+ & age < 25 yrs as % of total	2.7%	2.3%	3.0%	2.5%	4.0%		
	Domestic Māori & Pasifika students completing qualifications	Level 4+ (000s)	4.6	3.0	3.0	2.7	4.0	-13%	47%
		Total (000s)	10.1	6.7	7.7	9.2	10.0	-0.6%	8.2%
		Level 4+ as % of total	46%	44%	38%	30%	40%		
	Students completing qualifications by residency status	Domestic (000s)	24.5	18.1	14.9	16.8	17.6	-28%	4.4%
		Total (000s)	24.5	18.1	14.9	16.8	17.6	-28%	4.4%
Domestic as % of total		100%	100%	100%	100%	100%			
Five-year qualification completion rate	Full-time students	48%	53%	56%	43%	49%			
	All students	45%	52%	57%	59%	59%			

Note: All real values are in 2009 dollars.

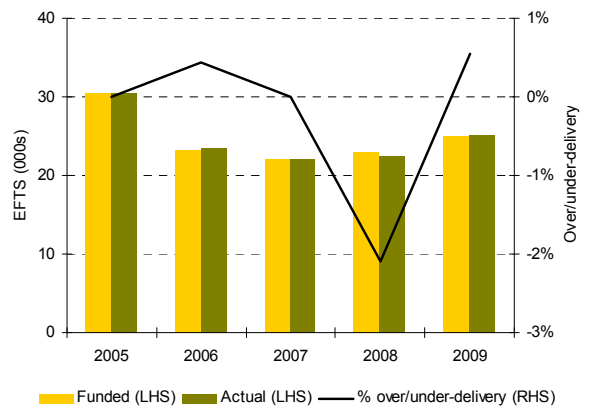
Source: Ministry of Education and Tertiary Education Commission

Inputs

Government funding – real (2009 dollars)

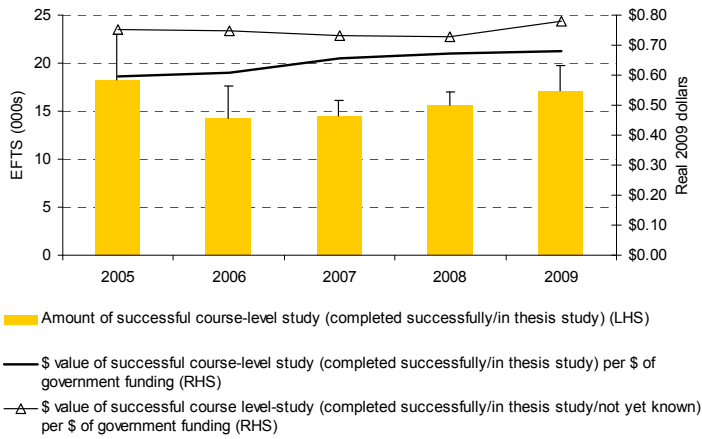


Equivalent full-time student places

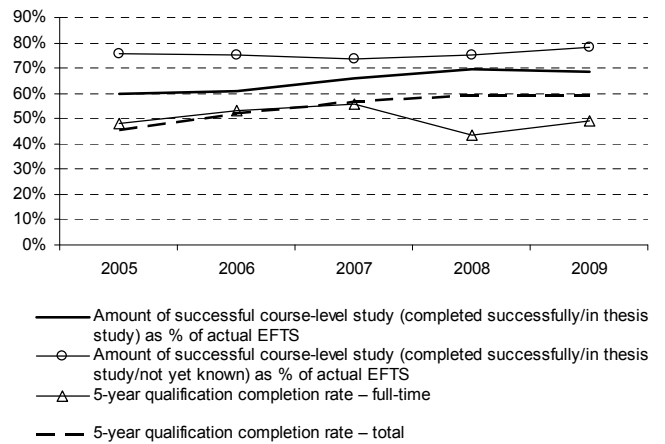


Outputs

Course-level outputs



Rates



Note: The error bars in the above graph show the amount of successful study including the 'not yet knows'.

4.4 Private training establishments¹²

Highlights

- Total funding for private training establishments (PTEs) increased in nominal (22 percent) and real terms (8.5 percent) between 2005 and 2009.
- Total funded EFTS increased by 5.6 percent between 2005 and 2009, while actual EFTS increased by 22 percent over the same period.
- There was a significant increase in actual EFTS of 7.7 percent in 2009 as a result of the recession boosting participation. This resulted in an increase in the already substantial over-delivery in PTEs from 22 percent in 2008 to 29 percent in 2009.
- On a per EFTS basis, real funding per actual EFTS decreased by 11 percent between 2005 and 2009. This figure decreased by 4.2 percent in 2009 alone. The main cause of this decrease was a rise in the rate of over-delivery in PTEs over time.
- As a result of a significant amount of ‘not yet known’ course-level outcomes, it is difficult to assess whether there has been any change in the percentage of successful study in the PTE subsector.
- The trend in the value of the successful course-level outputs per dollar of government funding is clearer, with the data showing there was an improvement in this measure between 2005 and 2009. The value per dollar of government funding with the ‘not yet known’ outcomes excluded was \$0.86 in 2009, which exceeded the value per dollar of government funding that included the ‘not yet known’ outcomes of \$0.83 in 2005. However, this improvement was driven mostly by increasing over-delivery of EFTS, rather than a substantial improvement in the rate of successful study.
- As a percentage of all students completing a qualification, students who were aged under 25 and who completed a qualification at level 4 or higher on the NZQF increased from 21 percent in 2005 to 28 percent in 2009.
- As a percentage of all domestic Māori or Pasifika students who completed a qualification, 53 percent were Māori or Pasifika students who completed a qualification at level 4 or higher in 2009, compared with 40 percent in 2005.
- The five-year qualification completion rate for all SAC-funded students was slightly lower in 2009 (49 percent) compared with 2005 (50 percent). However, the five-year qualification completion rate for full-time students improved from 59 percent in 2005 to 68 percent in 2009.

¹² Other tertiary education providers have been treated as PTEs for this analysis.

Table 5

Inputs and outputs of the Student Achievement Component fund – private training establishments

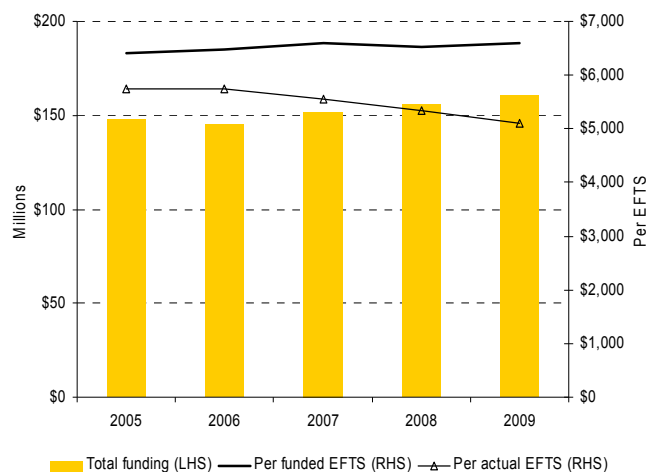
Type	Measure		Year					% change	
			2005	2006	2007	2008	2009	05-09	08-09
Inputs	Government funding (\$m)	Nominal	\$131.8	\$133.3	\$143.1	\$152.4	\$160.6	22%	5.3%
		Real	\$148.0	\$144.9	\$151.9	\$155.6	\$160.6	8.5%	3.2%
	Enrolments	Funded EFTS (000s)	23.1	22.4	23.0	23.8	24.4	5.6%	2.3%
		Actual EFTS delivered (000s)	25.8	25.3	27.3	29.2	31.4	22%	7.7%
		% over/under-delivery	12%	13%	19%	22%	29%		
	Per EFTS funding	Funded –nominal	\$5,713	\$5,953	\$6,213	\$6,397	\$6,590	15%	3.0%
		Funded – real	\$6,418	\$6,469	\$6,595	\$6,533	\$6,590	2.7%	0.9%
		Actual – nominal	\$5,110	\$5,278	\$5,237	\$5,226	\$5,110	0%	-2.2%
Actual – real		\$5,741	\$5,736	\$5,559	\$5,337	\$5,110	-11%	-4.2%	
Outputs	Amount of successful course-level study in EFTS (000s)	Completed successfully/in thesis study	16.0	16.7	17.9	20.1	21.1	32%	4.7%
		Completed successfully/in thesis study/not yet known	19.2	18.4	19.8	22.2	25.5	33%	15%
	Amount of successful course-level study as a % of actual EFTS	Completed successfully/in thesis study	62%	66%	66%	69%	67%		
		Completed successfully/in thesis study/not yet known	74%	73%	73%	76%	81%		
	\$ value of successful course-level study per \$ of govt funding (real)	Completed successfully/in thesis study	\$0.70	\$0.76	\$0.78	\$0.84	\$0.86	23%	2.5%
		Completed successfully/in thesis study/not yet known	\$0.83	\$0.83	\$0.86	\$0.92	\$1.03	24%	12%
	Domestic students completing qualifications	Level 4+ & age < 25 years (000s)	3.6	3.6	4.1	4.6	6.1	68%	31%
		Total (000s)	16.8	15.2	15.4	17.6	21.8	30%	24%
		Level 4+ & age < 25 yrs as % of total	21%	24%	27%	26%	28%		
	Domestic Māori & Pasifika students completing qualifications	Level 4+ (000s)	2.1	2.1	2.3	3.0	4.5	108%	50%
		Total (000s)	5.3	4.7	5.3	6.3	8.4	57%	32%
		Level 4+ as % of total	40%	45%	43%	47%	53%		
	Students completing qualifications by residency status	Domestic (000s)	16.8	15.2	15.4	17.6	21.8	30%	24%
		Total (000s)	16.8	15.2	15.4	17.6	21.8	30%	24%
Domestic as % of total		100%	100%	100%	100%	100%			
Five-year qualification completion rate	Full-time students	59%	57%	62%	66%	68%			
	All students	50%	45%	54%	50%	49%			

Note: All real values are in 2009 dollars.

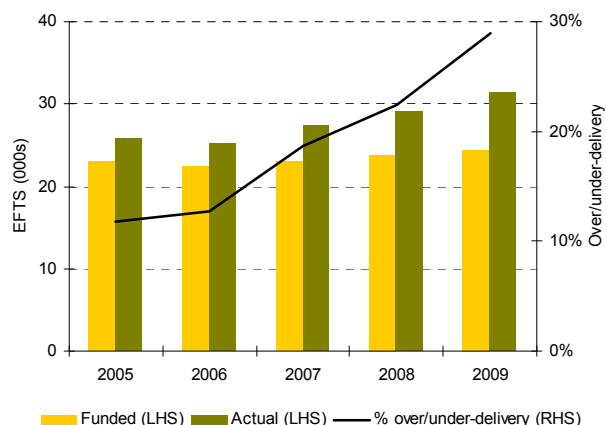
Source: Ministry of Education and Tertiary Education Commission

Inputs

Government funding – real (2009 dollars)

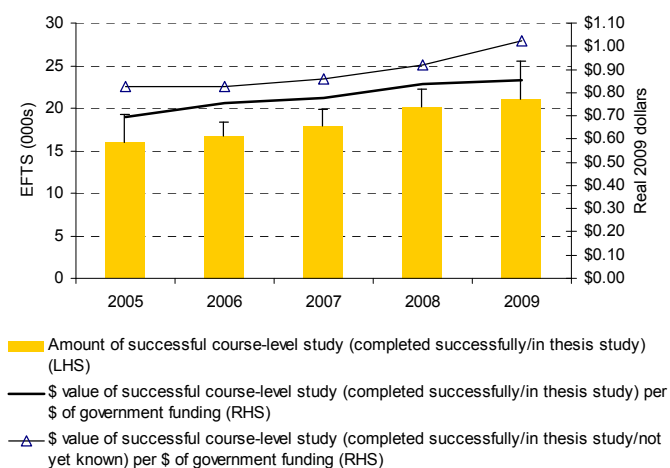


Equivalent full-time student places

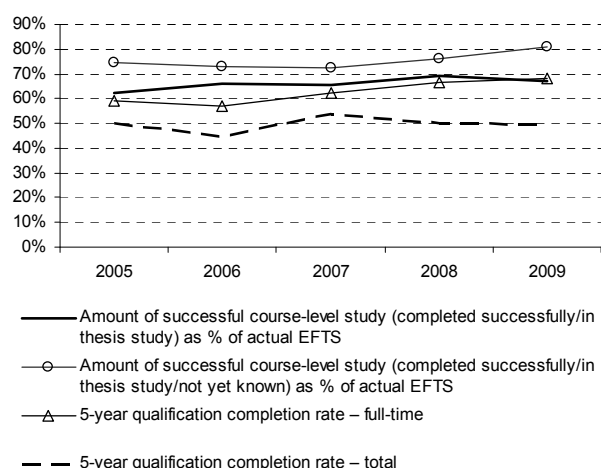


Outputs

Course-level outputs



Rates



Note: The error bars in the above graph show the amount of successful study including the 'not yet knows'.

5 PERFORMANCE-BASED RESEARCH FUND (INCLUDING RESEARCH TOP-UPS)

Background

The primary purpose of the Performance-Based Research Fund (PBRF) is to ensure that excellent research in the tertiary education sector is encouraged and rewarded. In addition, the PBRF is designed to encourage higher completion rates in postgraduate research courses.

