




MINISTRY OF EDUCATION
Te Tāhuhu o te Mātauranga

Demographic and Statistical Analysis Unit

Teacher Supply Key Statistics Report May Teacher Loss Rates

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June 2006

Data sources:

1. Teacher Payroll Data Warehouse
2. July 2005 Roll Return Survey

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Purpose

This report details trends in teacher numbers, teacher loss rates¹, and reasons for losses. This analysis will assist in identifying areas of concern to teacher supply. They give an indication of the stability and morale of the teacher workforce and the state of labour market.

The report begins with the key findings and some background information on teacher losses and loss rates. The topics covered include: trends in teacher numbers with a focus on the age profile of the teaching workforce; trends in teacher losses by age, region, designation and school decile; and a summary of the reasons for teacher losses by age and designation.

This report is part of a series of regular updates on trends in teacher numbers and losses produced by the Demographic & Statistical Analysis Unit.

Key findings

Teacher numbers

- The number of primary and secondary teachers in NZ State and State Integrated schools has increased between 2005 and 2006.
- The average age of teachers overall has remained at 44 years old for the past eight years.
- The percentage of teachers aged 40 to 54 has decreased in the past five years, while the percentage aged 30 to 39 and aged over 55 has increased.

Teacher losses

- Current primary and secondary teacher loss rates are low compared to previous years.
- Regionally, Gisborne and the West Coast have the highest loss rates among primary teachers. The West Coast, Southland and Gisborne have the highest loss rates among secondary teachers.
- Primary and secondary teachers in low decile schools tend to have lower loss rates than those in medium and high decile schools.

Reasons for losses

- The most common reason for leaving among primary and secondary teachers is to go on leave without pay, with overseas work or travel the second most common reason.
- In both primary and secondary, younger age groups are more likely to teach, work, or travel overseas, and less likely to leave to another occupation or leave due to personal or health reasons.

¹ The official series for reporting teacher numbers is the April series, while the official series for reporting teacher losses is the May series.

PART 1 — Background

What is a teacher loss?

Teacher losses include all permanent teachers who have left the teaching profession, or who are on leave without pay. They do not include those teachers who have moved to another school.

A loss is assumed to have occurred between May to May if a teacher was teaching at May of one year and not teaching in May the following year. For example, total teacher losses for 2006 is the number of permanent teachers teaching in May 2005 who were not teaching in May 2006. A loss rate is the number of losses of permanent teachers in the May to May period divided by the total number of permanent teachers at the first May.

What do teacher losses tell us?

Teacher loss rates are useful component of teacher supply analysis when considered alongside other components, such as trends in school enrolments, teacher vacancies, and intake rates. In particular, loss rates give an indication of the stability and morale of the teacher workforce and the state of the labour market.

Limitations of this measure

- A loss does not necessarily mean an actual loss to the teaching profession, as teachers may be on leave without pay, or maternity leave.
- This report focuses on teacher loss rates and teacher numbers, and so presents a limited view of teacher movements in New Zealand. Other factors, such as intake rates and the movement of teachers between schools, should be considered alongside the information given here.
- Readers should also bear in mind changes in school rolls and the effect these have on teacher losses.
- When comparing groups, consideration of population size is needed. For example, teachers in the 60+ age group (see Figure 4 and Figure 5) have seen large variations in loss rates compared with other age groups. However, the number of teachers in this age group (see Figure 1 and Figure 2) has typically been smaller than the other age groups. Smaller population sizes can cause more extreme variations than we would expect in larger groups. Thus large variations in some groups may be explained by population size.

PART 2 — Teacher numbers at April

There are 884 more teachers in State and State Integrated schools in April 2006 compared to the same period last year. This equates to an increase of 1.8 percent (see Table 1 and Table 2).

In April 2006, there were 26,305 primary school teachers employed in New Zealand State and State Integrated schools – an increase of 1.9 percent on last year's total.

There were also 20,241 secondary school teachers – an increase of 1.9 percent on last year's total.

Table 1: Headcount of teachers as at April 2004 to April 2006

School type	Measure	Year		
		2004	2005	2006
Primary	Permanent Teachers	20,140	19,836	20,032
	All Teachers	26,007	25,809	26,305
Secondary	Permanent Teachers	15,288	16,058	16,668
	All Teachers	19,190	19,872	20,241
Total*	Permanent Teachers	38,064	38,663	39,536
	All Teachers	48,546	49,241	50,125

**Includes composite, special, and the Correspondence school.*

Table 2: Change in teacher numbers from April 2004-2005 and April 2005-2006

School type	Measure	Year	
		2004 to 2005	2005 to 2006
Primary	Permanent Teachers	-1.5%	1.0%
	All Teachers	-0.8%	1.9%
Secondary	Permanent Teachers	5.0%	3.8%
	All Teachers	3.6%	1.9%
Total*	Permanent Teachers	1.6%	2.3%
	All Teachers	1.4%	1.8%

**Includes composite, special, and the Correspondence school.*

Teacher numbers by age

The age profile of the primary and secondary teacher workforce has flattened in recent years, with growing proportions in the 'younger' and 'older' age groups, and declining proportions in the mid-range of ages.

The declining proportion of teachers aged 40 to 49 has potential implications for the recruitment and retention of experienced middle management teachers.

Despite these changes to the age profile of teachers, the average age of teachers has remained steady at 44 for the past eight years.

Figure 1 and Figure 2 show a comparison between primary and secondary teacher age profiles. The age profiles are fairly similar, with the majority of teachers aged between 40 to 54 years old.

Figure 1: Percentage of primary teachers by age group, as at April 2002 to April 2006

