

School Teachers' Review Body

**TEACHERS' WORKLOADS
DIARY SURVEY
March 2007**

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Chapter 1

INTRODUCTION

1. The 2007 teachers' workloads survey provides independently-collected data on the hours and working patterns of the 2,151 randomly-selected teachers in primary, secondary and special schools in England and Wales who returned useable questionnaires. It is the eighth survey to examine teachers' workloads; the previous surveys were carried out in 1994, 1996, 2000, and annually from 2003.

Background

2. Evidence previously gathered by the School Teachers' Review Body (STRB), from teacher associations and other parties as well as directly from teachers during school visits, showed mounting concern among the profession about teacher workload and its effect on morale. This concern reflected the results of three previous workload surveys commissioned by the Review Body, which showed clear increases in average teacher workload between 1994 and 2000.

3. Against this background, the STRB's Tenth Report, published in February 2001, recommended that the Department for Education and Employment (as it then was) organise an independent programme to look at the workload of teachers, and the factors contributing to it. The Department subsequently commissioned PricewaterhouseCoopers (PwC) to undertake such a study and formed a Steering Group comprising representatives of all main stakeholders to oversee and guide PwC's work.

4. After PwC's final report, in December 2001, the then Secretary of State remitted the STRB to consider teacher workload and conditions of service in some detail, and established a concurrent working party on the remodelling of teaching, with a membership similar to the earlier Steering Group. The STRB produced recommendations in May 2002 in its *Special review of approaches to reducing teacher workload*.

5. After a consultation period and further discussions within the working party, most of the organisations represented on that group signed up to a national agreement, *Raising standards and tackling workload*, in January 2003. The agreement acknowledged the pressure on schools to raise standards and tackle workload and introduced a set of changes to teachers' conditions of service to be introduced in three annual phases from September 2003:

- 1 September 2003: routine delegation of administrative and clerical tasks, introduction of work/life balance clauses, and introduction of leadership and management time for those with corresponding responsibilities.
- 1 September 2004: introduction of new limits on covering for absent colleagues (38 hours per year).
- 1 September 2005: introduction of guaranteed professional time for planning, preparation and assessment, introduction of dedicated headship time, and introduction of new invigilation arrangements.

Acknowledgements

6. BMRB wishes to thank the range of stakeholders who assisted with the design of the diary survey and for organising the support of the parties and their detailed comments and suggestions. These contributed to the successful mounting of the study.

7. This year, the response rate increased slightly for primary, secondary and special schools, compared with 2006. Above all, BMRB would particularly like to thank all the schools which agreed to co-operate in the study and the teachers who took the time to complete diaries and make themselves available to be interviewed. Without their co-operation the study would not have been possible.

The survey

8. This year's survey was conducted on a basis similar to the previous seven surveys, with diaries being completed during a single week in March 2007. As such, it should be kept in mind that the survey statistics do not necessarily provide an accurate guide to working patterns in other weeks of the year, although an important factor in selecting the week was that it was generally felt not to be unusual for term-time. The achieved sample of 2,151 teachers is an increase on last year's achieved sample.

9. In the 2007 survey, there were some changes to the activity codes and follow-up questionnaire, as compared with the 2006 survey, in order to better represent teachers' activities. For example code T11 in the 2006 survey, "covering absent teacher's lesson within the timetabled day" was split into two new codes: "teaching during cover for absent colleague within timetabled day" and "covering for absent colleague, when cover takes the form of supervising pre-set work". The former of these is categorised as teaching and the latter as non-teaching pupil/parent contact. This change was an attempt to better capture when teachers are actually teaching. This and other changes were made through consultation with key stakeholders and are documented in the survey's technical report which is available on request from OME.

10. As a result of the changes in 2007, grouped breakdowns of workload activities should not be compared directly with earlier surveys, although comparisons of total workload and of individual activities remain valid. Technical notes on the survey are included in Annex B.

11. For more details about the survey, please contact Anthony Craggs at the Office of Manpower Economics (anthony.craggs@berr.gsi.gov.uk).

Chapter 2

SUMMARY OF FINDINGS

Comparisons between 2007 and previous surveys

12. Charts 1 and 2 and Table 1 compares average total hours worked from the 2007 survey with previous years for various categories of teacher. Table 2 gives the same comparison for average hours worked on teaching activities. Tables A1 to A28 in Annex A provide more detailed breakdowns of the survey results.