The PBRF was introduced over a transition period between 2004 and 2007, where it progressively replaced research top-ups as the allocation method for research funding. Research top-ups allocated funding to providers based on the number of domestic enrolments at bachelors level and higher. For the purposes of trend analysis of research performance, the funding allocated via the PBRF and the research top-ups has been combined.

The PBRF funding allocation is based on three components: the Quality Evaluation (60 percent), research degree completions (RDC) (25 percent) and external research income (ERI) (15 percent). The Quality Evaluation uses peer review to assess the quality of research produced by staff at participating providers. These are scheduled to take place every six years, with the next round due in 2012. The Tertiary Education Commission publishes the results of the Quality Evaluations at the provider level, which gives providers an additional incentive to maximise their research quality.

The RDC measure allocates funding based on the weighted volume of doctoral and masters theses completions, while the ERI measure allocates funding based on the share of ERI earned by the participating providers. The RDC and ERI components use data submitted on an annual basis by providers to make allocations.

Policy context

There have been no changes to the way the PBRF allocates funding via the ERI and RDC components since the introduction of the PBRF in 2004. However, over time there have been a number of changes to the way the Quality Evaluation has been carried out. For the 2006 Quality Evaluation, the main change was the inclusion of two quality categories for new and emerging researchers (R(NE) and C(NE)) that were designed to take into account that they were at the start of their research careers.

For the 2012 Quality Evaluation, in addition to the 12 peer review panels, there will be two expert advisory groups. These are the 'Professional and Applied Research' and 'Pacific Research' advisory groups. The purpose of these two advisory groups is to ensure that these two types of research receive appropriate assessment.

For the purposes of this analysis, PBRF performance information (Quality Evaluation results, RDCs and ERI) only for those institutions that participated in the 2006 Quality Evaluation is reported in Table 6.

Highlights

- Government expenditure on the PBRF continued to grow in 2009 in nominal (3.1 percent) and real terms (1.2 percent). The size of the PBRF (including research top-ups) in 2009 was 45 percent above 2005 levels in real terms. This scale of this increase is partly due to extra appropriations into the PBRF funding pool.
- Real external research income (ERI) per full-time equivalent (FTE) staff continued to grow in 2009 and was 28 percent higher than in 2005.

- The volume of research degree completions (RDCs) per FTE was 19 percent higher in 2009 compared with 2005.
- The long-term completion rates of PhD and masters students continue to improve. In 2009, the eight-year completion rate of PhD students was 62 percent, compared with 45 percent in 2005. The four-year completion rates of all masters students was 64 percent in 2009, compared with 51 percent in 2005.
- The academic impact of TEI¹³ research continues to grow. In 2009, 0.40 percent of world indexed publications were from New Zealand TEIs, compared with 0.38 percent in 2005. The share of world indexed citations increased even more, from 0.32 percent in 2005 to 0.42 percent in 2009.
- The distribution of the academic impact of research by authors from New Zealand TEIs continues to improve. In 2009, 55 percent of subject areas reported on by Thomson Reuters had an academic impact equal to or above the world average, compared with 42 percent in 2005.
- The percentage of publications by authors from New Zealand TEIs that attracted citations has been steadily rising. In 2005, 60 percent of publications received at least one citation. By 2009, this had increased to 66 percent.

Table 6

Inputs, outputs and impact of the Performance-Based Research Fund (including research top-ups)

Type	Measure		Year					% change	
			2005	2006	2007	2008	2009	2005-09	2008-09
Inputs	Government funding (\$m) (includes top-ups)	Nominal	\$146.4	\$199.9	\$206.3	\$231.6	\$238.7	63%	3.1%
		Real	\$164.6	\$216.1	\$218.7	\$236.0	\$238.7	45%	1.2%
	PBRF-eligible FTE staff	(in 2006 Quality Evaluation)	8,078	8,078	8,078	8,078	8,078		
Outputs	2006 PBRF Quality Evaluation results	% of staff rated 'A'	7%						
		% of staff rated 'B'	26%						
		% of staff rated 'C' or 'C(NE)'	34%						
		% of staff rated 'R' or 'R(NE)'	33%						
	PBRF external research income (ERI) (\$m)	Nominal	\$286.0	\$304.6	\$322.0	\$372.3	\$411.1	44%	10%
		Real	\$321.4	\$329.3	\$341.2	\$379.3	\$411.1	28%	8.4%
		Real ERI per FTE (\$000s)	\$39.8	\$40.8	\$42.2	\$47.0	\$50.9	28%	8.4%
	PBRF research degree completions (RDCs)	Volume-weighted RDCs	3,409	2,772	3,743	4,135	4,051	19%	-2.0%
		Volume-weighted RDCs per FTE	0.42	0.34	0.46	0.51	0.50	19%	-2.0%
		Qualification completion rates	PhD 8-year qual completion rates (total)	49%	55%	58%	62%	62%	
	Masters 4-year qual completion rates (F/T)	60%	74%	75%	75%	72%			
	Masters 4-year qual completion rates (total)	51%	61%	62%	64%	64%			
Outcomes (TEIs)	Share of world indexed publications and citations	% of world indexed publications	0.38%	0.39%	0.39%	0.40%	0.40%		
		% of world indexed citations	0.32%	0.34%	0.37%	0.39%	0.42%		
Five-year windows	Distribution of fields of research by level of academic impact (citations/publications) (world average = 1)	1.50 and over	5%	5%	8%	7%	9%		
		1.00 to 1.49	37%	40%	41%	46%	46%		
		0.50 to 0.99	56%	52%	50%	45%	45%		
		0 to 0.49	1%	3%	1%	2%	1%		
		% of publications cited	60%	61%	62%	64%	66%		

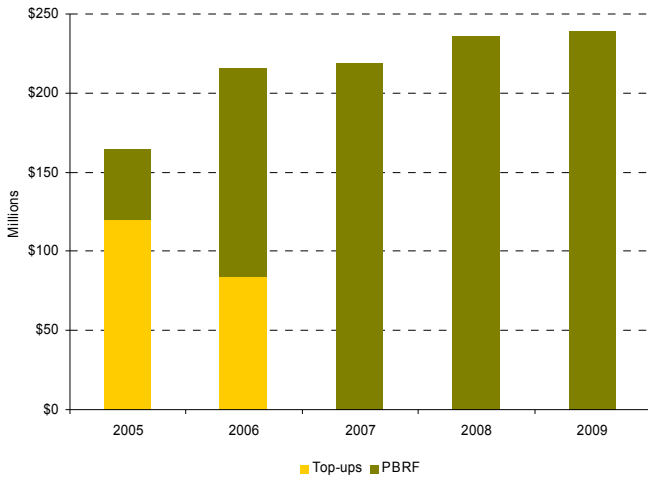
Notes: 1. All real values are in 2009 dollars. 2. The PBRF-eligible FTE data, Quality Evaluation results, ERI data and RDC data presented in this table refer only to those institutions that participated in the 2006 Quality Evaluation.

Source: Ministry of Education, Tertiary Education Commission and Thomson Reuters

¹³ TEIs include universities, polytechnics and wānanga.

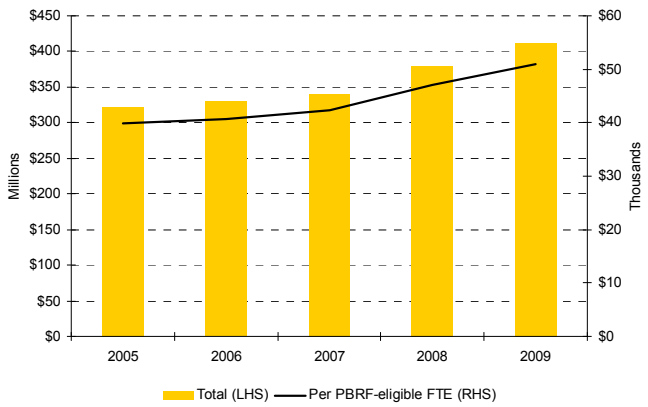
Inputs

Government funding – real (2009 dollars)

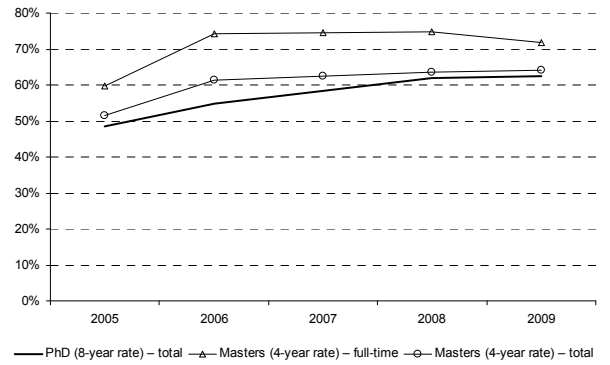


Outputs

External research income – real (2009 dollars)

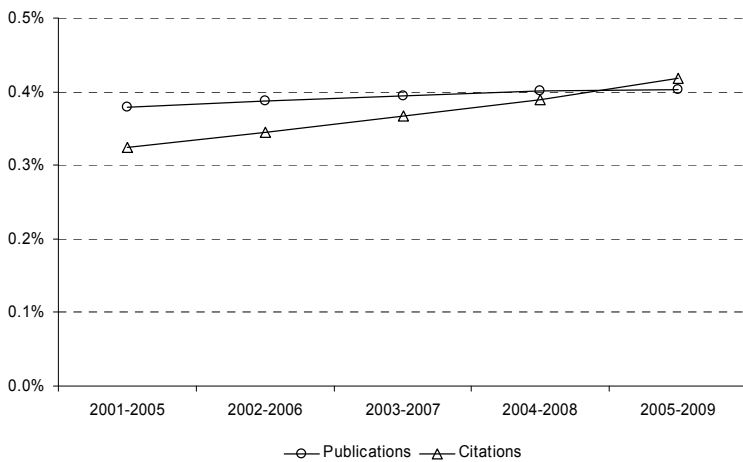


Postgraduate qualification completion rates

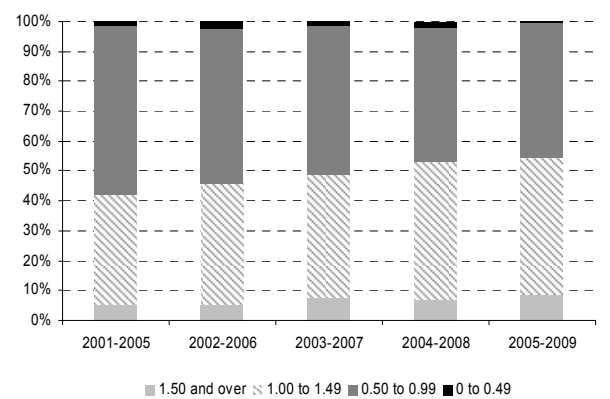


Outcomes

Share of world indexed publications and citations by New Zealand tertiary education institutions



Distribution of academic impact across subject areas by New Zealand tertiary education institutions



Note: The two Outcomes graphs above use data based on five-year overlapping windows.

6 INDUSTRY TRAINING FUND

Background

The Industry Training Fund provides for systematic training in skills characteristic of, or likely to be valuable to, an industry. It is delivered to people employed in that industry and is based on a work-based training approach. Industry training organisations (ITOs) are funded to purchase on-job and off-job training from workplace trainers and tertiary education organisations respectively, and employ assessors who administer unit standards assessments within the workplace.¹⁴ The system operates on a cost-sharing principle, with government contributing approximately 70 percent of the total cash cost of training, and the remainder contributed by industry. Industry also makes a significant in-kind contribution. Government funding is delivered to ITOs based on the volume of Standard Training Measure (STM) units. One STM is equivalent to 120 credits of study.

Policy context

The major change to the operation of the Industry Training Fund during the period 2005 to 2009 was the move to a single standard training measure (STM) funding rate. This was phased in over the period 2005 to 2007.

From 2011, changes to operational policy will place an annual cap on funding for each trainee, clarify the need for clear evidence of trainee achievement, and ensure ITOs are funded at rates that reflect the actual progress of trainees.¹⁵ These changes, plus the lower demand for trainee places resulting from the recession, have allowed a transfer of \$55 million from Industry Training over the next two years (2011 and 2012) to fund an additional 1,580 undergraduate places in universities via the Student Achievement Component.

Highlights

- Government expenditure on the Industry Training Fund continued to grow in 2009 in nominal (3.3 percent) and real terms (1.4 percent). Total real expenditure increased by 32 percent between 2005 and 2009.
- Although the number of trainees increased by 3.7 percent in 2009, total STM load decreased by 2.0 percent.¹⁶ The number of trainees increased by 23 percent between 2005 and 2009, while STMs increased by 23 percent.
- The number of new trainee commencements dropped slightly in 2009 (-1.4 percent) and is now 5.2 percent lower than in 2005.
- Between 2008 and 2009, per STM funding grew by 5.4 percent in nominal terms and 3.5 percent in real terms. In real terms, per STM funding increased by 7.2 percent between 2005 and 2009.
- The number of credits attained rose by 1.3 percent in 2009 and were around 20 percent higher than in 2005. The largest increase in credits attained between 2005 and 2009 was at level 6 or higher on the NZQF (138 percent) and level 2 on the NZQF (36 percent). Between 2008 and 2009, the fastest growth in credits attained was at level 6 or higher.
- The number of credits attained per STM decreased by 3.3 percent between 2005 and 2009, although there was an increase of 3.4 percent in 2009. The number of credits attained per \$1,000 of real government expenditure decreased by 9.8 percent between 2005 and 2009.
- The number of trainees that completed programmes increased by 96 percent between 2005 and 2009.