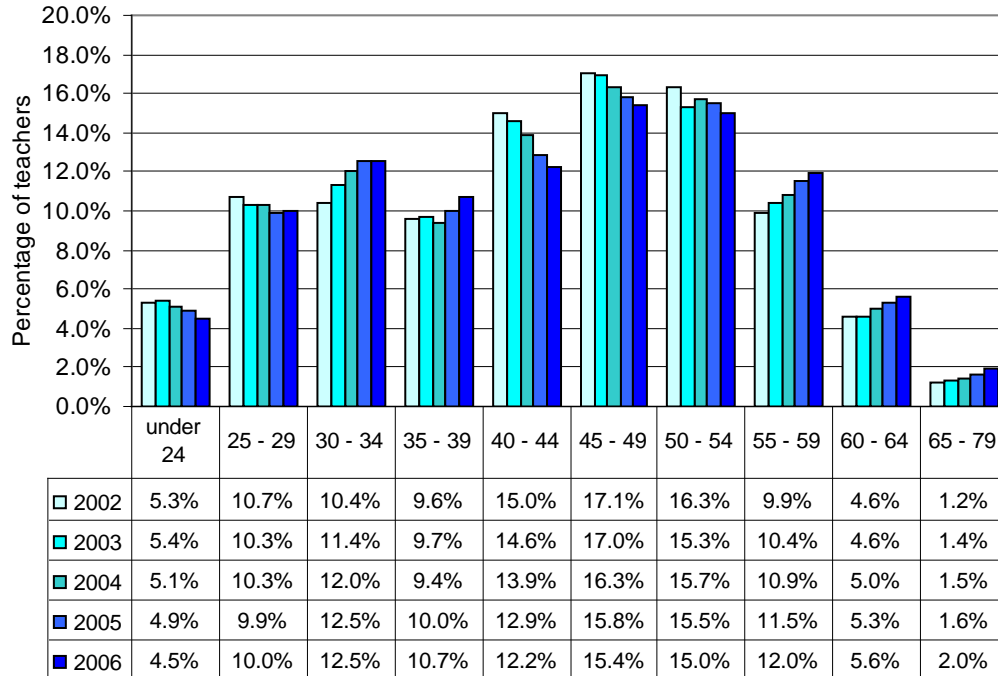
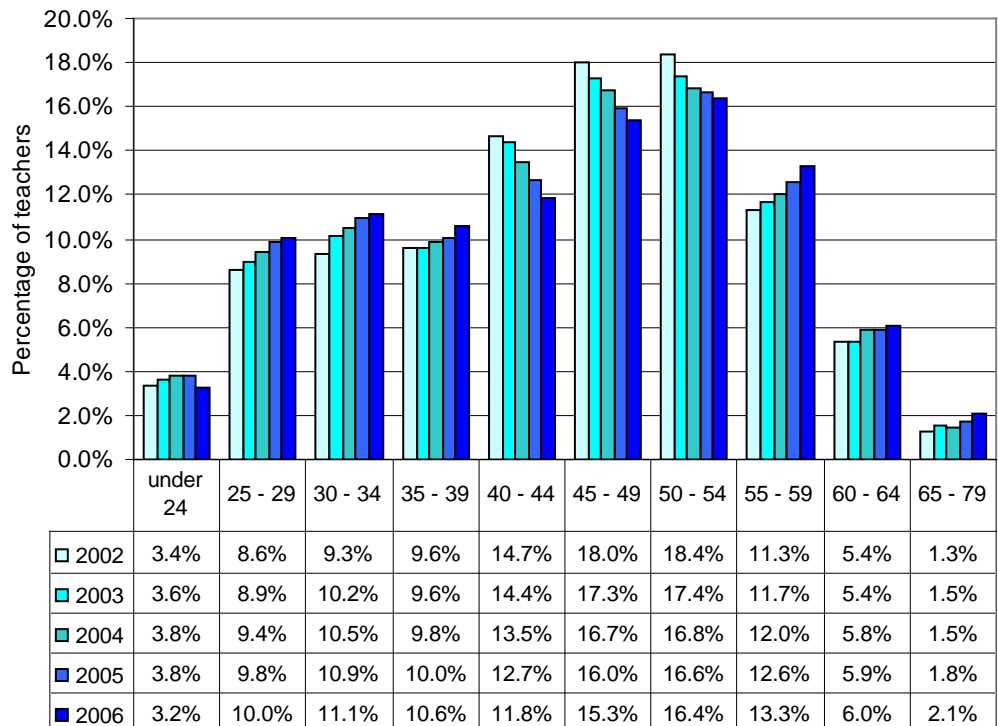


Figure 2: Percentage of secondary teachers by age group, as at April 2002 to April 2006



PART 3 — Teacher losses from May 2005 to May 2006

Table 3 shows how loss rates are calculated. Although the number of primary losses is considerably higher than the number of secondary losses, the loss rate for primary is only slightly higher due to the greater number of primary teachers overall.

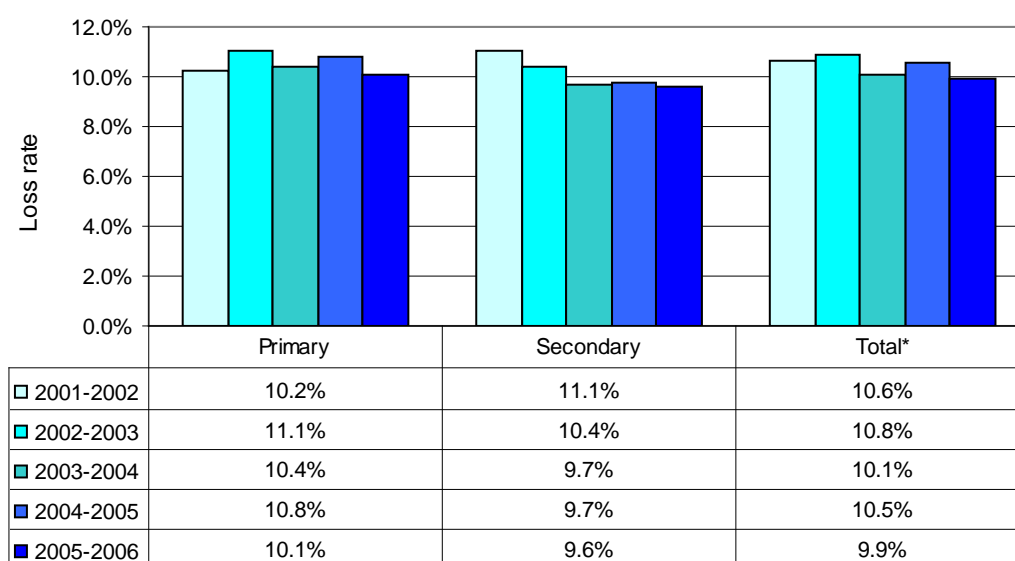
Table 3: Number of permanent teacher losses, permanent teachers, and loss rates by school type, May 2005 to May 2006

School type	Number of losses 2005-2006	Permanent teachers in May 2005	Loss rate 2005-2006
Primary	1,987	19,688	10.1%
Secondary	1,529	15,980	9.6%
Total*	3,807	38,417	9.9%

*Includes composite, special, and the Correspondence school.

Current loss rates for primary and secondary teachers are low compared to previous years (see Figure 3).

