

15 THE TERTIARY EDUCATION WORKFORCE

AN OVERVIEW

In 2008, the total number of staff employed by tertiary education institutions remained virtually unchanged compared with the previous year. Staff numbers in private training establishments decreased for the third consecutive year.

There was a slight decrease from 2007 to 2008 in the number of academic staff at tertiary education institutions and a slightly larger increase in the non-academic staff. Over the same period, the percentage decrease in the number of academic staff in private training establishments was matched by a similar size fall in the number of non-academic staff.

In wānanga, the number of teaching staff fell significantly while the number of students increased, raising the 2008 student to academic staff ratio to 42 to 1, compared to 34 to 1 in 2007. An increase in the number of teaching staff at polytechnics, together with a decrease in the number of students, lowered the student to academic staff ratio in 2008 from 19 to 1, compared to 18 to 1 in 2007. In universities, the student to academic staff ratio remained virtually unchanged.

Total expenditure on personnel in public tertiary education institutions rose from 2007 to 2008, while personnel costs as a percentage of total operating expenditure increased by one percentage point to 58 percent in 2008.

2009 YEAR

Government announced during 2009 that an estimated 2,000 young New Zealanders are expected to be able to access student places in 2010 and 2011 under the new Youth Guarantee programme. The Youth Guarantee programme is likely to increase demand in polytechnics, wānanga and private training establishments. In the meantime, the effects of the 'birth blip' – those born between 1983 and 1990 – will continue to be felt in the tertiary education sector in 2009. The number of 18 to 24 year-olds in the population is also expected to increase in 2009.

Another important driver of demand for tertiary education in 2009 is likely to be the economic recession. In times of economic downturn, demand for tertiary education increases.

The above trends will keep demand for places in tertiary education organisations high and hence mean that there will be continuing pressure to retain academic staff or to look for ways of improving the productivity of staff.

In response to the weaker economic conditions, government reprioritised some pending commitments in 2009, including the discontinuation from 2010 of the University Tripartite Adjustment Fund.

TERTIARY EDUCATION WORKFORCE

The number of staff employed by tertiary education institutions remained stable overall in 2008, while it decreased in 2006 and 2007. Before 2005, staff numbers had risen for several years.

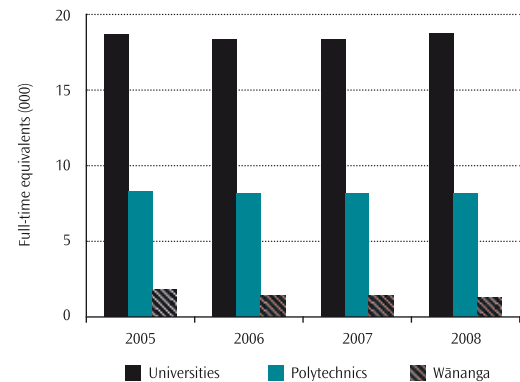
Staff employed in 2008 (expressed in full-time equivalents):

Tertiary education institutions	28,200	(up 0.4% on 2007)
Private training establishments ¹	5,750	(down 12% on 2007)
Universities	18,700	(up 1.6% on 2007)
Polytechnics	8,190	(up 0.2% on 2007)
Wānanga	1,230	(down 14% on 2007)

Note: Tertiary education institutions comprise 8 universities, 20 institutes of technology and polytechnics and 3 wānanga.

Source: Ministry of Education and annual reports of tertiary education institutions.

Figure 15.1: Staff employed in tertiary education institutions



ACADEMIC AND NON-ACADEMIC STAFFING

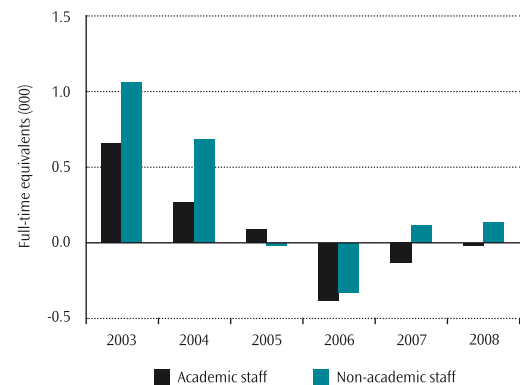
The number of full-time equivalent academic staff employed in tertiary education institutions decreased slightly in 2008, following more significant falls in 2006 and 2007. The number of non-academic full-time equivalent staff increased in 2008, and in 2007, partially reversing the downward movements in 2005 and 2006.