¹⁴ Industry training organisations (ITOs) also design qualifications and forecast skills shortages.

¹⁵ In addition, the Tertiary Education Commission is introducing a regular, in-depth monitoring and review programme of ITOs, alongside governance support, and a Code of Practice to help guide funding decisions in the sector.

¹⁶ Note that the introduction of new industry training requirements in real estate reduced the extent of the downfall. In addition, some ITOs (such as flooring and hospitality) continued to recruit trainees, but shifted their focus from younger to older workers, reflecting the fact that unemployment was disproportionately high among the young. In effect, these changes masked the extent of the downturn in training in other ITOs.

- The number of trainees that achieved qualifications at level 4 or higher and were aged under 25 as a percentage of all trainees completing qualifications decreased from 9.6 percent in 2005 to 6.8 percent in 2009.
- Both the five-year programme completion rate and the five-year qualification completion rate for trainees have displayed improvement over time. In 2009, the programme completion rate was 31 percent (23 percent in 2005) and the qualification completion rate was 28 percent (21 percent in 2006).
- In 2009, people with level 1 to 3 certificates and level 4 to 7 certificates/diplomas continued to enjoy an earnings premium over people with school or no qualifications, although this finding is for all people with this level of qualification, not just those gained through industry training.¹⁷
- In 2009, the chances of being unemployed were lower for people with tertiary qualifications, although this applies to all people with this level of qualification, not just those in industry training. People with level 4 to 7 certificates/diplomas have the greatest advantage over people with upper secondary school qualifications.

Technical note:

A programme of learning contains all of the unit standards under which trainees are assessed in order to show competency in the tasks required to perform their jobs. Industry trainees may embark on a number of training programmes (but usually they do just one) in pursuit of the learning set out in their training agreement.

¹⁷ Note that Crichton (2009) found that industry training participants only achieved an earnings premium for qualifications at level 4 or higher. For males, attaining a level 3 or higher qualification resulted in an earnings premium.

Table 7
Inputs, outputs and outcomes of the Industry Training Fund

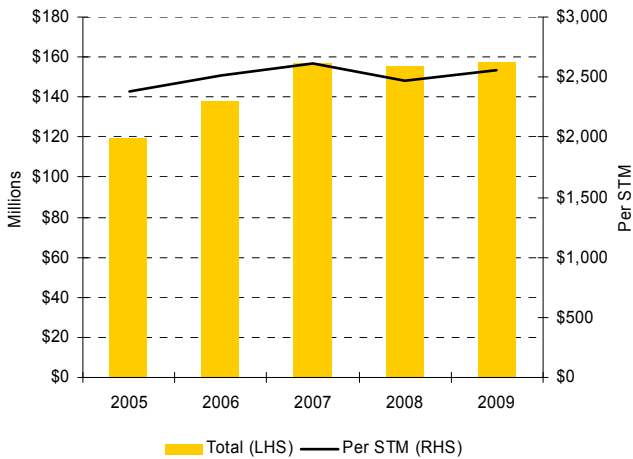
Type	Measure		Year					% change	
			2005	2006	2007	2008	2009	05-09	08-09
Inputs	Government funding (\$m)	Nominal	\$106.1	\$127.7	\$148.1	\$152.6	\$157.7	49%	3.3%
		Real	\$119.3	\$138.1	\$156.9	\$155.4	\$157.7	32%	1.4%
	Enrolments	STMs achieved (000s)	50.0	54.9	59.9	62.9	61.7	23%	-2.0%
		Trainee numbers (000s)	153.8	165.9	174.7	181.8	188.5	23%	3.7%
		New trainee commencements (000s)	48.5	46.6	49.1	46.6	45.9	-5.2%	-1.4%
	Per STM cost	Nominal	\$2,121	\$2,326	\$2,470	\$2,425	\$2,556	21%	5.4%
Real		\$2,384	\$2,514	\$2,618	\$2,470	\$2,556	7.2%	3.5%	
Outputs	Credits attained (000s) by NZQF level	Level 1	169.8	217.8	199.3	173.6	206.2	21%	19%
		Level 2	659.5	832.7	801.3	878.0	896.6	36%	2.1%
		Level 3	1,007.9	1,195.4	1,140.0	1,180.7	1,184.9	18%	0.4%
		Level 4	808.1	935.2	895.7	912.8	843.3	4.4%	-7.6%
		Level 5	104.3	171.4	110.4	95.7	113.7	9.0%	19%
		Level 6+	28.0	45.7	36.2	26.5	66.6	138%	152%
		Total	2,777.7	3,398.1	3,182.8	3,267.3	3,311.3	19%	1.3%
	Credits attained per STM		55.5	61.9	53.1	51.9	53.7	-3.3%	3.4%
	Credits attained per \$1,000 – real		23.3	24.6	20.3	21.0	21.0	-9.8%	-0.1%
	Programme completions	Number of trainees (000s)	20.7	26.2	28.0	33.4	40.6	96%	22%
		Number of programmes (000s)	23.7	32.8	31.3	38.0	49.2	108%	29%
	Trainees completing qualifications	Level 4+ & age < 25 years (000s)	1.9	1.7	1.9	2.0	2.0	7.3%	0.8%
		Total (000s)	19.6	24.6	22.6	27.4	29.7	51%	8.4%
		Level 4+ & age < 25 yrs as % of total	9.6%	7.1%	8.2%	7.3%	6.8%		
	Completion rates	5 year programme completion	23%	26%	33%	29%	31%		
		5 year qualification completion		21%	29%	26%	28%		
Outcomes	Premium on median hourly earnings (base = no qualifications) (ages 15 and over)	Lower secondary school	8%	7%	6%	5%	6%		
		Upper secondary school	8%	7%	8%	4%	0%		
		Level 1-3 certificates	22%	17%	17%	18%	17%		
		Level 4-7 certs/dips	38%	34%	38%	32%	34%		
	Unemployment rate by highest qualification (ages 15 and over)	No qualifications	6.7%	5.4%	6.0%	6.1%	8.6%		
		Lower secondary school	3.9%	4.1%	4.0%	4.8%	8.2%		
		Upper secondary school	4.7%	4.1%	4.4%	4.4%	6.9%		
		Level 1-3 certificates	3.2%	3.9%	3.9%	2.9%	5.7%		
		Level 4-7 certs/dips	2.4%	2.7%	2.3%	3.3%	4.2%		

Note: All real values are in 2009 dollars.

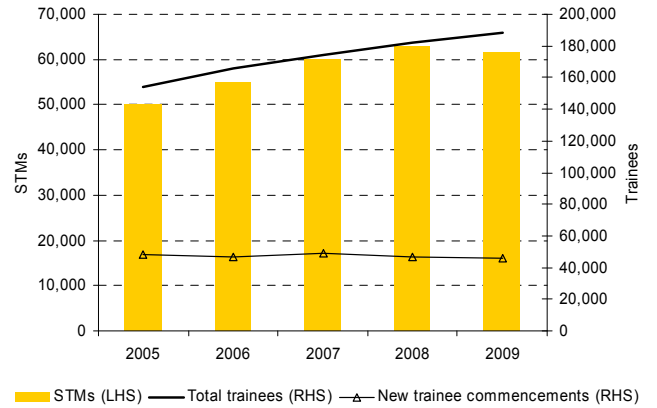
Source: Ministry of Education, Tertiary Education Commission and Statistics New Zealand

Inputs

Government funding – real (2009 dollars)

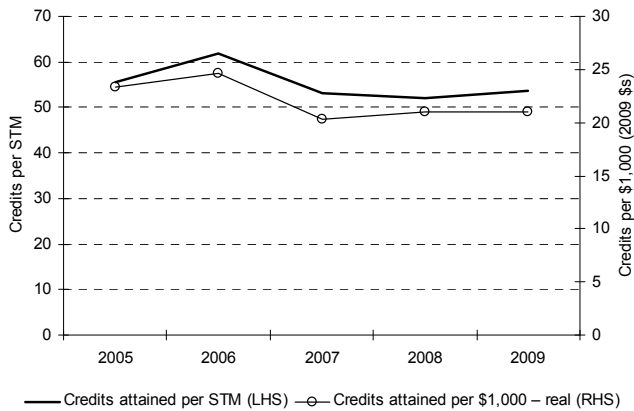


Enrolments

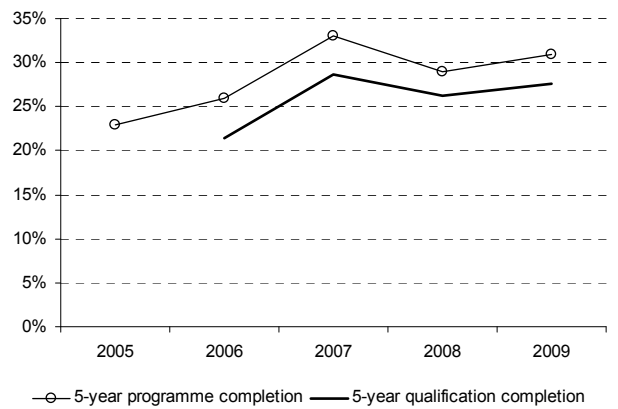


Outputs

Credits attained

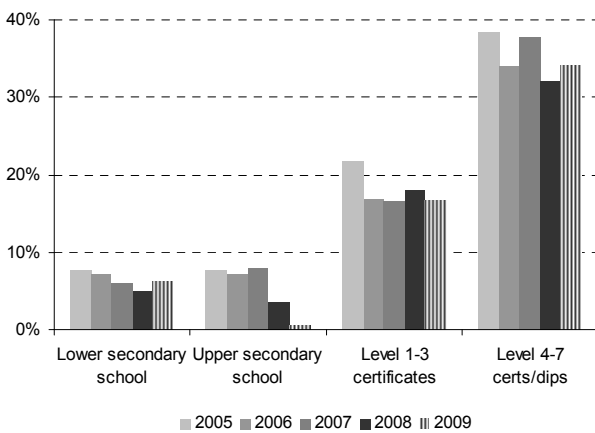


Completion rates

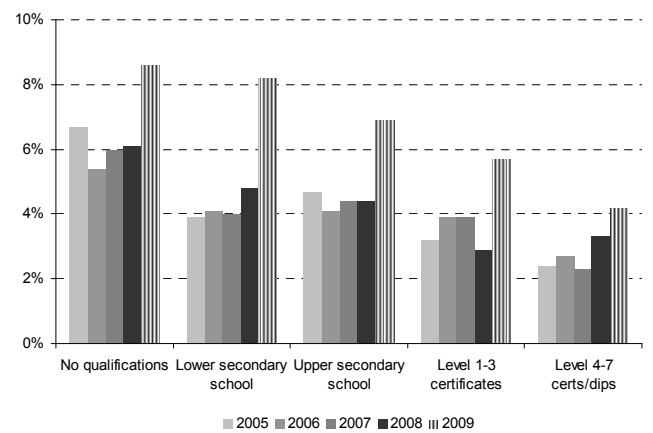


Outcomes

Premium on median hourly earnings compared with no qualifications (ages 15+)



Unemployment rates (ages 15+)



7 MODERN APPRENTICESHIPS

Background

The Modern Apprenticeships programme is a work-based education initiative that makes it easier for employers to recruit and train young people and provide them with an opportunity to gain a nationally recognised qualification. The programme provides systematic training in skills characteristic of, or likely to be valuable to, an industry. It is delivered to people employed in that industry and is based on a work-based training approach. The Modern Apprenticeships programme applies specifically to students aged under 21 years of age, although some older people wishing to change careers can be accommodated. Government funding is delivered to ITOs based on the volume of standard training measure (STM) units. One STM is equivalent to 120 credits of study.

A key part of the Modern Apprenticeships approach is the use of co-ordinators, who provide additional services to employers and trainees than are available for non-targeted industry training. This involves providing suitable young people with work placements leading into apprenticeship training (brokerage), and with peer support services that support both learners and employers throughout the process. This additional support significantly increases the average cost of Modern Apprenticeship training over the normal model of industry training.

Policy context

There were no major policy changes to Modern Apprenticeships between 2005 and 2009. However, the rise in trainees between 2005 and 2008 reflects a decision by the government to make more places available.

Highlights

- Government expenditure on Modern Apprenticeships continued to grow in 2009 in nominal (2.4 percent) and real terms (0.5 percent). In real terms, total spending was 46 percent higher in 2009 compared with 2005.
- In 2009, the number of trainees increased by 1.1 percent and total STM load increased by 5.3 percent. Compared with 2005, there was a significant increase in STMs (58 percent) and trainees (54 percent) as the Modern Apprenticeship programme was expanded.
- Despite these increases in enrolments overall, the number of new trainee commencements dropped sharply in 2009 (-27 percent), reflecting the impact of the recession on the younger population.
- Between 2008 and 2009, per STM funding fell by 2.7 percent in nominal terms and 4.5 percent in real terms.
- The number of credits attained rose by 16 percent in 2009 and was almost 60 percent higher than in 2005. The largest increase in credits attained between 2005 and 2009 was at level 6 or higher on the NZQF (127 percent) and level 1 on the NZQF (74 percent).
- The number of credits attained per STM achieved increased by 0.4 percent between 2005 and 2009. This figure increased significantly by 11 percent in 2009. The number of credits attained per \$1,000 of real government expenditure increased by 8.2 percent between 2005 and 2009.
- The number of trainees completing programmes increased by 94 percent between 2005 and 2009.
- Both the five-year programme completion rate and the five-year qualification completion rate have shown improvement over time. In 2009, the programme completion rate was 37 percent (compared with 32 percent in 2006) and the qualification completion rate was 31 percent (25 percent in 2006).