Figure 3: Teacher loss rates by school type, May 2001-2002 to May 2005-2006



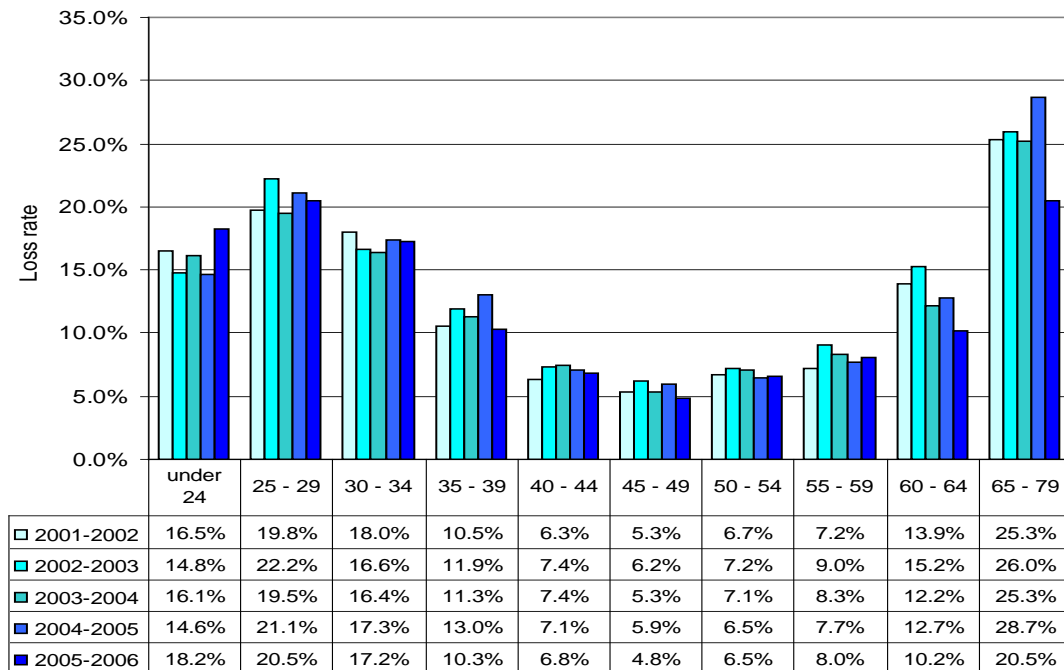
*Includes composite, special schools and the Correspondence School

Teacher loss rates by age

Primary

Across all age groups, the proportion of primary teachers who leave the teaching profession has varied from year to year. Primary teacher loss rates for teachers aged 60 and over remain low compared to previous years (Figure 4). However, it is difficult to draw conclusions about changes from year to year due to the small size of these older age groups.

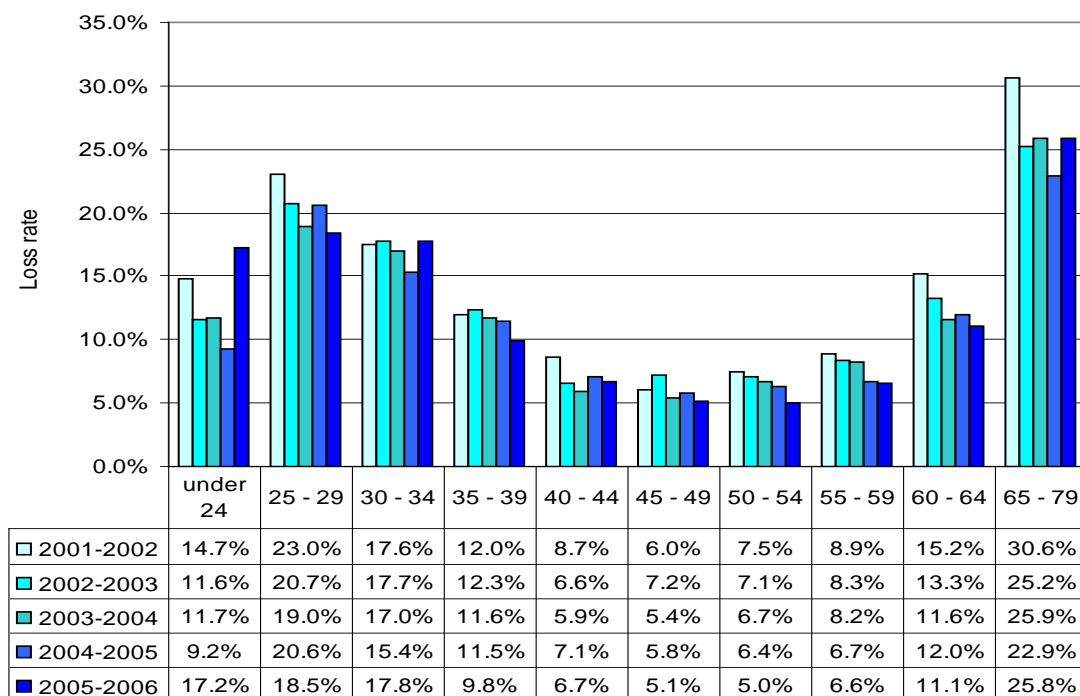
Figure 4: Primary teacher loss rates by age group, May 2001-2002 to May 2005-2006



Secondary

Across all age groups, the proportion of secondary teachers who leave the teaching profession has varied from year to year. Loss rates for secondary teachers in age groups over 35 remain low compared to previous years (Figure 5). Loss rates for secondary teachers aged under 24 have increased, although it is difficult to draw conclusions about changes from year to year due to the small size of this age group.

Figure 5: Secondary teacher loss rates by age group, May 2001-2002 to May 2005-2006