Hours worked

13. Charts 1 and 2 show the average total hours worked by teachers in primary and secondary schools respectively (detailed figures are set out in Table 1).

Chart 1

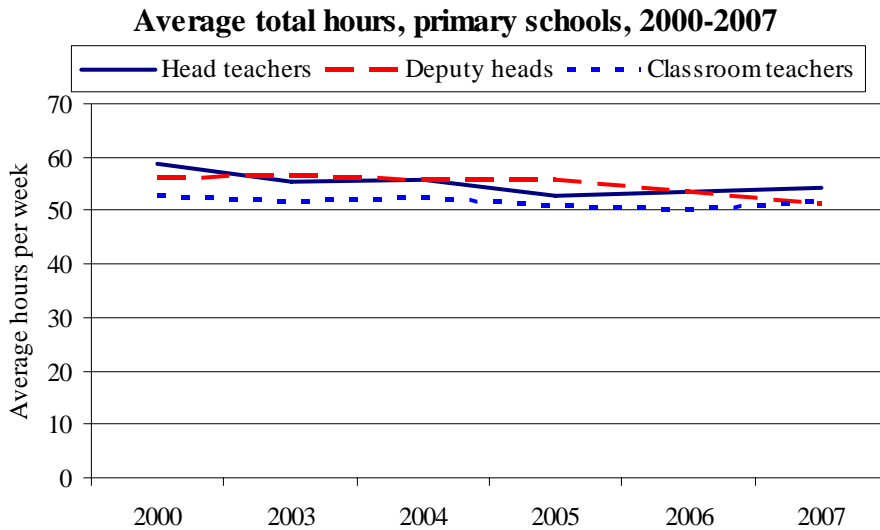
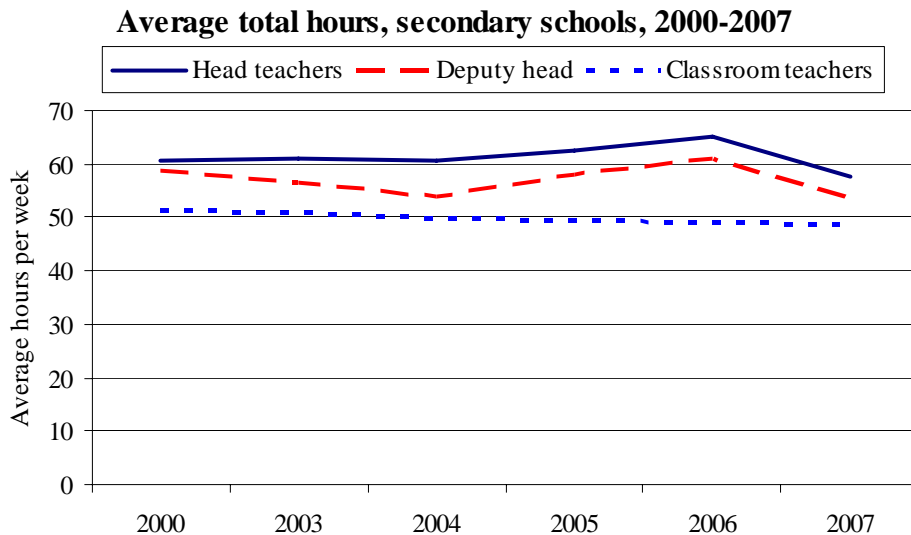


Chart 2



14. The charts show that most categories of teacher in 2007 continued to report working over 50 hours per week. Chart 1 shows that the working hours reported by primary heads, deputies and classroom teachers have decreased since 2000, although the hours reported have fluctuated in the intervening period (e.g. the 2007 estimates for heads and classroom teachers are higher than the 2006 survey). Chart 2 shows a gentle decrease in the number of hours reported by secondary classroom teachers; the number of hours reported by secondary heads and deputies in recent years shows more volatility although this year's estimates are lower than those in previous surveys (see paragraph 15 below).