- In 2009, people aged 15 to 24 with level 1 to 3 certificates and level 4 to 7 certificates or diplomas continued to enjoy an earnings premium over people with school or no qualifications, although this applies to all people with this level of qualification, not just those obtained via the Modern Apprenticeships programme.
- In 2009, the chances of being unemployed were generally lower for people in the 15 to 24 age group with tertiary qualifications, compared with people with school-level qualifications. However, this includes all people with this level of qualification, not just those obtained through Modern Apprenticeship programme.

Technical note:

A programme of learning contains all of the unit standards under which trainees are assessed in order to show competency in the tasks required to perform their jobs. Industry trainees may embark on a number of training programmes (but usually they do just one) in pursuit of the learning set out in their training plan.

Table 8

Inputs, outputs and outcomes of Modern Apprenticeships

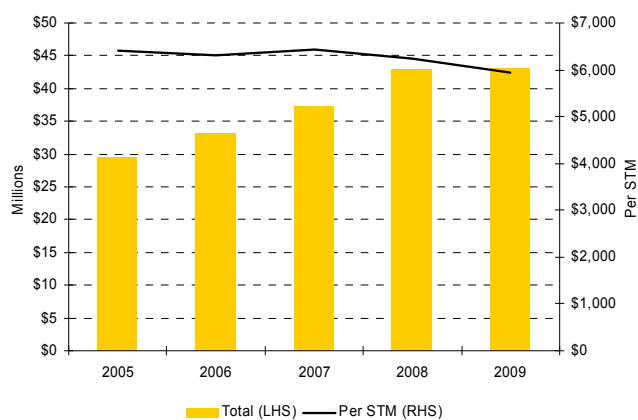
Type	Measure		Year					% change	
			2005	2006	2007	2008	2009	05-09	08-09
Inputs	Government funding (\$m)	Nominal	\$26.3	\$30.6	\$35.2	\$42.2	\$43.2	64%	2.4%
		Real	\$29.6	\$33.0	\$37.4	\$43.0	\$43.2	46%	0.5%
	Enrolments	STMs achieved (000s)	4.6	5.2	5.8	6.9	7.3	58%	5.3%
		Trainee numbers (000s)	10.2	11.7	13.1	15.5	15.7	54%	1.1%
		New trainee commencements (000s)	3.6	4.1	4.6	5.5	4.0	12%	-27%
	Per STM cost	Nominal	\$5,703	\$5,842	\$6,065	\$6,109	\$5,945	4.2%	-2.7%
Real		\$6,410	\$6,315	\$6,428	\$6,225	\$5,945	-7.3%	-4.5%	
Outputs	Credits attained (000s) by NZQF level	Level 1	13.3	14.4	12.5	13.1	23.1	74%	76%
		Level 2	84.6	100.5	96.1	107.4	131.9	56%	23%
		Level 3	152.4	173.5	185.8	206.2	243.3	60%	18%
		Level 4	118.2	147.4	154.5	174.4	185.9	57%	6.6%
		Level 5	4.0	4.5	5.0	4.7	4.5	14%	-4.0%
		Level 6+	0.4	0.6	0.8	0.3	0.8	127%	191%
		Total	372.7	440.8	454.7	506.2	589.6	58%	16%
		Credits attained per STM	80.8	84.3	78.2	73.3	81.1	0.4%	11%
		Credits attained per \$1,000 – real	12.6	13.3	12.2	11.8	13.6	8.2%	16%
	Programme completions	Number of trainees	930	1,342	1,315	1,550	1,800	94%	16%
		Number of programmes	951	1,376	1,319	1,561	1,813	91%	16%
	Trainees completing qualifications	Level 4+ & age < 25 years	899	1,224	1,206	1,345	1,379	53%	2.5%
		Total	1,464	2,081	2,055	2,356	2,713	85%	15%
		Level 4+ & age < 25 yrs as % of total	61%	59%	59%	57%	51%		
	Completion rates	5-year programme completion		32%	32%	33%	37%		
5-year qualification completion			25%	29%	29%	31%			
Outcomes	Premium on median hourly earnings (base = no qualifications) (ages 15-24)	Lower secondary school	-3%	-2%	-4%	-4%	-4%		
		Upper secondary school	1%	2%	6%	4%	-1%		
		Level 1-3 certificates	20%	18%	14%	20%	9%		
		Level 4-7 certs/dips	33%	20%	19%	20%	19%		
	Unemployment rate by highest qualification (ages 15-24)	No qualifications	18%	15%	18%	18%	24%		
		Lower secondary school	9%	10%	10%	13%	21%		
		Upper secondary school	8%	8%	7%	8%	13%		
		Level 1-3 certificates	4%	9%	9%	9%	11%		
	Level 4-7 certs/dips	8%	9%	5%	8%	14%			

Note: All real values are in 2009 dollars.

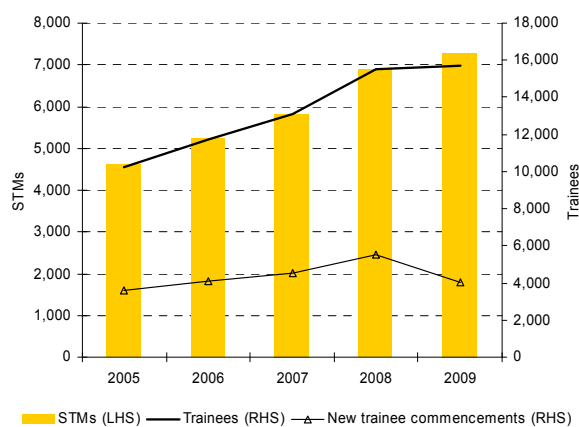
Source: Ministry of Education, Tertiary Education Commission and Statistics New Zealand

Inputs

Government funding – real (2009 dollars)

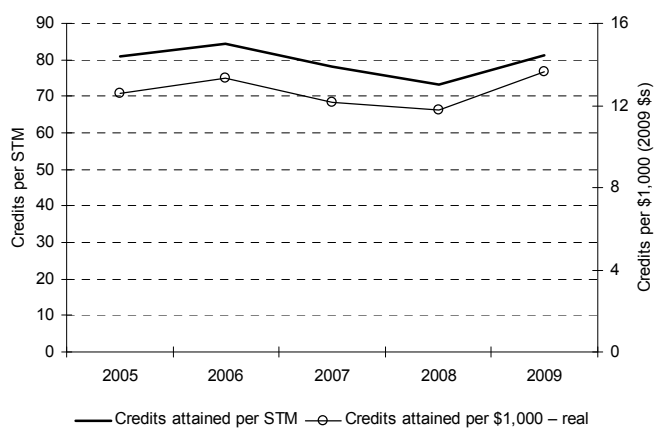


Enrolments



Outputs

Credits attained

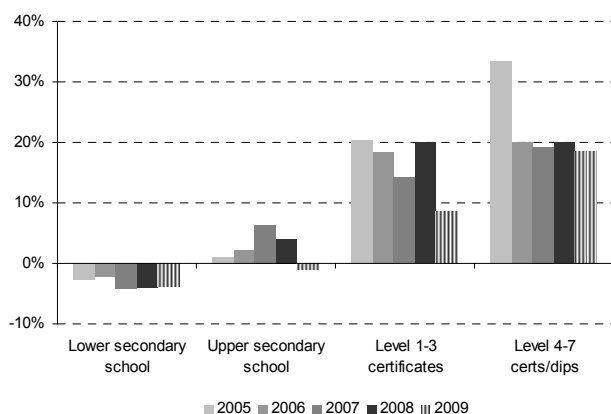


Completion rates

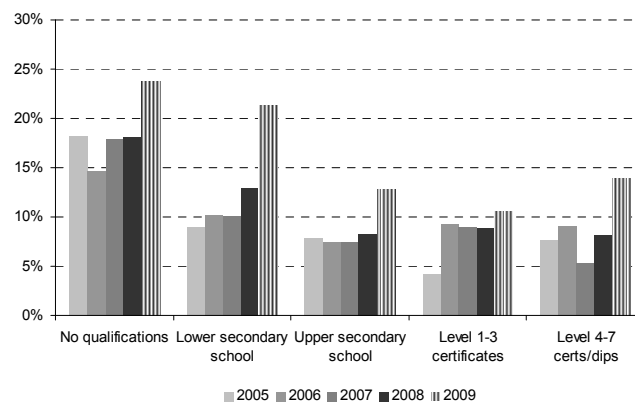


Outcomes

Premium on median hourly earnings compared with no qualifications (ages 15-24)



Unemployment rates (ages 15-24)



8 TRAINING OPPORTUNITIES

Background

Training Opportunities is a scheme whereby long-term unemployed persons aged 18 years or older with low or no qualifications and assessed as being at risk of labour market disadvantage undergo training in varying blocks (usually of no more than a couple of months' duration) with the aim of improving the chances of these trainees obtaining employment.

The focus of training is generic workplace skills accumulation, but training must be tied to specific industries to ensure the training has some practical relevance. Training is linked to the New Zealand Qualifications Framework (NZQF), and learners earn credits that can be used to contribute towards qualifications. Training is paid for on a weekly fee basis, and is mostly delivered by private training establishments. Funding is derived from the Ministry of Social Development (MSD) through Vote Social Development, and administered by the Tertiary Education Commission on MSD's behalf.

Policy context

In 2003, the unemployment-related eligibility criterion for entrance to Training Opportunities was widened to include those assessed as being at risk of experiencing long periods of unemployment, as well as those that had actually experienced long periods of unemployment. Although there were no major changes to the operation of Training Opportunities between 2005 and 2009, there are substantial changes pending. The government has announced that from 2011, 40 percent of Training Opportunities funding is to be administered by the Ministry of Social Development and will be invested in short, employment-focused training programmes. The remaining 60 percent of Training Opportunities funding will continue to be administered by the Tertiary Education Commission in largely longer courses of study.

Highlights

- Government expenditure on Training Opportunities decreased in 2009 in nominal (-0.9 percent) and real terms (-2.7 percent). Total real expenditure is 3.5 percent lower in 2009 compared with 2005.
- The number of training weeks decreased slightly in 2009 (-0.8 percent), with larger percentage falls in the number of trainees (-9.7 percent) and placements (-10 percent).
- The number of training weeks per placement increased by 10 percent in 2009, indicating that although the number of trainees and placements dropped, they were involved in longer periods of training.
- Between 2008 and 2009, funding per training week decreased by 1.9 percent in real terms. Between 2005 and 2009 funding per training week decreased by 5.4 percent in real terms.
- The number of credits attained in 2009 was 18 percent below those achieved in 2005, although part of this was due to a fall in the number of placements. The largest decrease in credits attained took place at level 4 or higher on the NZQF, which was down 55 percent from 2005 and 25 percent on 2008.
- On a per training week basis, the number of credits attained fell by 19 percent between 2005 and 2009. The number of credits attained per \$1,000 of government expenditure remained relatively unchanged in 2009 but was still 15 percent lower than in 2005. A factor in the decrease in credit achievement was that a strengthening labour market up to 2008 resulted in trainees leaving for employment earlier in their training and so accumulating fewer credits (TEC 2008). In addition, the available pool of trainees was much reduced. There was no increase in credits per training week, or per \$1,000, in 2009 despite a weaker employment climate.