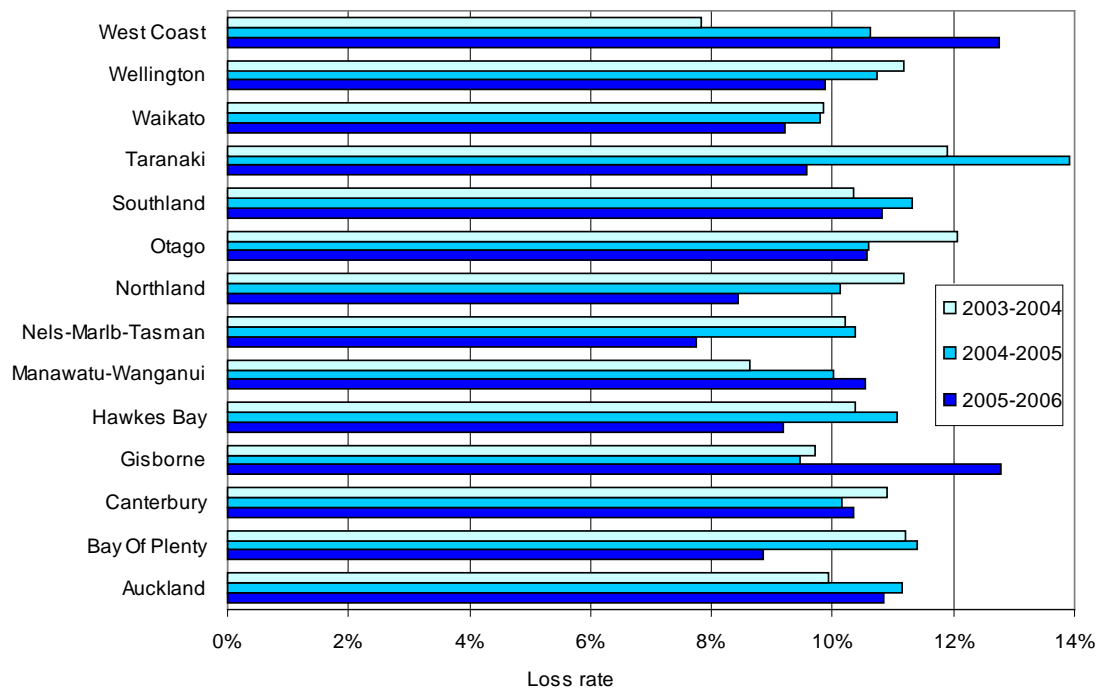
Teacher loss rates by region

Variations in regional loss rates can in part be explained by factors such as job opportunities and roll change. Small regions also tend to have greater variability from year to year, as changes to loss numbers have a relatively larger effect on small population sizes.

Primary

In the period May 2005 to May 2006 primary teachers were more likely to leave the profession in Gisborne and the West Coast regions (both on 12.8 percent). The Nelson-Marlborough-Tasman region had the lowest primary teacher loss rates (7.7 percent).

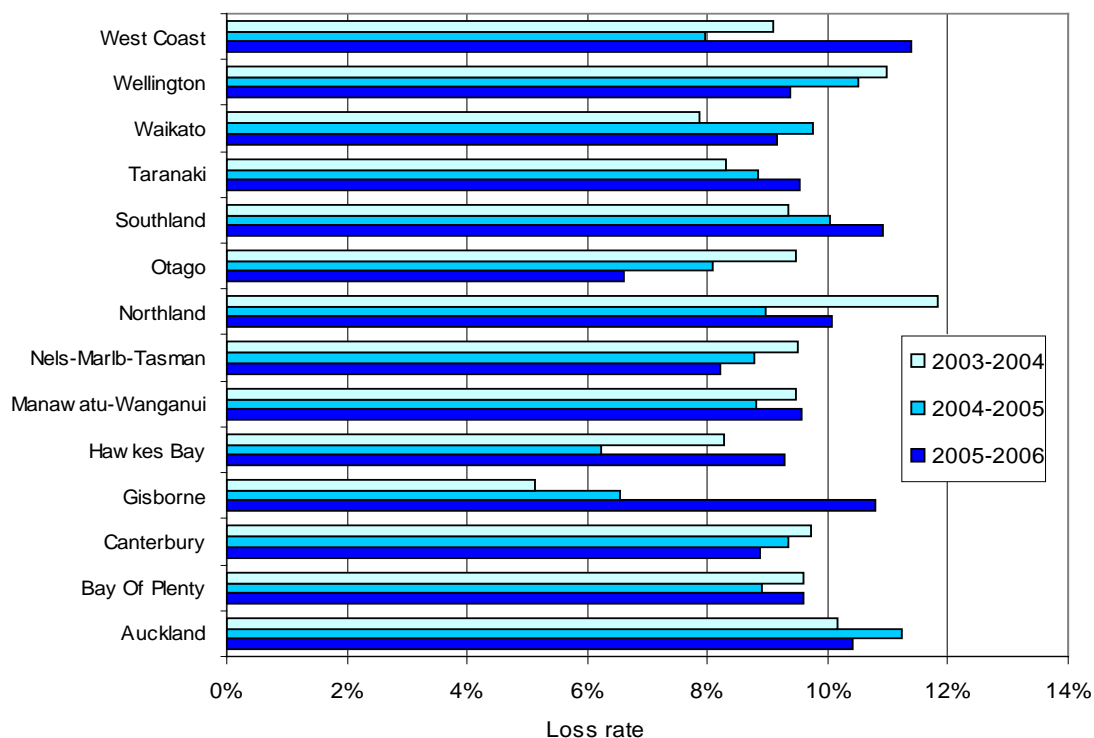
Figure 6: Primary teacher loss rates by region, May 2003-2004 to May 2005-2006



Secondary

In the period May 2005 to May 2006 secondary teachers were more likely to leave the profession in the West Coast, Southland, and Gisborne regions (11.4 percent, 10.9 percent, and 10.8 percent respectively). The Otago region had the lowest secondary teacher loss rates (6.6 percent).

Figure 7: Secondary teacher loss rates by region, May 2003-2004 to May 2005-2006



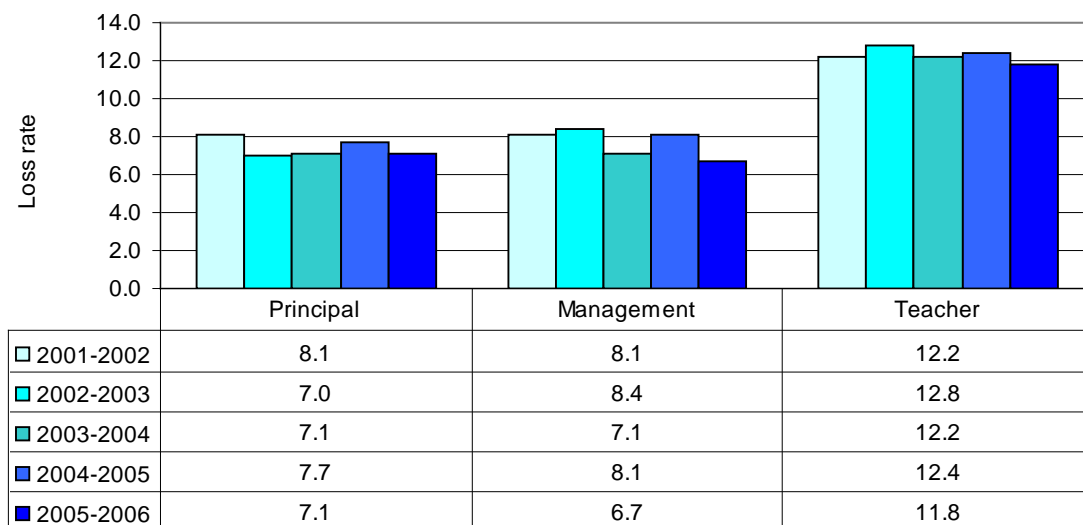
Teacher loss rates by designation²

Primary

Figure 8 shows the loss rates of teachers by designation. The percentage of primary teacher losses (excluding management and principals) has steadied at around 12 percent in recent years. Primary principals and teachers in management positions are less likely to leave the teaching profession compared to last year.