15. The 2007 survey has seen some statistically significant changes¹ in the reported numbers of hours worked by full-time teachers between 2006 and 2007:

- Secondary head teachers have seen decreases in the total hours worked, from a peak of 65.1 hours in 2006 to 57.6 hours in 2007.
- Secondary deputy heads have seen a decrease in total hours worked between 2006 and 2007 (from 61 hours per week to 53.6 hours).

The estimates of hours worked by secondary head and deputy head teachers are more prone to volatility than those for classroom teachers due to the relatively small sample sizes. Detailed analysis of the hours reported by secondary heads and deputy heads in recent years show that:

- the distribution of hours recorded in the 2006 survey was particularly unusual, with considerably more heads and deputy heads reporting working over 70 hours than in any other year.
- the 2007 survey has seen a return to more 'normal' distribution with relatively few heads and deputy heads at the extremes of the distribution and this partly explains the significant decrease in average hours recorded.

¹ For more explanation of statistically significant changes see paragraphs 16-28 of Annex B.

- for heads the biggest decreases between 2006 and 2007 were reported in the numbers of hours spent on contact with parents/families and on ‘management related activities’ not explicitly captured elsewhere by the survey.

16. As was the case with the results for 2006, there are a number of statistically significant changes when comparing 2007 with earlier years

- Primary heads have seen a decrease in total hours worked, from 58.9 hours per week in 2000 to 54.2 in 2007 (although the 2007 estimate is higher than that for the two previous years).
- Primary deputy heads have seen decreases in total hours worked, from 55.7 hours in 2005, to 51.4 hours in 2007.
- Primary classroom teachers worked fewer hours than in 2004 and 2000. The 2007 estimate of 51.5 hours is, however, slightly higher than those for 2005 and 2006.
- Secondary heads of department have seen a decrease in total hours worked, from 52.7 hours in 2003, to 50.2 hours in 2007.
- Secondary classroom teachers have seen statistically significant decreases in total hours worked, from 50.8 hours per week in 2003 to 48.7 hours in 2007 (the 2006 estimate was 49.1 hours).
- Special classroom teachers have seen a decrease in total hours worked, from 51.2 hours in 2000 to 45 hours in 2007.

Table 1 – Average total hours worked by full-time teachers in a week, 2000-2007

	Total					
	2007	2006	2005	2004	2003	2000
Primary	Hours	Hours	Hours	Hours	Hours	Hours
Head teachers ¹	54.2	53.5	52.9	55.6	55.5	58.9
Deputy heads ²	51.4	53.4	55.7	55.7	56.4	56.2
Classroom teachers ³	51.5	50.1	50.9	52.5	51.8	52.8
Secondary						
Head teachers ⁴	57.6	65.1	62.6	60.8	60.9	60.8
Deputy head ⁵	53.6	61.0	58.1	54.1	56.5	58.6
Heads of faculty/department ⁶	50.2	51.5	51.2	51.6	52.7	52.9
Classroom teachers ⁶	48.7	49.1	49.3	49.9	50.8	51.3
Special						
Classroom teachers ⁷	45.0	43.9	45.6	46.3	47.6	51.2
<p>1. The change in total hours between 2007 and 2000 is statistically significant at the 95% level</p> <p>2. The change in total hours between 2007 and all measures taken from 1996-2005 is statistically significant at the 95% level</p> <p>3. The change in total hours between 2007 and 2004 is statistically significant at the 95% level</p> <p>4. The change in total hours between 2007 and all previous measures taken is statistically significant at the 95% level</p> <p>5. The change in total hours between 2007 and all measures except 2004 is statistically significant at the 95% level</p> <p>6. The change in total hours between 2007 and all measures taken from 2000-2003 is statistically significant at the 95% level</p> <p>7. The change in total hours between 2007 and 2000 is statistically significant at the 95% level</p> <p>Total hours worked include, as in previous years, completing the diary, which takes around an hour on average</p>						

Teaching hours

17. In the 2007 survey, there were some changes to the activity codes and follow-up questionnaire, in order to better represent teachers' activities. For example code T11 in the 2006 survey, "covering absent teacher's lesson within the timetabled day" was split into two new codes: "teaching during cover for absent colleague within timetabled day" and "covering for absent colleague, when cover takes the form of supervising pre-set work". As a result of these changes, some time which would previously have been classed as teaching is now classed as non-teaching. Therefore, a direct comparison of teaching hours between 2007 and the earlier surveys should not be made.