- The number of learners in employment two months post study decreased again in 2009 to reach 32 percent. This compares with 36 percent in 2005. This drop is not unexpected, given the recession. The percentage of trainees that are not in further training or not in employment two months post study did not increase between 2005 and 2009, with trainees either returning to Training Opportunities or engaging in other forms of tertiary education.¹⁸

Table 9
Inputs, outputs and outcomes of Training Opportunities

Type	Measure		Year					% change	
			2005	2006	2007	2008	2009	05-09	08-09
Inputs	Government funding (\$m)	Nominal	\$78.5	\$80.1	\$84.5	\$85.9	\$85.1	8.5%	-0.9%
		Real	\$88.2	\$86.5	\$89.5	\$87.5	\$85.1	-3.5%	-2.7%
	Enrolments	Number of trainees (000s)	17.1	17.6	17.1	17.5	15.8	-7.5%	-9.7%
		Number of placements (000s)	18.0	18.4	17.9	18.2	16.4	-8.9%	-10%
		Number of training weeks (000s)	341.1	349.1	344.3	350.9	348.0	2.0%	-0.8%
		Training weeks/placements	19.0	19.0	19.2	19.3	21.2	12%	10%
Per training week cost	Nominal	\$230	\$229	\$245	\$245	\$245	6.4%	0.0%	
	Real	\$259	\$248	\$260	\$249	\$245	-5.4%	-1.9%	
Outputs	Credits attained (000s) by NZQF level	Level 1	104.0	126.0	94.6	101.6	99.6	-4.2%	-2.0%
		Level 2	142.8	160.1	117.7	116.9	111.5	-22%	-4.6%
		Level 3	57.9	62.9	45.4	43.4	45.5	-22%	4.7%
		Level 4+	16.2	14.3	9.8	9.7	7.3	-55%	-25%
		Total	320.9	363.3	267.5	271.3	263.9	-18%	-2.7%
	Credits attained per training week		0.9	1.0	0.8	0.8	0.8	-19%	-1.9%
	Credits attained per \$1,000 – real		3.6	4.2	3.0	3.1	3.1	-15%	0.0%
Outcomes	Two-month post-study outcomes for each placement	Employed full-time	32%	33%	34%	30%	26%		
		Employed part-time	4%	5%	4%	5%	5%		
		Return to programme	31%	30%	32%	31%	32%		
		Other study	11%	12%	11%	14%	18%		
		Other	22%	20%	19%	20%	18%		
Context	Unemployment rate by highest qualification (ages 15 and over)	No qualifications	6.7%	5.4%	6.0%	6.1%	8.6%		
		Lower secondary school	3.9%	4.1%	4.0%	4.8%	8.2%		
		All	3.7%	3.6%	3.6%	3.9%	5.8%		
	Trainees as % of registered unemployed aged 18-64		34%	44%	74%	99%	31%		

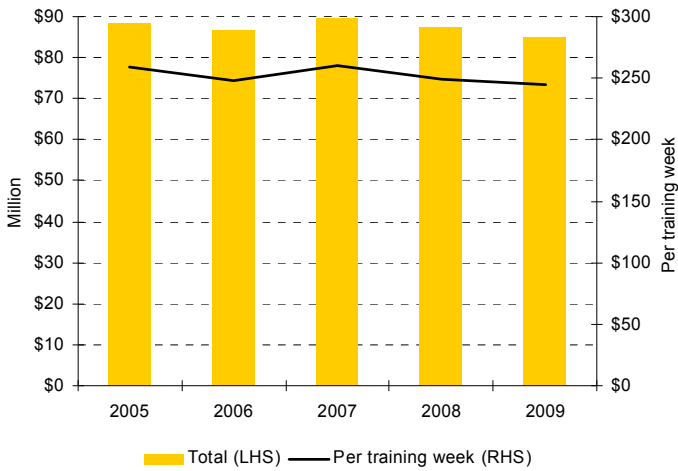
Note: All real values are in 2009 dollars.

Source: Ministry of Education, Tertiary Education Commission and Statistics New Zealand

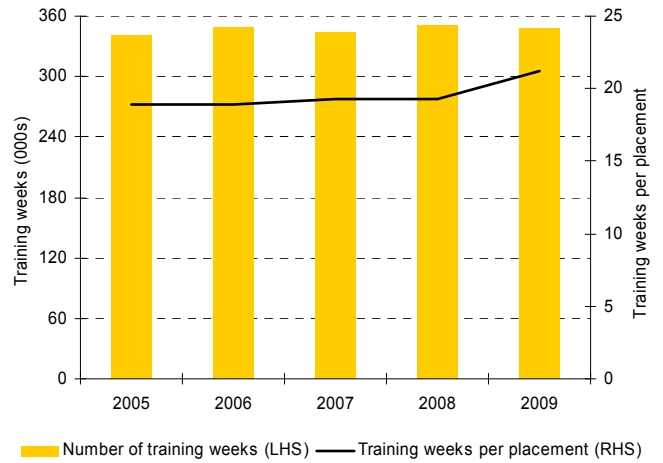
¹⁸ There is no publicly available data on longer-term outcomes.

Inputs

Government funding – real (2009 dollars)

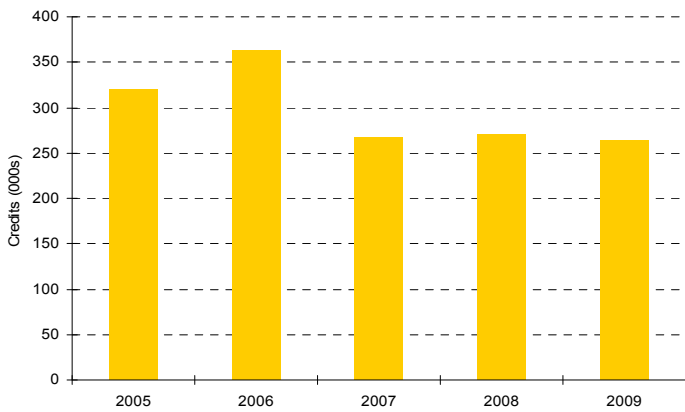


Enrolments

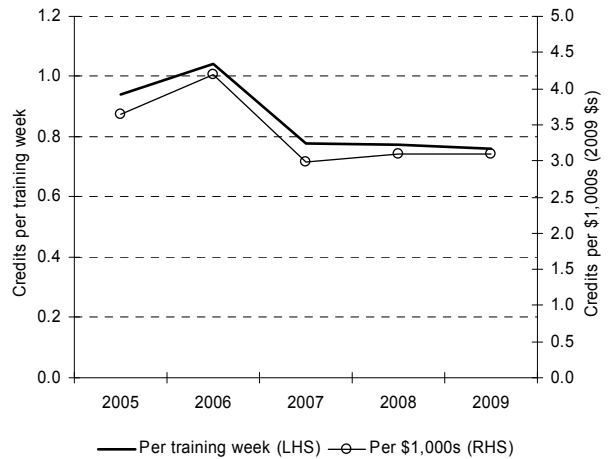


Outputs

Credits attained

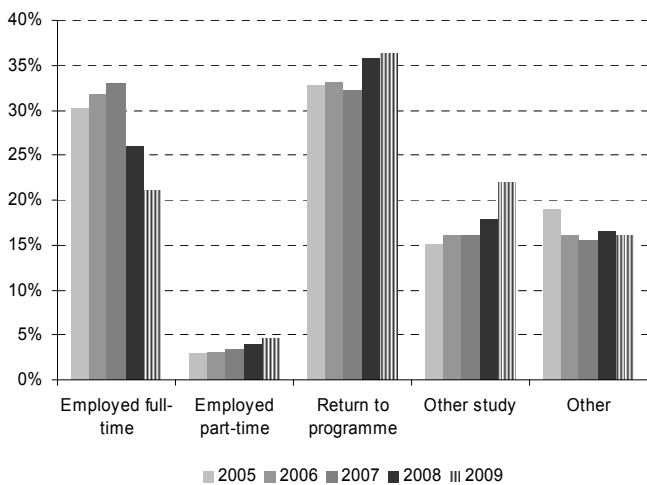


Credits attained per training week and per \$000s



Outcomes

Two-month post-placement outcomes



9 YOUTH TRAINING

Background

Youth Training is a scheme whereby learners under 18 years of age with low or no qualifications and assessed as being at risk of labour market disadvantage undergo training in varying blocks (usually of no more than a couple of months' duration) with the aim of improving the chances of these trainees obtaining employment.

The focus of training is generic workplace skills accumulation, but training must be tied to specific industries to ensure the training has some practical relevance. Training is linked to the New Zealand Qualifications Framework (NZQF), and learners earn credits that can be used to contribute towards qualifications. Training is paid for on a weekly fee basis, and is mostly delivered by private training establishments.

Policy context

In 2003, the unemployment-related eligibility criterion for entrance to Youth Training was widened to include those assessed as being at risk of experiencing long periods of unemployment, as well as those that had actually experienced long periods of unemployment. During the period 2005 to 2009, there were no major changes to the operation of Youth Training.

Highlights

- Government expenditure on Youth Training increased in 2009 in nominal (4.6 percent) and real terms (2.7 percent). Total real funding is 8.3 percent lower in 2009 compared with 2005.
- Between 2005 and 2009, the number of placements and trainees fell by 14 percent and 13 percent respectively. The strengthening labour market between 2005 and 2007 and the tightening up of the criteria for granting early school leaver exemptions in 2007 were both factors in this decrease.
- The number of training weeks increased in 2009 (4.6 percent), although the number of trainees (-1.7 percent) and placements (-2.0 percent) both fell. The number of training weeks per placement increased by 6.8 percent in 2009, indicating that although the number of trainees and placements dropped, they were involved in longer periods of training.
- Between 2008 and 2009, funding per training week decreased by 1.9 percent in real terms.
- The number of credits attained in 2009 increased significantly by 11 percent; however, the number of credits attained was 4.5 percent below the levels achieved in 2005. By NZQF level, the only increase between 2005 and 2009 was at level 1 (10 percent), with the largest decrease at level 4 or higher (-16 percent). Between 2008 and 2009, the fastest growth in credits attained was at level 3 (26 percent).
- The number of credits attained per \$1,000 of government expenditure was also significantly lower in 2007 and 2008, compared with 2006. As was the case with Training Opportunities, the strengthening labour market up to 2008 meant that trainees were likely to leave the programme earlier and hence accumulate fewer credits (TEC 2008). With the worsening of employment opportunities in 2009, there has been an increase of 8.1 percent in the number of credits attained per \$1,000 of government expenditure.
- The number of learners in employment two months post study decreased again in 2009 to reach 26 percent. This compares with 33 percent in 2005. This drop is not unexpected, given the recession. The percentage of trainees not in further training or not in employment

two months post study has not increased, with trainees either returning to Training Opportunities or engaging in other forms of tertiary education.¹⁹

Table 10
Inputs, outputs and outcomes of Youth Training

Type	Measure		Year					% change	
			2005	2006	2007	2008	2009	05-09	08-09
Inputs	Government funding (\$m)	Nominal	\$56.2	\$56.7	\$57.1	\$55.4	\$57.9	3.0%	4.6%
		Real	\$63.2	\$61.3	\$60.5	\$56.4	\$57.9	-8.3%	2.7%
	Enrolments	Number of trainees (000s)	11.6	11.4	10.5	10.2	10.1	-13%	-1.7%
		Number of placements (000s)	12.3	12.1	11.1	10.7	10.5	-14%	-2.0%
		Number of training weeks (000s)	230.7	231.9	223.8	218.2	228.3	-1.0%	4.6%
		Training weeks/placements	18.8	19.2	20.2	20.4	21.8	16%	6.8%
	Per training week cost	Nominal	\$244	\$244	\$255	\$254	\$254	4%	0.0%
Real		\$274	\$264	\$270	\$259	\$254	-7.4%	-1.9%	
Outputs	Credits attained (000s) by NZQF level	Level 1	88.5	109.6	85.4	88.2	97.7	10%	11%
		Level 2	97.2	108.4	81.6	75.2	81.5	-16%	8.3%
		Level 3	24.1	27.8	21.4	17.5	22.2	-8.2%	26%
		Level 4+	3.2	3.6	3.6	2.4	2.0	-37%	-15%
		Total	213.0	249.4	191.9	183.3	203.3	-4.5%	11%
	Credits attained per training week		0.9	1.1	0.9	0.8	0.9	-3.5%	6.0%
	Credits attained per \$1,000 – real		3.4	4.1	3.2	3.2	3.5	4.1%	8.1%
Outcomes	Two-month post-study outcomes for each placement	Employed full-time	30%	32%	33%	26%	21%		
		Employed part-time	3%	3%	3%	4%	5%		
		Return to programme	33%	33%	32%	36%	36%		
		Other study	15%	16%	16%	18%	22%		
		Other	19%	16%	16%	16%	16%		
Context	Unemployment rate by highest qualification (ages 15-19)	No qualifications	21%	21%	21%	22%	34%		
		Lower secondary school	12%	13%	12%	15%	26%		
		All	13%	14%	13%	15%	23%		

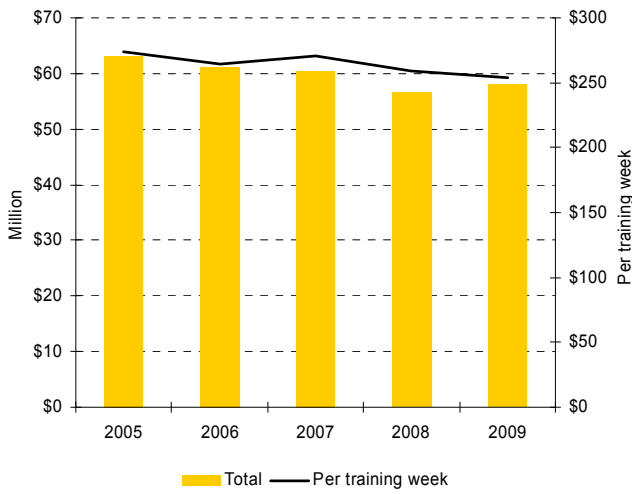
Notes: All real values are in 2009 dollars.

Source: Ministry of Education, Tertiary Education Commission and Statistics New Zealand

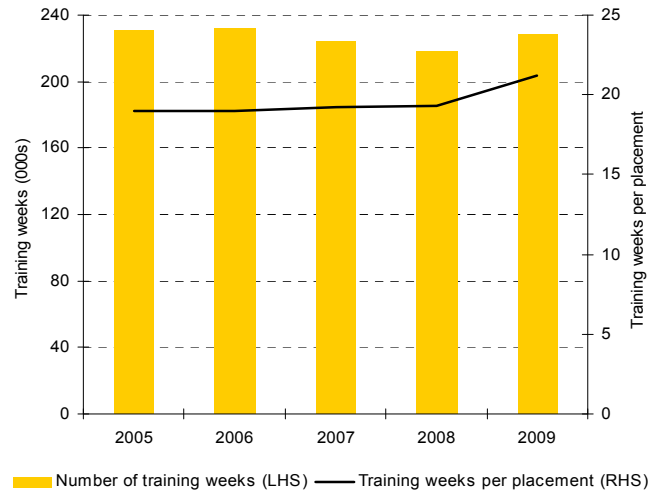
¹⁹ There is no publicly available data on longer-term outcomes.