² Note that the grouping of teachers into designation categories used in this report may differ from other reports.

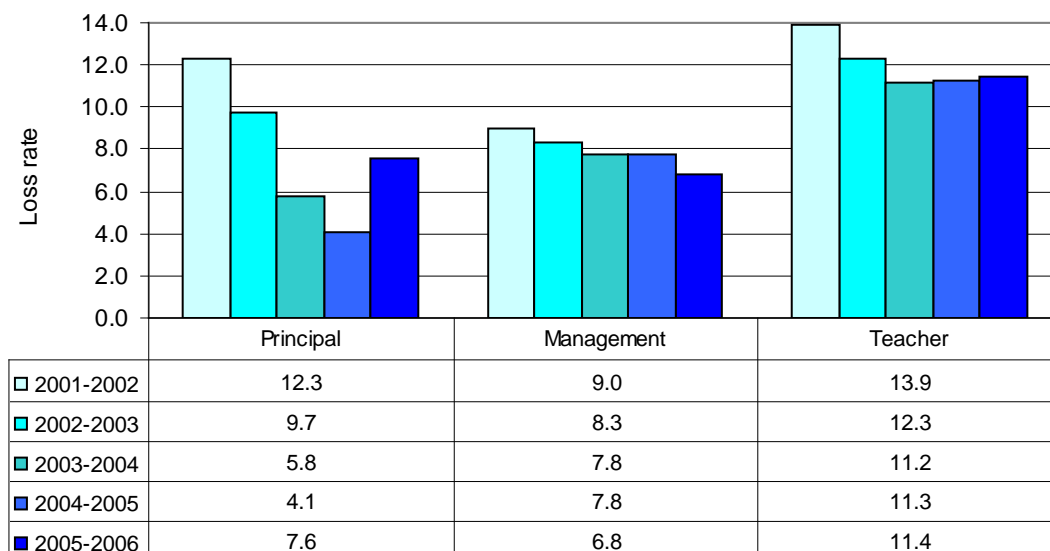
Figure 8: Primary teacher loss rates by designation, May 2001-2002 to May 2005-2006



Secondary

Figure 9 shows the loss rates of teachers by designation. The percentage of secondary teacher losses (excluding management and principals) has steadied at around 11 percent in recent years. Secondary loss rates for principals have increased since last year, although loss rates remain lower than in the early 2000s. Secondary loss rates for teachers in management positions remain low.

Figure 9: Secondary teacher loss rates by designation, May 2001-2002 to May 2005-2006

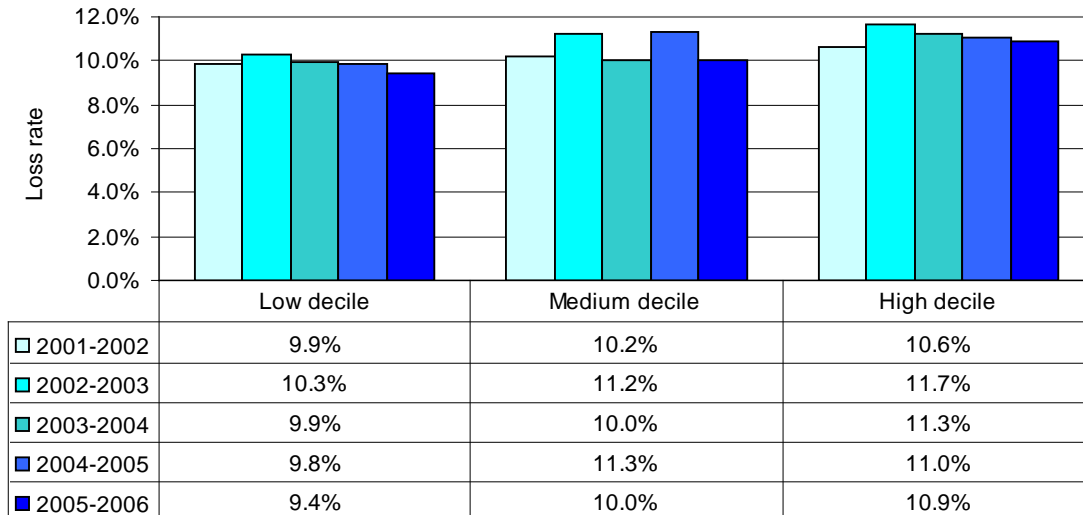


Teacher loss rates by school decile³

Primary

Figure 10 shows that teachers low decile schools⁴ have had consistently lower loss rates than medium and high decile schools.

Figure 10: Primary teacher loss rates by decile, May 2001-2002 to May 2005-2006



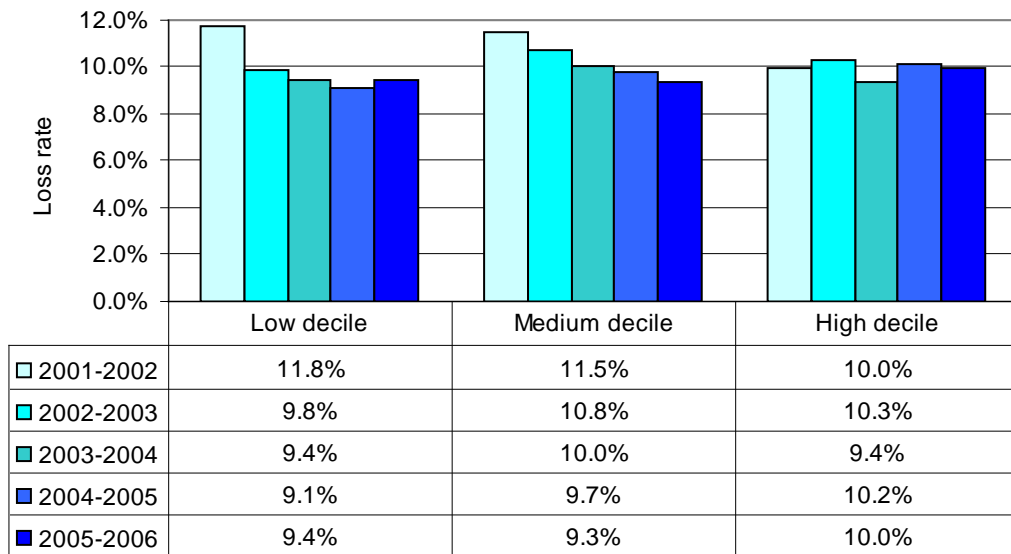
Secondary

Figure 11 shows that while the loss rates at high decile schools have remained steady over the last five years, loss rates for medium and low decile schools have decreased. Hence low and medium decile schools now have slightly lower loss rates than high decile schools.