Staff employed in 2008 (expressed in full-time equivalents):

	Academic		Non-academic	
	2008	% change from 2007	2008	% change from 2007
Tertiary education institutions	12,700	-0.2	15,400	+0.9
Private training establishments	3,220	-12.0	2,530	-12.5
Universities	7,830	+0.9	10,900	+2.1
Polytechnics	4,360	+0.8	3,820	-0.4
Wānanga	545	-18.5	688	-9.6

Source: Ministry of Education and annual reports of tertiary education institutions.

Figure 15.2: Annual change in the number of academic and non-academic staff employed in tertiary education institutions



STUDENT TO STAFF RATIOS

An indicator of performance in tertiary education is the ratio of students to staff. This ratio has been decreasing in recent years for all provider types and in 2008 this continued except in wānanga. In wānanga, an increase in student numbers in 2008, coupled with a significant decline in the number of academic staff, caused the ratio to rise to 42 to 1 compared to 34 to 1 in 2007.

The student to academic staff ratio in 2008:

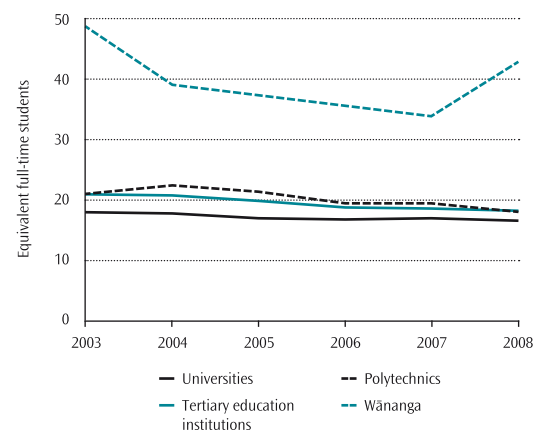
Tertiary education institutions	17.9	(20.4 in 2003)
Universities	16.2	(17.4 in 2003)
Polytechnics	17.8	(20.6 in 2003)
Wānanga	42.4	(48.2 in 2003)

Notes:

- These ratios have been calculated using the equivalent full-time student measure and the full-time equivalent academic staff count. In interpreting these ratios caution needs to be exercised as the allocation of staff to categories may not be consistently reported in the annual reports from year to year.
- The ratio at the wānanga is significantly higher than at other types of tertiary education institutions because of the delivery of distance programmes.

Source: Annual reports of tertiary education institutions.

Figure 15.3: Average number of students per academic staff member



1. Data for private training establishments is from the statistical collections provided to the Ministry of Education by tertiary education providers. Providers are included if they are registered with the New Zealand Qualifications Authority.

UNIVERSITY ACADEMIC AND RESEARCH STAFF

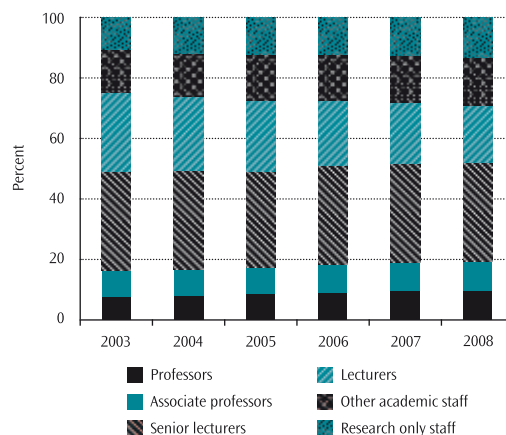
The proportions of associate professors and research only staff employed by universities continued to increase in 2008. There was a corresponding decline in the proportion of lecturers. This is partly due to the ageing of the workforce.

The proportion of university academic staff by designation in 2008 (expressed in full-time equivalents):

Professors	9.4%	(7.5% in 2003)
Associate professors	9.9%	(8.8% in 2003)
Senior lecturers	33%	(33% in 2003)
Lecturers	19%	(26% in 2003)
Other academic staff	16%	(14% in 2003)
Research only staff	13%	(11% in 2003)

There were also 492 full-time equivalent research support staff employed in universities in 2008.

Figure 15.4: Distribution of university academic staff by designation



GENDER DIFFERENCES

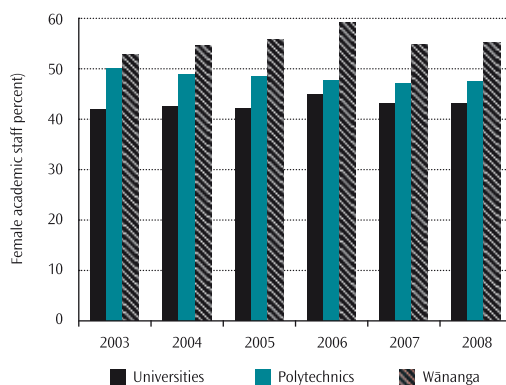
The overall proportion of women employed by tertiary education institutions continued to be stable in 2008 at 45 percent of the full-time equivalent staff.