Inputs

Government funding – real (2009 dollars)

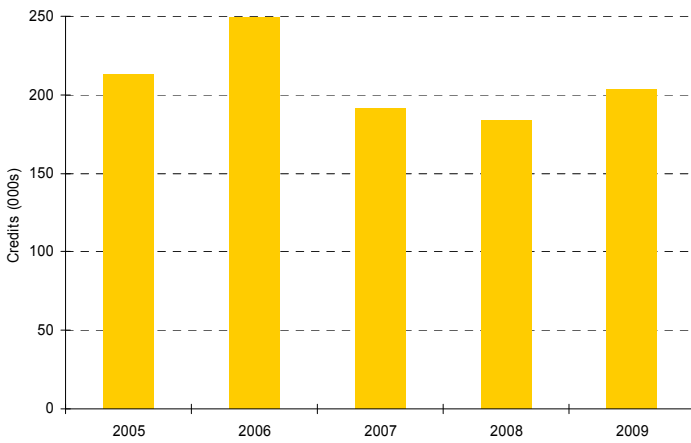


Enrolments

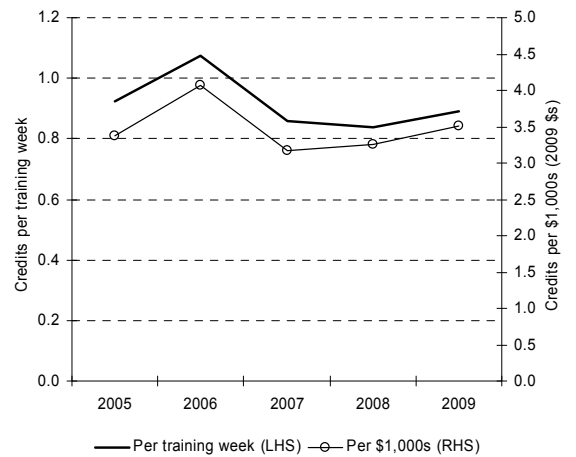


Outputs

Credits attained

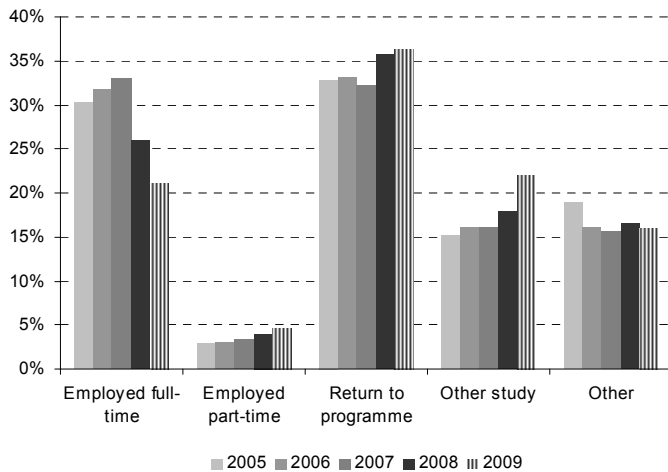


Credits attained per training week and \$000s



Outcomes

Two-month post-placement outcomes



10 STUDENT LOANS AND ALLOWANCES

Background

The two main components of the student support system are the Student Loan Scheme and Student Allowances. Student loans allow students enrolled in eligible courses to borrow money while studying to pay for tuition fees, course costs and living costs. The loans are interest free while the students are domiciled in New Zealand. Student allowances are paid to students on a means-tested basis to assist students from low incomes to participate in tertiary education. There is no requirement to pay back a student allowance.

The principles underpinning the student support system are:

- To maintain high levels of participation, and completion, of tertiary education
- To ensure equity and fairness
- To ensure that New Zealand's tertiary education system makes the best possible contribution to national development
- To ensure that government investment in student support and tertiary education is financially sustainable
- To ensure that tertiary education is affordable for students
- To ensure consistency with the wider income support system.

Source: Student Loan Scheme Annual Report 2009 (p 11)

Policy context

In 2006, student loans were made interest free for borrowers resident in New Zealand. From 2006 to 2009, the parental income threshold for student allowances was raised each year and indexed to inflation. In 2007, the government restricted student loan eligibility to those courses that attracted Student Achievement Component funding. In 2009, the age for parental means testing of student allowances reduced from 25 to 24 and there was a one-off increase in the living costs component of student loans (\$5 per week).

In major changes announced in the 2010 Budget, access to student loans has been tightened. From 1 January 2011, an academic performance element and life-time entitlement will be introduced to the Student Loan Scheme. Permanent residents and Australians will also face a two-year stand-down before they can access student loans. Changes will also be made to the student loan administration fee structure, with the Ministry of Social Development loan establishment fee being increased from \$50 to \$60, and a \$40 annual Inland Revenue account fee introduced (this Inland Revenue fee will not be charged if a Ministry of Social Development fee is charged in the same tax year). A number of smaller changes were made to the student allowances policy including restricting entitlement for study at secondary school.

Highlights

- Government capital expenditure on student loans increased in 2009 in nominal (12 percent) and real terms (10 percent). This reflects an increase in borrower numbers with the Ministry of Social Development of 11 percent in 2009. The increase in borrower numbers is likely to partly reflect the greater demand during the recession. In real terms, capital expenditure on student loans was 25 percent higher in 2009 compared with 2005.
- The uptake rate of student loans reached 71 percent in 2009, up from 49 percent in 2005. This increase has been mostly driven by an increased uptake among part-time students.²⁰

²⁰ The increase in the uptake rate for part-time borrowers between 2006 and 2007 was a result of two factors. First, there was an increase in the uptake rate due to the introduction of interest-free loans. Second, there was a reduction in the number of part-time students eligible for student loans due to a policy change where only students enrolled in courses that attracted Student Achievement Component funding could draw down student loans.

- Student allowance expenditure increased significantly in 2009 in nominal (30 percent) and real terms (27 percent). This sharp increase reflects changes to eligibility and the impact of the recession. As a result of these factors, the uptake rate of student allowances increased from 37 percent in 2008 to 42 percent in 2009. In real terms, expenditure on student allowances was 33 percent higher in 2009 compared with 2005.
- In 2009, the total number of borrowers with Inland Revenue was 26 percent higher than in 2005. In real terms, the amount of student loan debt with Inland Revenue increased by 21 percent between 2005 and 2009.
- The nominal value of the Student Loan Scheme was \$10.3 billion on 30 June 2009. This compares with a fair value of \$5.5 billion. The ratio of fair value to nominal value was 53.3 in 2009. This compares with a value of 66.2 in 2006.²¹ This decrease in ratio is a result of new data on people overseas and their repayment patterns, changes in the discount rate, and assumptions about the New Zealand economy and its effect on future repayments.
- The access indices suggest that there has been no decrease in the access to tertiary education by students from low-decile schools when taking into account the phase of the economic cycle. In fact, students from decile 1 to 3 schools with an achievement score greater than or equal to 50 are now over-represented at bachelors level compared with the proportion of these students that have left school. Although this is likely to reflect the impact of the recession, it would nevertheless suggest that the student support system is at the very least maintaining the levels of access to tertiary education. If this was not the case, a decrease in representation may have occurred.

Technical note:

Access index

The access index compares the distribution of 18-year-old students enrolled in tertiary education by their school decile grouping with the distribution of all 18 year olds not in school by their school decile grouping. It is designed to show if particular groups of students from low-decile schools are under-represented at the bachelors and level 4 to 7 certificates/diplomas level. Significant and continued under-representation of students from lower-decile schools **may** indicate that there are financial barriers to access to tertiary education for this group. Other factors, such as the recession, can also impact on participation.

To calculate the access index for bachelors students, the percentage point share of bachelors students with University Entrance (UE) and NCEA Level 3 from a particular decile grouping is divided by the percentage point share of all 18 year olds with UE and NCEA Level 3 from that particular decile grouping that are not in school. This figure is then multiplied by 100 to generate the index figure.

- An index value of less than 100 indicates that 18-year-old students studying a bachelors degree from a particular decile grouping are under-represented, compared with the population of 18 year olds with UE and NCEA Level 3 not at school.
- An index value of more than 100 indicates that 18-year-old students studying a bachelors degree from a particular decile grouping are over-represented, compared with the population of 18 year olds with UE and NCEA Level 3 not at school.
- An index value of 100 indicates that 18-year-old students studying a bachelors degree from a particular decile group are equally represented compared with the population of 18 year olds with UE and NCEA Level 3 not at school.

This analysis is also disaggregated using the 'NCEA Level 3 achievement score'. This score is based on students' grades in their level 3 standards against other students in the same year, producing a score between 0 and 100. Students who gained level 3 credits with excellence and merit grades will score higher than students who gained their credits with relatively fewer merits or excellences, or with relatively more achieved grades. The score also adjusts for the level of difficulty within a standard. A student who achieved an excellence in a standard where many people gained a merit or excellence will receive a lower score for that standard, while a higher score is given to a similar student in a standard where most people received an achieved grade, for example. This measure was developed by Dr Michael Johnston at NZQA. Details about the National Certificate of Educational Achievement can be found at <http://www.nzqa.govt.nz/qualifications-standards/qualifications/ncea/>. Further details about the calculation of the school achievement score can be found in Ussher (2008).

Example:

Say 10 percent of 18 year olds who have left school with NCEA Level 3, UE and an achievement score greater than or equal to 50 are from a decile 1 to 3 school. If the percentage of students enrolled in a bachelors degree from this same group is 8 percent, to calculate the access index you use the following formula:

$$\begin{array}{rclclcl} \text{Percentage in bachelors study} & & & & 8 & & \\ \text{Percentage in population who have left school} & \times & 100 & = & \frac{8}{10} & \times & 100 & = & 80 \end{array}$$

This suggests that this group of people is under-represented at bachelors study.

Table 11
Inputs, outputs and outcomes of student loans and student allowances

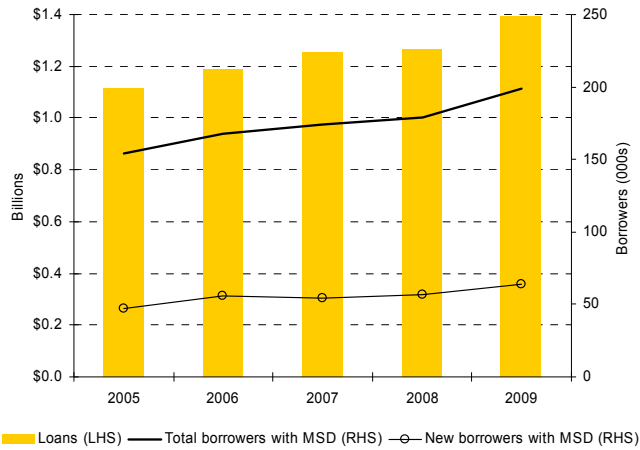
Type	Fund	Measure		Year					% change		
				2005	2006	2007	2008	2009	05-09	08-09	
Inputs	Student loans	Capital expenditure (\$m)	Nominal	\$990	\$1,100	\$1,180	\$1,241	\$1,389	40%	12%	
			Real	\$1,113	\$1,189	\$1,251	\$1,265	\$1,389	25%	10%	
		Borrowers with MSD Development (000s)	All	154.4	167.4	173.8	178.5	198.7	29%	11%	
			First-time	46.9	56.0	54.3	57.0	64.2	37%	13%	
		Uptake rate	Full-time	75%	81%	77%	83%	82%			
			Part-time	14%	19%	35%	34%	41%			
	Total		49%	56%	66%	68%	71%				
	Per borrower funding	Nominal	\$6,412	\$6,569	\$6,791	\$6,953	\$6,991	9.0%	0.5%		
		Real	\$7,207	\$7,101	\$7,198	\$7,084	\$6,991	-3.0%	-1.3%		
	Student Allowances	Expenditure (\$m)	Nominal	\$345	\$373	\$384	\$397	\$515	49%	30%	
			Real	\$388	\$403	\$407	\$404	\$515	33%	27%	
		Recipients (000s)		56.8	59.5	62.5	65.7	82.6	45%	26%	
		Uptake rate		33%	35%	35%	37%	42%			
	Per recipient funding	Nominal	\$6,079	\$6,266	\$6,141	\$6,035	\$6,231	2.5%	3.3%		
Real		\$6,833	\$6,774	\$6,509	\$6,148	\$6,231	-8.8%	1.4%			
Outcomes	Student loan debt	Borrowers with Inland Revenue (000s)		445.1	470.5	499.3	530.3	561.8	26%	5.9%	
		% of cohort who last studied 10 years before who have repaid loans		60%	56%	52%	48%	b			
		Median loan balance with Inland Revenue	Nominal – incl accr interest	\$10,404	\$10,652	\$11,087	\$11,384				
			Nominal – excl accr interest				\$10,883	\$11,090		1.9%	
			Real – incl accr interest	\$11,694	\$11,515	\$11,750	\$11,599				
	Real – excl accr interest					\$11,088	\$11,090		0.0%		
	Student loan balance held with Inland Revenue (\$m)	Nominal	\$6,680	\$7,470	\$8,400	\$8,550	\$9,100	36%	6.4%		
		Real	\$7,508	\$8,075	\$8,902	\$8,711	\$9,100	21%	4.5%		
	Value of Student Loan Scheme	Nominal value (\$m)		\$7,499	\$8,370	\$9,413	\$9,573	\$10,259	37%	7.2%	
		Carrying value (\$m)		\$6,465	\$5,569	\$6,011	\$6,741	\$6,533	1.1%	-3.1%	
		Fair value (\$m)		\$5,994	\$5,537	\$5,443	\$5,521	\$5,464	-8.8%	-1.0%	
		Value ratios	Carrying to nominal		86.2	66.5	63.9	70.4	63.9		
	Fair to nominal			79.9	66.2	57.8	57.7	53.3			
	Access index - Bachelors	NCEA Level 3 achievement score < 50	Decile 1-3		97	98	97	94	95		
			Decile 9-10		105	104	102	103	104		
		NCEA Level 3 achievement score ≥ 50	Decile 1-3		101	95	96	101	104		
			Decile 9-10		101	104	101	103	101		
Access index - Level 4 certificates & diplomas	NCEA Levels 1 & 2	Decile 1-3		84	89	87	86	88			
		Decile 9-10		154	133	141	148	157			
	NCEA Level 3	Decile 1-3		104	105	106	105	113			
		Decile 9-10		82	86	84	81	74			
All	Decile 1-3		104	108	108	107	111				
	Decile 9-10		85	84	83	81	83				
Context	Unemployment rate	Ages 15 and over		3.8%	3.8%	3.8%	3.7%	5.0%			
	Participation	Participation rate of domestic students by selected age group	18-19		41%	41%	42%	42%	45%		
			20-24		30%	30%	30%	30%	32%		
Total				13%	13%	12%	12%	12%			

Notes: 1. All real values are in 2009 dollars. 2. From 2006, the fair value and carrying value of the Student Loan Scheme is prepared according to NZ equivalents to International Financial Reporting Standards (NZ IFRS). 3. b indicates this data is not yet available.