³ Deciles measure the extent to which a school draws its students from low-socio-economic communities. For example, Decile 1 schools are the 10 percent of school with the highest proportion of students from low-socio-economic communities, whereas Decile 10 schools are the 10 percent of schools with the lowest proportion of these students.

⁴ Low decile schools are those with decile ratings 1-3. Medium decile schools are those with decile rating 4-7. High decile schools are those with decile rating 8-10.

Figure 11: Secondary teacher loss rates by decile, May 2001-2002 to May 2005-2006



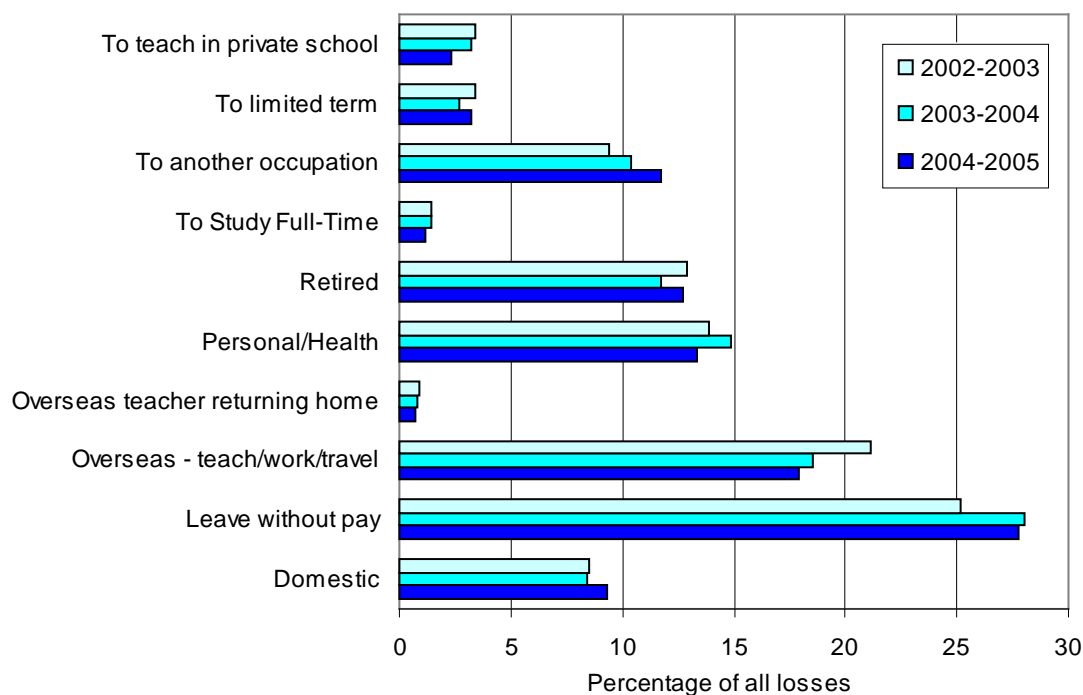
PART 4 — Summary of reasons for losses

Information on the reasons why teachers leave their positions is collected in the 1 July School Roll Return Survey each year⁵. Schools are sent out a list of teachers who were recorded as a loss between May of the current year and May of the previous year. They are asked to fill in the reasons for each teacher loss during this period. Due to the timing of the 1 July School Roll Return the most recent information available is for the period May 2004 to May 2005.

Primary

In the period May 2004 to May 2005, there were 2,149 primary teacher losses. Figure 12 shows the reason for leaving of primary teachers for the last three years for which data is available. It excludes losses where the reason for leaving was unknown⁶.

Figure 12: Primary teachers' reasons for losses, May 2002-2003 to May 2004-2005



Note: Excludes losses where the reason is unknown or unspecified

For primary teachers who left between 2004 and 2005, the most common reason for leaving was to go on leave without pay (28 percent).

The proportion of teachers leaving to go overseas to travel or work has declined as a reason for leaving from 21 percent in 2002-2003 to 18 percent of all losses in 2004-2005. However, this reason remains the second most common reason for leaving.

⁵ Reasons for losses have been categorised to fit the purposes of this report. These categories may differ to other publications. Details of the reasons for loss within each category are provided in the appendix.

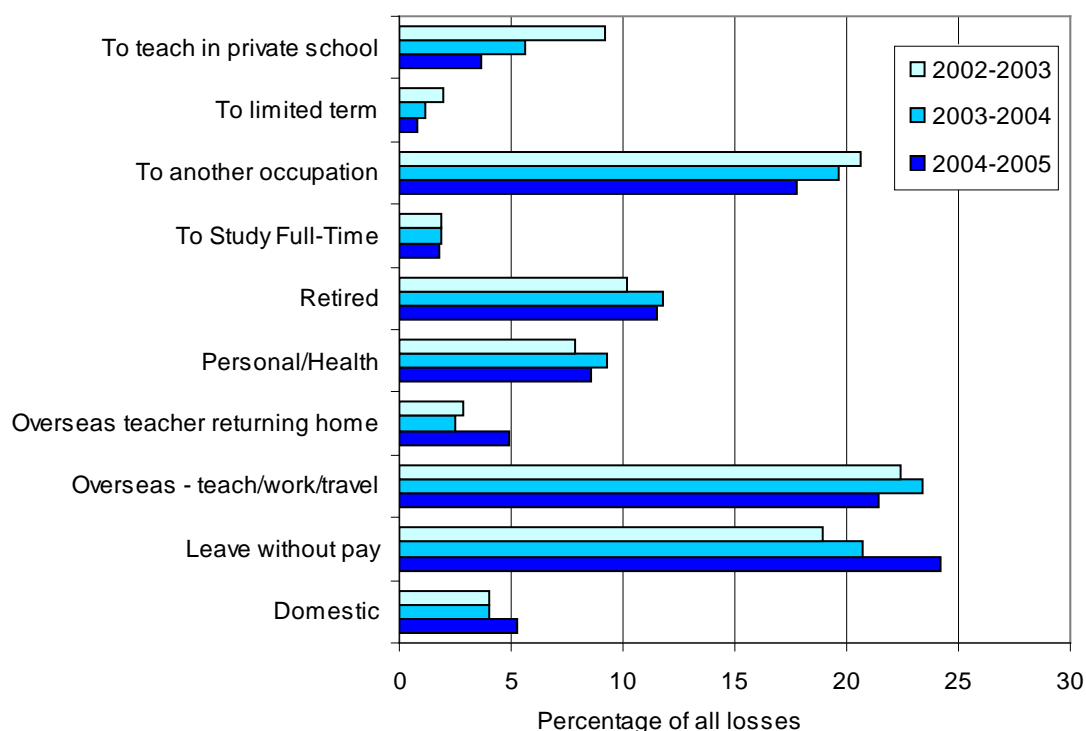
⁶ Losses where the reason for leaving is unknown are excluded because they may distort the proportions. They account for between 3% and 5% of total losses in the three time periods.