The proportions of female academic staff by provider type in 2008 (expressed in full-time equivalents):

Tertiary education institutions	45%	(46% in 2003)
Universities	43%	(42% in 2003)
Polytechnics	48%	(50% in 2003)
Wānanga	55%	(53% in 2003)

Based on a headcount, the gender balance of the overall public tertiary education workforce remained unchanged in 2008 at 58 percent in favour of female staff.

Figure 15.5: Proportion of female academic staff by provider type



GENDER DIFFERENCES IN UNIVERSITIES

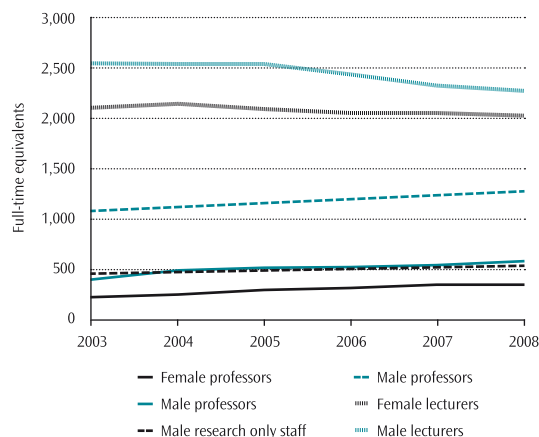
Following a steady rise in the proportion of female professors and lecturers in recent years, the percentages remained unchanged between 2007 and 2008. The proportion of female research only staff continued to increase in 2008.

The proportions of university academic staff by gender (expressed in full-time equivalents):

	2003	2008
Female professors/associate professors	17%	21%
Male professors/associate professors	83%	79%
Female senior lecturers/lecturers	45%	47%
Male senior lecturers/lecturers	55%	53%
Female research only staff	47%	52%
Male research only staff	53%	48%

Note: The figures used in the graph for professors include associate professors, and lecturers includes senior lecturers.

Figure 15.6: Selected university academic staff by gender



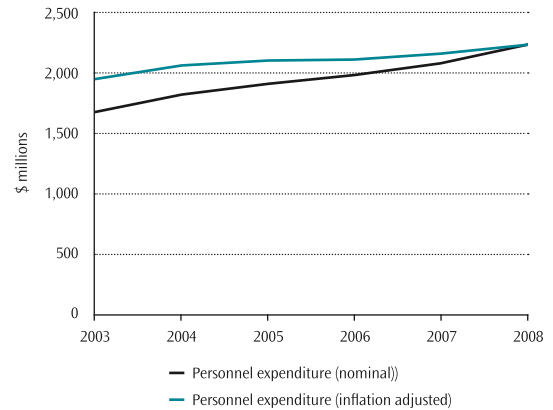
PERSONNEL COSTS

The personnel costs for all public tertiary education institutions amounted to \$2.21 billion in 2008. Personnel expenditure was 7.4 percent higher in 2008 than in 2007, when it totalled \$2.06 billion. Personnel expenditure represents 58 percent of all expenditure in tertiary education institutions.

Note: The deflator used is the Consumers Price Index (all groups) and the base period is the year 2008.

Source: Annual reports of tertiary education institutions.

Figure 15.7: Personnel expenditure in tertiary education institutions



PERSONNEL COSTS PER STAFF MEMBER

In wānanga, the personnel costs per staff member increased significantly from 2007 and 2008. The mix of staff in wānanga is likely to have changed in recent years as the trend in the number of academic and non-academic staff has averaged a fall since 2004 of 11 percent per year.

The number of staff in polytechnics and universities has been more stable in recent years. However, the average personnel cost per staff member has risen more slowly in polytechnics than in universities. This difference is likely to be due to increased government funding in recent years aimed at universities in order to maintain the quality of teaching and research and to ensure that they remain internationally competitive.

Personnel cost per full-time equivalent staff member:

			\$ (000) nominal		Inflation-adjusted		
	2003	2007	2008	% change 2003-08	% change 2007-08	% change 2003-08	% change 2007-08
Universities	65.5	80.2	86.1	+31.4	+ 7.4	+13.3	+ 3.3
Polytechnics	51.8	62.1	63.2	+21.9	+ 1.8	+ 5.1	- 2.1
Wānanga	41.1	52.0	67.2	+63.4	+29.2	+40.9	+24.2
Total	60.0	73.5	78.6	+31.0	+ 7.0	+13.0	+ 2.9

Notes:

1. Due to different cost structures in each sub-sector, caution should be exercised when comparing provider types.
2. The deflator used is the Consumers Price Index (all groups) and the base period is the year 2008.

Figure 15.8: Personnel expenditure per staff member