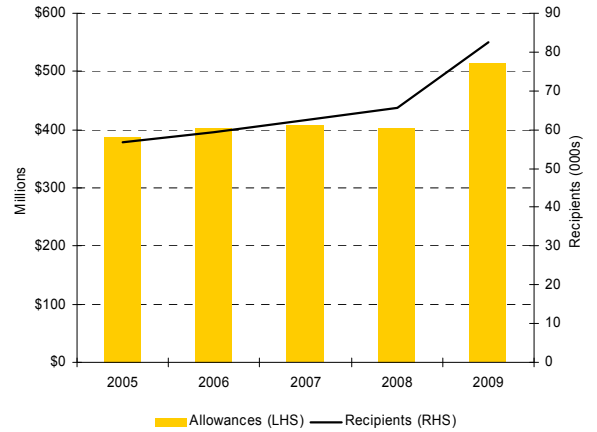
Source: Ministry of Education, Ministry of Social Development, Inland Revenue and Statistics New Zealand

Inputs

Government student loan capital funding – real (2009 dollars)

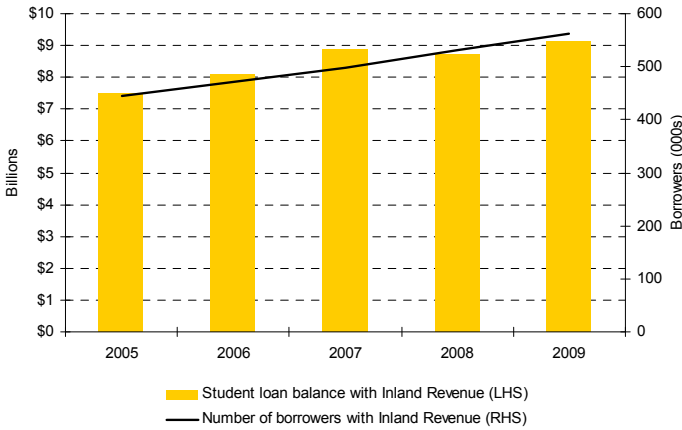


Government student allowance funding – real (2009 dollars)

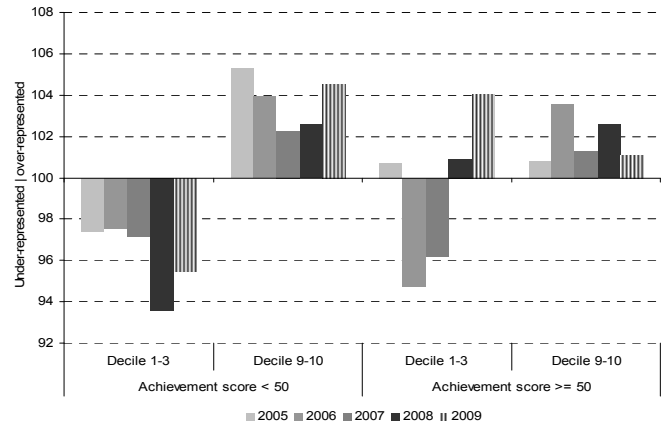


Outcomes

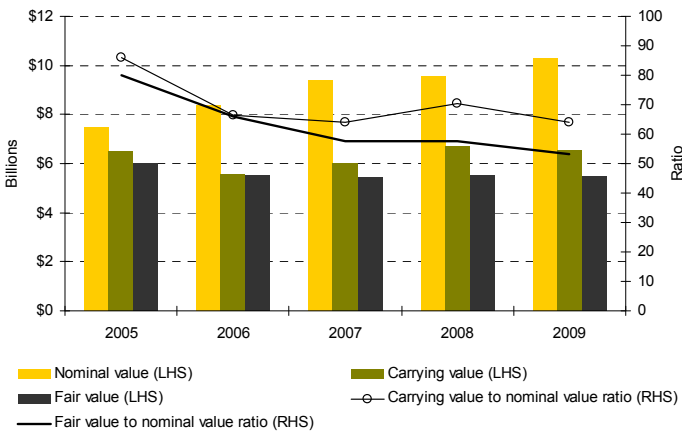
Student loan debt with Inland Revenue – real (2009 dollars)



Bachelors degree access index by school decile and school achievement for 18 year olds



Value of the Student Loan Scheme



From 2006, the fair value and carrying value of the Student Loan Scheme is prepared according to NZ equivalents to International Financial Reporting Standards (NZ IFRS).

11 DATA DEFINITIONS

This section outlines the definitions of the data used in this report.

Adjusting for inflation

In this report, the Consumers Price Index is used as a deflator to adjust funding for inflation. The calculations for creating the deflator are presented in Table 12 below. The quarterly CPI values have been annualised by taking an average, then the index has been rebased with 2009 as the base year.

Table 12
Calculation of CPI deflator

Quarter	CPI		
	Quarterly	Annualised	Deflator
2005.1	953	967	0.89
2005.2	962		
2005.3	973		
2005.4	979		
2006.1	985	999	0.92
2006.2	1,000		
2006.3	1,007		
2006.4	1,005		
2007.1	1,010	1,023	0.94
2007.2	1,020		
2007.3	1,025		
2007.4	1,037		
2008.1	1,044	1,064	0.98
2008.2	1,061		
2008.3	1,077		
2008.4	1,072		
2009.1	1,075	1,086	1.00
2009.2	1,081		
2009.3	1,095		
2009.4	1,093		

Source: Statistics New Zealand

Source of data

The tables that follow contain information on the sources of the data. The sources of the data are indicated by the following acronyms:

MoE = Ministry of Education

TEC = Tertiary Education Commission

MoE/TEC = derived by the Ministry of Education from unit record data supplied by the Tertiary Education Commission

SNZ = Statistics New Zealand

TR = Thomson Reuters

Table 13
Student Achievement Component data definitions

Type	Measure and data source		Definition
Inputs	Government funding (\$m) (TEC)	Nominal	Total expenditure from SAC, tripartite-rates and TEI base investment. This excludes funding distributed via the research top-ups in 2005 and 2006
		Real	Total funding adjusted for CPI inflation and expressed in 2009 dollars
	Enrolments (TEC)	Funded EFTS (000s)	Number of EFTS funded by the government
		Actual delivered EFTS (000s)	Number of EFTS actually delivered by TEOs
		% over/under-delivery	The difference between the actual EFTS delivered and funded EFTS as a percentage of funded EFTS. A positive figure indicates over-delivery and a negative figure indicates under-delivery
	Per EFTS funding	Funded – nominal	Total nominal funding divided by funded EFTS
Funded – real		Total real funding divided by funded EFTS	
Actual – nominal		Total nominal funding divided by actual EFTS	
Actual – real		Total real funding divided by actual EFTS	
Outputs	Amount of successful course-level study in EFTS (000s) (MoE)	Completed successfully/in thesis study	The sum of course completions (including ongoing thesis study) weighted by their EFTS consumed value
		Completed successfully/in thesis study/not yet known	The sum of course completions (including ongoing thesis study) or where completion information is still pending weighted by their EFTS consumed value
	Amount of successful course-level study as a % of actual EFTS (MoE)	Completed successfully/in thesis study	The number of EFTS-weighted course completions divided by total actual EFTS
		Completed successfully/in thesis study/not yet known	The number of EFTS-weighted course completions and courses where there is a valid extension or where completion information is still pending divided by total actual EFTS
	\$ value of successful course-level completions per \$ of government funding <input type="checkbox"/> real (MoE)	Completed successfully/in thesis study	The value of course completions per dollar of real government funding which is calculated by multiplying the EFTS consumed in each funding category by the value of the SAC funding rate in real terms. This is then divided by total real SAC funding
		Completed successfully/in thesis study/not yet known	In addition to the categories in the above measure, this also includes the value of course EFTS that have a valid extension or are still pending results
	Domestic students completing qualifications	Level 4+ & aged < 25 (000s)	Number of students aged under 25 and studying at level 4 or higher that completed SAC-funded qualifications
		Total (000s)	Number of domestic students completing SAC-funded qualifications
		Level 4+ & age < 25 as % of total	Percentage of domestic students completing a qualification that were aged under 25 and studying at level 4 or higher
	Domestic Māori or Pasifika students completing qualifications	Level 4+ (000s)	Number of domestic Māori or Pasifika students that completed a SAC-funded qualification at level 4 or higher
		Total (000s)	Number of domestic Māori or Pasifika students that completed a SAC-funded qualification
		Level 4+ as % of total	Percentage of domestic Māori or Pasifika students completing a SAC-funded qualification that were studying at level 4 or higher
	Students completing qualifications by residency status	Domestic (000s)	Number of domestic students completing SAC-funded qualifications
		Total (000s)	Total number of students completing SAC-funded qualifications
		Domestic as % of total	Domestic students completing qualifications as a percentage of all students completing SAC-funded qualifications
Five-year qualification completion rate (MoE)	Full-time students	The percentage of students who studied on a full-time basis and who completed their qualification within 5 years of commencing study	
	All students	The percentage of students who completed their qualification within 5 years of commencing study	
Outcomes	Premium on median hourly earnings by highest qualification (base = no qualifications) (SNZ)	Lower secondary school Upper secondary school Level 1-3 certificates Level 4-7 certificates/diplomas Bachelors Postgraduate	This is the premium on median income by highest qualification compared with people with no qualifications for the population aged 15 and over in the June quarter
		No qualifications Lower secondary Upper secondary Level 1-3 certificates Level 4-7 certificates/diplomas Bachelors Postgraduate	This is the unemployment rate for the population aged 15 and over by highest qualification in the June quarter

Table 13 continued

Context	Qualification attainment of the working-age population (SNZ)	No qualifications Lower secondary school Upper secondary school Level 1-3 certificates Level 4-7 certificates/diplomas Bachelors Postgraduate	This is the distribution of the population aged 15 and over by their highest qualification in the June quarter
	Participation rate of domestic students by selected age group (MoE)	Under 18 18-19 20-24	This is the number of domestic SAC-funded students expressed as a percentage of the total population

Table 14

Performance-Based Research Fund data definitions

Type	Measure and data source		Definition
Inputs	Government funding (\$m) (includes top-ups) (TEC)	Nominal Real	Total funding allocated via the PBRF and research top-ups Total funding adjusted for CPI inflation and expressed in 2009 dollars
	PBRF-eligible FTE staff (TEC)	(in 2006 Quality Evaluation)	PBRF-eligible FTEs at all TEOs participating in 2006 Quality Evaluation
Outputs	2006 Quality Evaluation results (TEC)	% of staff rated 'A' % of staff rated 'B' % of staff rated 'C' or 'C(NE)' % of staff rated 'R' or 'R(NE)'	Quality category assigned in the 2006 Quality Evaluation
	PBRF external research income (\$m) (TEC)	Nominal Real	Total ERI as per PBRF definition Total ERI adjusted for CPI inflation and expressed in 2009 dollars
		Real ERI per FTE (\$000s)	Real ERI per PBRF-eligible FTE in 2009 dollars (000s)
	PBRF research degree completions (TEC)	Volume-weighted RDCs Volume-weighted RDCs per FTE	Total weighted volume of RDCs at TEOs participating in PBRF. PhDs weighting = 3, Masters course weighting is between 0.75 and 1 Volume of RDCs divided by PBRF-eligible FTEs
	Qualification completion rates (MoE)	PhD 8-year qual completion rates (All)	The percentage of students that started a PhD and completed within 8 years of commencement of that qualification
		Masters 4-year qual completion rates (F/T) Masters 4-year qual completion rates (All)	The percentage of full-time students that started a masters degree and completed within 4 years of commencement of that qualification The percentage of students that started a masters degree and completed within 4 years of commencement of that qualification
Outcomes TEIs five-year windows	Share of world indexed publications and citations (TR)	% of world indexed publications	The percentage of world indexed publications authored by staff at New Zealand TEIs, measured in 5-year overlapping time periods
		% of world indexed citations	The percentage of world indexed citations of publications authored by staff at New Zealand TEIs, measured in 5-year overlapping time periods
	Distribution of fields of research by level of academic impact (citations/publication) (world average = 1) (TR)	1.50 and over 1.00 to 1.49 0.50 to 0.99 0 to 0.49	The distribution of the academic impact (citations/publication) of publications authored by staff at New Zealand TEIs in the Thomson Reuters research subject fields. The academic impact had been normalised to the world average in that field, so a value of 1 indicates that the academic impact of New Zealand authored publications is the same as the world average. Only subject areas with more than 50 or more publications in each 5-year period are included in this analysis
	% of publications cited (TR)		The percentage of publications authored by staff at New Zealand TEIs that are cited