The proportion of primary teachers leaving to another occupation has increased from 9 percent in the 2002-2003 period to 12 percent in the 2004-2005 period.

Secondary

In the period May 2004 to May 2005, there were 1,484 secondary teacher losses. Figure 13 depicts the spread of secondary teacher losses by reason for leaving for the last three years.

Figure 13: Secondary teachers' reasons for losses, May 2002-2003 to May 2004-2005



Note: Excludes losses where the reason is unknown or unspecified

For secondary teachers who left between 2004 and 2005, the most common reason for leaving was to go on leave without pay (24 percent). Over a fifth of all secondary teachers who leave go overseas to travel or work.

The proportion of secondary teachers going to other occupations was much higher than for primary teachers. Around a fifth of all secondary teachers who leave go to another occupation. This is possibly because a higher proportion of secondary teachers than primary teachers have non-teaching qualifications, and this may enable them to move to other industries more easily.

Interestingly the proportion of losses in secondary due to personal or health reasons was noticeably lower than in primary.

Reasons for loss by age

Primary

The highest number of losses for teachers in primary schools occurred in the 25-29 and the 30-34 age groups (shown in Table 4). Otherwise the proportion of teachers leaving were spread relatively evenly over the different age groups.

Table 4: Primary teacher losses by age group, May 2004-May 2005

	Age Category									Total
	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60+	
Total number of losses	73	392	397	231	170	198	228	200	254	2,143
% of total losses	3.4%	18.3%	18.5%	10.8%	7.9%	9.2%	10.6%	9.3%	11.9%	100%

Note: Excludes losses where teacher age is unknown

Table 5 shows the spread of reasons for leaving within each age group. Going overseas to teach, work, or travel was the most popular reason for primary teachers in the 20-24 and 25-29 age group. This is not surprising given the age limit of 30 on the working visas to the UK.

Leave without pay was the most common reason for leaving for the 30-34 and 35-39 age groups.

Leaving to go into another occupation featured strongly among primary teachers aged 40 to 49. Generally, younger primary teachers are less likely to another occupation than older teachers.

Personal/Health reasons featured strongly among primary teachers aged 45 to 54.

The most common reason for leaving for the 55-59 and 60+ age groups was retirement. A quarter of the 252 primary teachers retiring came from the 55-59 age group.

Table 5: Primary teacher losses by reason for leaving and age group, May 2004-2005

Reason for leaving	Age Category									Total
	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60+	
	%	%	%	%	%	%	%	%	%	%
Domestic	7.1	10.0	13.9	11.4	13.7	6.7	8.4	3.4	3.9	9.3
Leave without pay	17.1	32.3	47.8	41.7	20.9	18.3	26.7	10.7	4.3	27.8
Overseas - teach/work/travel	51.4	37.3	17.1	13.7	10.5	11.7	11.9	10.7	1.7	17.9
Overseas teacher returning home		1.0	1.0	0.5	2.0	0.6	0.5			0.7
Personal/Health	5.7	5.5	7.1	10.4	19.0	23.9	24.8	21.5	12.9	13.3
Retired	2.9	0.5				2.2	7.9	34.5	72.0	12.7
To study full-time	2.9	1.0	1.6	0.9	0.7	3.9		1.1		1.2
To another occupation	8.6	7.9	9.2	12.8	26.1	20.6	14.4	12.4	2.2	11.7
To limited term	1.4	0.8	1.6	4.7	5.2	8.9	3.5	3.4	2.6	3.2
To teach in private school	2.9	3.7	0.8	3.8	2.0	3.3	2.0	2.3	0.4	2.3
Total percentage	100	100	100	100	100	100	100	100	100	100

Note: Excludes losses where teacher age is unknown. Also excludes losses where reason for leaving is unknown

Secondary

As was the case with primary teacher losses, secondary teachers in the 25-29 and 30-34 age groups were overrepresented in the losses.

Table 6: Secondary teacher losses by age group, May 2004-2005

	Age Category									Total
	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60+	
Total number of losses	23	271	245	171	132	145	177	144	171	1,479
% of total losses	1.6%	18.3%	16.6%	11.6%	8.9%	9.8%	12.0%	9.7%	11.6%	100%

Note: Excludes losses where teacher age was unknown

Going overseas to travel or work accounted for a high proportion of secondary teacher losses in the 20-24 and 25-29 age groups (see Table 7). In addition, just under a fifth of secondary teacher losses in the 30-34 through to 50-54 age groups were due to overseas travel or work. This is somewhat different from the pattern for primary teacher losses.

Teachers moving to other occupations are less likely to return to teaching in the future. This was the most common reason for teachers in age groups from 40-44 through to 55-59. It is worth monitoring these teachers considering their level of experience and lower likelihood of returning to teaching.

Table 7: Secondary teacher losses by reason for leaving and age group, May 2004-2005

Reason for leaving	Age Category									Total
	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60+	
	%	%	%	%	%	%	%	%	%	%
Domestic	13.0	7.3	8.2	5.6	2.5	3.6	4.9	4.4	1.2	5.3
Leave without pay	21.7	24.6	41.6	40.7	13.3	21.0	18.4	16.3	4.3	24.2
Overseas - teach/work/travel	39.1	44.6	18.1	17.9	17.5	17.4	19.6	13.3	4.3	21.4
Overseas Teacher Returning Home	4.3	8.1	9.5	4.9	8.3	3.6	0.6			4.9
Personal/Health		4.2	4.9	6.2	12.5	12.3	16.0	11.1	8.6	8.6
Retired				0.6	1.7	0.7	9.2	22.2	69.3	11.5
To Study Full-Time	8.7	0.8	3.7	1.2	5.8	1.4		1.5		1.8
To another occupation	13.0	7.7	10.7	16.7	30.0	34.1	25.2	27.4	9.2	17.8
To limited term		0.4	0.8	1.2	1.7	0.7		1.5	0.6	0.8
To teach in private school		2.3	2.5	4.9	6.7	5.1	6.1	2.2	2.5	3.7
Total percentage	100	100	100	100	100	100	100	100	100	100

Note: Excludes losses where teacher age is unknown. Also excludes losses where reason for leaving is unknown