Table 15
Industry Training Fund data definitions

Type	Measure		Definition
Inputs	Government funding (\$m) (TEC)	Nominal Real	Total government funding for the Industry Training Fund Total government funding for the Industry Training Fund adjusted for CPI inflation and expressed in 2009 dollars
	Enrolments	STMs (000s) (TEC) Trainee numbers (000s) (MoE/TEC) New learner commencement (000s) (MoE/TEC)	The total number of standard training measures (STMs) paid for in each year. One STM is equivalent to one EFT, or 120 credits attained in the equivalent of one calendar year The number of distinct trainees active at any time during the year Learners new to industry training
	Per STM cost	Nominal Real	Total Industry Training funding divided by total STMs Total Industry Training funding divided by total STMs adjusted for CPI inflation and expressed in 2009 dollars
Outputs	Credits attained by NZQF level (000s) (MoE/TEC)	Level 1 Level 2 Level 3 Level 4 Level 5 Level 6+ Total	Credits attained by NZQF level Total number of credits attained
	Credits attained per STM		Total number of credits attained divided by the number of STMs
	Credits attained per \$1,000 - real		Total number of credits attained per \$1,000 of government funding in 2009 dollars
	Programme completions (MoE/TEC)	Number of trainees Number of programmes	Total number of trainees completing programmes in each year Total number of programme completions in each year
	Learners completing qualifications (MoE/TEC)	Level 4+ & age < 25 years Total	Number of learners completing Industry Training-funded qualifications at level 4 or above and aged under 25 years Total number of learners completing Industry Training-funded qualifications
		Level 4+ & age < 25 yrs as % of total	The number of learners completing a qualification at level 4 or higher and aged under 25 years as a percentage of all students completing Industry Training-funded qualifications
	Completion rates (MoE/TEC)	5-year programme completion 5-year qualification completion	The percentage of trainees who complete a programme of learning within 5 years of commencement The percentage of trainees who complete a qualification within 5 years of commencement
Outcomes	Premium on median hourly earnings (base = no quals) (ages 15 and over) (SNZ)	Lower secondary school Upper secondary school Level 1-3 certificates Level 4-7 certs/dips	The premium on median income by highest qualification compared with people with no qualifications for the population aged 15 and over in the June quarter
	Unemployment rate by highest qualification (ages 15 and over) (SNZ)	No qualifications Lower secondary school Upper secondary school Level 1-3 certificates Level 4-7 certs/dips	The unemployment rate for the population aged 15 and over by highest qualification in the June quarter

Table 16
Modern Apprenticeships data definitions

Type	Measure		Definition
Inputs	Government funding (\$m) (TEC)	Nominal Real	Total government funding for the Modern Apprenticeships Total government funding for the Modern Apprenticeships adjusted for CPI inflation and expressed in 2009 dollars
	Enrolments	STMs (000s) (TEC) Trainee numbers (000s) (MoE/TEC) New trainee commencements (000s) (MoE/TEC)	Total number of standard training measures (STMs) paid for in each year. One STM is equivalent to one EFT, or 120 credits attained in the equivalent of one calendar year The number of distinct trainees active at any time during the year Learners new to Modern Apprenticeships
	Per STM cost	Nominal Real	Total Modern Apprenticeships funding divided by total STMs Total Modern Apprenticeships funding divided by total STMs adjusted for CPI inflation and expressed in 2009 dollars
Outputs	Credits attained by NZQF level (000s) (MoE/TEC)	Level 1 Level 2 Level 3 Level 4 Level 5 Level 6+	Credits attained by NZQF level
		Total	Total number of credits attained
	Credits attained per STM		Total number of credits achieved divided by the number of STMs
	Credits attained per \$1,000 - real		Total number of credits attained per \$1,000 of government funding in 2009 dollars
	Programme completions (MoE/TEC)	Number of trainees Number of programmes	Total number of trainees completing programmes in each year Total number of programme completions in each year
	Learners completing qualifications (MoE/TEC)	Level 4+ & age < 25 years Total	Number of learners completing Modern Apprenticeships-funded qualifications at level 4 or above and aged under 25 years Total number of learners completing Modern Apprenticeships-funded qualifications
		Level 4+ & age < 25 yrs as % of total	The number of learners completing a qualification at level 4 or higher and aged under 25 years as a percentage of all students completing Modern Apprenticeships-funded qualifications
Completion rates (MoE/TEC)	5-year programme completion	The percentage of trainees who complete a programme of learning within 5 years of commencement	
	5-year qualification completion	The percentage of trainees who complete a qualification within 5 years of commencement	
Outcomes	Premium on median hourly earnings (base = no quals) (ages 15 and over) (SNZ)	Lower secondary school Upper secondary school Level 1-3 certificates Level 4-7 certs/dips	The premium on median income by highest qualification compared with people with no qualifications for the population aged 15 and over in the June quarter
	Unemployment rate by highest qualification (ages 15 and over) (SNZ)	No qualifications Lower secondary school Upper secondary school Level 1-3 certificates Level 4-7 certs/dips	The unemployment rate for the population aged 15 and over by highest qualification in the June quarter

Table 17
Training Opportunities data definitions

Type	Measure		Definitions
Inputs	Government funding (\$m) (TEC)	Nominal Real	Total government funding allocated via Training Opportunities Total government funding allocated via Training Opportunities adjusted for CPI inflation and expressed in 2009 dollars
	Enrolments (MoE/TEC)	Number of trainees (000s) Number of placements (000s) Number of training weeks (000s) Training weeks/placements	The number of distinct trainees active at any time during the calendar year The number of placements by distinct trainees occurring at any time during the calendar year Total number of trainee weeks paid during the calendar year (funding unit) The average number of trainee weeks paid per placement by distinct trainee
	Per training week cost	Nominal Real	Total government funding divided by number of training weeks Total real government funding divided by the number of training weeks
Outputs	Credits attained by NZQF level (000s) (MoE/TEC)	Level 1 Level 2 Level 3 Level 4+ Total	Credits attained by NZQF level Total credits attained
	Credits attained per training week Credits attained per \$1,000 - real		Total credits attained divided by total training weeks Total credits attained divided by real government funding (in \$000s)
Outcomes	Two-month post-study outcomes for each placement (MoE/TEC)	Employed (%) Unemployed (%) Return to programme (%) Other study (%)	The distribution of the 2-month post-study outcomes for each placement by outcome type
Context	Unemployment rate by highest qualification (ages 15 and over) (SNZ)	No qualifications Lower secondary school All	The unemployment rate by highest qualification for the population aged 15 and over in the June quarter
	Trainees as % of unemployed with no/low qualifications	Ages 15+	Number of trainees divided by the number of unemployed aged 15 and over who have no or low qualifications (in June quarter)

Table 18
Youth Training data definitions

Type	Measure		Definitions
Inputs	Government funding (\$m) (TEC)	Nominal Real	Total government funding allocated via Youth Training Total government funding allocated via Youth Training adjusted for CPI inflation and expressed in 2009 dollars
	Enrolments (MoE/TEC)	Number of trainees (000s) Number of placements (000s) Number of training weeks (000s) Training weeks/placements	The number of distinct trainees active at any time during the calendar year The number of placements by distinct trainees occurring at any time during the calendar year Total number of trainee weeks paid during the calendar year (funding unit) The average number of trainee weeks paid per placement by distinct trainee
	Per training week cost	Nominal Real	Total government expenditure divided by number of training weeks Total government expenditure divided by number of training weeks adjusted for CPI inflation and expressed in 2009 dollars
Outputs	Credits attained by NZQF level (000s) (MoE/TEC)	Level 1 Level 2 Level 3 Level 4+ Total	Credits attained by NZQF level Total credits attained
	Credits attained per training week Credits attained per \$1,000 - real		Total credits attained divided by total training weeks Total credits attained divided by real government funding (in \$000s)
Outcomes	Two-month post-study outcomes for each placement (MoE/TEC)	Employed (%) Unemployed (%) Return to programme (%) Other study (%)	This is the distribution of the 2-month post-study outcomes for each placement by outcome type
Context	Unemployment rate by highest qualification (ages 15-19) (SNZ)	No qualifications NCEA Level 1 All	This is the unemployment rate by highest qualification for the population aged 15-19 in the June quarter
	Trainees as % of unemployed with no/low qualifications	Ages 15-19	This is the number of trainees divided by the number of unemployed aged 15-19 who have no or low qualifications (June quarter)

Table 19
Student support data definitions

Type	Fund	Measure		Definitions	
Inputs	Student loans	Capital expenditure (\$m) (MSD)	Nominal	Total amount drawn down by student loan borrowers	
			Real	Total student loans adjusted for CPI inflation and expressed in 2009 dollars	
		Borrowers with MSD	All (000s)	Total number of borrowers with MSD	
			First-time (000s)	Total number of first time borrowers with MSD	
		Uptake rate (MoE)	Full-time	The percentage of students that are estimated to be eligible for students loans that actually draw down a loan by study status	
	Part-time				
	Student allowances	Expenditure (\$m) (MSD)	Nominal	Total amount allocated to student allowance recipients minus refunds	
			Real	Total real amount allocated to student allowance recipients minus refunds	
		Recipients (000s) (MSD)		Number of students receiving a student allowance	
		Uptake rate (MoE)		The number of student allowance recipients divided by the student population doing study that would qualify them for student allowances before income testing takes place	
		Per recipient funding	Nominal	Total value of student allowances divided by number of recipients	
Real			Total real value of student allowances divided by number of recipients		
Outcomes	Student loan debt (IRD)	Borrowers with Inland Revenue (000s)		Number of borrowers with IRD as at 30 June	
		% of loans repaid by cohort	After 10 years	The percentage of a borrower cohort that have fully repaid their loans 10 years after initially drawing down their loan	
		Median loan balance with Inland Revenue	Nominal - incl accr int	The median loan balance held by IRD at 30 June of people with student loans. Note that from 2008 this is calculated excluding accrued interest	
			Real - excl accr int		
	Student loan balance held with Inland Revenue at 30 June	Nominal	Total amount of student loans held by IRD at 30 June		
		Real	Total real amount of student loans held by IRD at 30 June		
	Value of Student Loan Scheme	Nominal value (\$m)		The balance of borrowings with Inland Revenue and MSD at 30 June. It includes loan principal, interest and penalties	
		Carrying value (\$m)		The carrying value is the value of the Student Loan Scheme asset shown in the scheme's accounts at 30 June. From 2006, this is prepared according to NZ equivalents to International Financial Reporting Standards (NZ IFRS)	
		Fair value (\$m)		The amount for which the Student Loan Scheme could be exchanged between knowledgeable, willing parties in an arm's length transaction at 30 June. In a sense, it is an appraisal of the value of the portfolio should it be offered for sale on the open market. From 2006, this is prepared according to NZ equivalents to International Financial Reporting Standards (NZ IFRS)	
	Value ratios	Carrying to nominal	This is the carrying value divided by nominal value multiplied by 100		
		Fair to nominal	The fair value divided by nominal value multiplied by 100. Essentially, it represents the proportion of loans that will be written off for that cohort of borrowers		
	Access index - Bachelors (MoE)	Achievement score < 50	Decile 1-3	The calculation of the access index is described on page 38 in this report	
		Achievement score ≥ 50	Decile 9-10		
		All	Decile 1-3		
			Decile 9-10		
		Access index - level 4 certificates & diplomas (MoE)	NCEA Levels 1 & 2		Decile 1-3
			NCEA Level 3		Decile 9-10
All	Decile 1-3				
Context	Unemployment rate	Ages 15+ (SNZ)	The unemployment rate for the population aged 15 and over		
	Participation	Participation rate of domestic students by age group (MoE)	Under 18 18-19 20-24 25-39 40 and over Total The participation rate of domestic students in SAC-funded courses		

12 REFERENCES

Crichton, S (2009) *Does workplace-based learning improve earnings?* Wellington: Department of Labour and Statistics New Zealand.

Ministry of Education (2010) *Statement of intent 2010-2015*, Wellington: Ministry of Education.

Ministry of Education (2009) *Tertiary Education Strategy 2010-2015*, Wellington: Ministry of Education.

Ministry of Education (2009) *Student Loan Scheme annual report 2009*, Wellington: Ministry of Education.

Scott, D (2009) *What do students earn after their tertiary education?* Wellington: Ministry of Education and Statistics New Zealand.

TEC (2008) *Annual report 2008*, Wellington: Tertiary Education Commission.

Ussher, S (2008) *Post-school choices: How well does academic achievement predict the tertiary education choices of school leavers?* Wellington: Ministry of Education.



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