Reasons for loss by designation

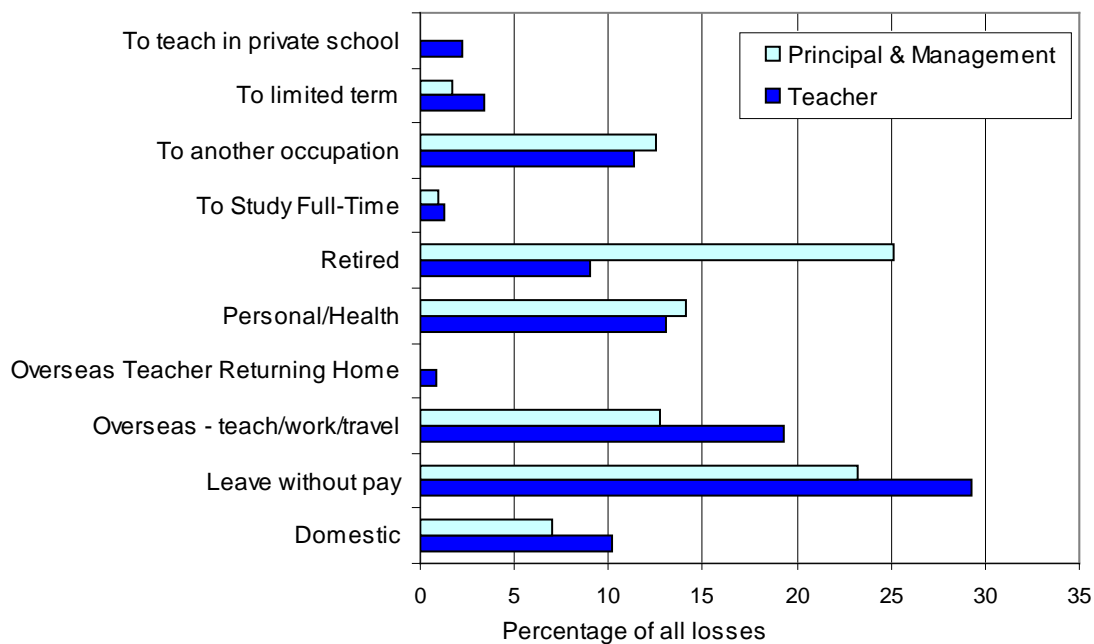
Primary

Figure 14 shows reasons for leaving as a percentage of all losses by designation. Principals and management have been grouped due to small numbers of losses from these designations. The majority of primary teachers (excluding management and principals) left teaching to go on leave without pay (29 percent) or to teach, travel or work overseas (19 percent).

A quarter of primary principals or management staff left to retire. A further 23 percent left to go on leave without pay.

The reasons for leaving the teaching profession by designation is tied to the typical ages of these designations. Teachers (excluding management and principals) are typically younger than management and principals and so reflect the reasons for leaving of the younger age groups. Management and principals are typically older than other teaching staff and so reflect the reasons for leaving of the older age groups.

Figure 14: Primary teacher losses by reason for leaving and designation, May 2004-2005



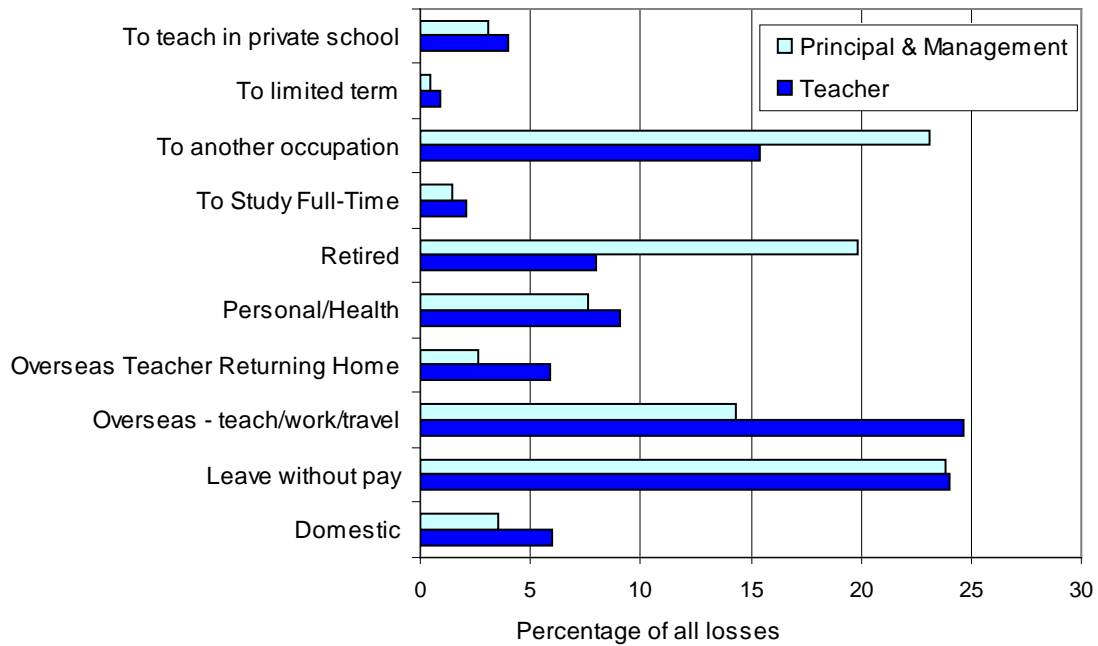
Secondary

Figure 15 shows the reasons for leaving the teaching profession as a percentage of all losses by designation. The majority of secondary teachers (excluding management and principals) left to teach, travel or work overseas (25 percent), to go on leave without pay (24 percent), or to another occupation (15 percent).

Secondary teachers in management and principal positions were most likely to leave on leave without pay (24 percent) or to another occupation (23 percent). A further 20 percent left to retire.

Across all designations, secondary teaching staff were more likely to leave to another occupation than primary teaching staff.

Figure 15: Secondary teacher losses by reason for leaving and designation, May 2004-2005



Appendix – Detailed reasons for losses

Table 8: Details of reason for loss categories used in this report

Reason for loss category	Detail
Domestic	Change in employment area within NZ of partner Family commitment other than maternity/childcare Resigned following parental or childcare leave
Leave without pay	Leave without pay (incl. parental leave)
Overseas - teach/work/travel	To teach overseas To travel or work overseas
Overseas teacher returning home	End of Exchange period Overseas teacher returning home
Personal & health	Deceased Health reasons Personal reasons Termination following protected teacher status (e.g. supernumerary) Unsuitable
Retired	Retired
To limited term	To limited term full-time or part-time teaching
To study full-time	To study full-time
To another occupation	To another occupation outside of teaching in schools
To teach in private school	To teach in private education service