Table 2 Average total teaching hours worked by full-time teachers in a week, 2000-2007

	Teaching					
	2007 ¹	2006	2005	2004	2003	2000
Primary	Hours	Hours	Hours	Hours	Hours	Hours
Head teachers	3.4	4.0	3.8	5.8	4.9	6.0
Deputy heads	13.1	15.2	14.6	14.8	15.9	16.8
Classroom teachers	16.6	17.8	18.1	18.5	18.6	18.8
Secondary						
Head teachers	1.7	2.9	2.8	2.9	2.5	3.4
Deputy head	9.9	9.7	10.2	9.6	10.8	9.6
Heads of faculty/department	17.6	18.6	17.9	18.3	18.1	18.0
Classroom teachers	18.8	19.3	18.9	19.4	19.6	19.4
Special						
Classroom teachers	15.7	15.9	15.5	16.7	16.1	18.4

1. Definition of teaching has changed from previous years: some classroom supervision, which was previously included in the teaching codes, is now classified as non-teaching pupil/parent contact

18. We have, however, calculated teaching hours for 2007 using the definitions used from 2000-2006 (by adding on to the total teaching hours codes P22 "covering for absent colleague, when cover takes the form of supervising pre-set work" and P31 "supervising pupils on educational visits, or while external provider is teaching pupils"). These are reproduced below:

	Teaching					
	2007	2006	2005	2004	2003	2000
Primary	Hours	Hours	Hours	Hours	Hours	Hours
Head teachers	4.4	4.0	3.8	5.8	4.9	6.0
Deputy heads	13.8	15.2	14.6	14.8	15.9	16.8
Classroom teachers	16.9	17.8	18.1	18.5	18.6	18.8
Secondary						
Head teachers	2.0	2.9	2.8	2.9	2.5	3.4
Deputy head	10.5	9.7	10.2	9.6	10.8	9.6
Heads of faculty/department	18.4	18.6	17.9	18.3	18.1	18.0
Classroom teachers	19.5	19.3	18.9	19.4	19.6	19.4
Special						
Classroom teachers	15.9	15.9	15.5	16.7	16.1	18.4

Typically recalculating teaching hours in this way adds between half an hour and an hour to the average teaching hours for each grade.

Perceptions of workload

19. The survey asked teachers a number of questions about their perception of their workload (Table A27). Around 25 per cent of head teachers and 13 per cent of classroom teachers did not respond to these attitudinal questions and this should be borne in mind when interpreting the responses. Key findings were:

- Primary head teachers were more likely to say that they often had to do things which were not directly related to their job: 21 per cent of primary heads said this applied to them all or most of the time, compared with 7 per cent of secondary heads and around 11 per cent of full-time primary and secondary classroom teachers.
- Eighteen per cent of full-time secondary classroom teachers and 16 per cent of full-time primary classroom teachers felt they were unable to do things which should be part of their job all or most of the time, compared with 13 per cent of primary and 10 per cent of secondary teachers.
- Secondary head teachers were more likely to say that their duties represented a good use of their time: 63 per cent of them said that this was true all or most of the time, compared with 36 per cent of primary heads.
- Only 7 per cent of secondary heads felt that their workload allowed them to pursue outside interests all or most of the time, compared with 17 per cent of primary heads, 25 per cent of full-time primary classroom teachers and 31 per cent of full-time secondary teachers.
- The number of primary heads who felt that they had enough time to do their job as it should be done all or most of the time has fallen from 43.5 per cent in 2006 to 34 per cent in 2007. Conversely, the number of secondary heads who felt they had enough time, all or most of the time, to do their jobs has risen from 32 per cent to 45 per cent.

The 2007 survey results

20. Tables A1 to A28 provide detailed tabulations of the survey data. Please note that the tabulations are based on survey estimates and are therefore subject to sampling error (see Annex B1 for more details).

21. The following list summarises the breakdowns of total hours available in the detailed tables:

- Gender and teacher category – Tables A2-A5
(These breakdowns are only provided for those categories of teachers where the sample size for each gender is greater than 50, i.e. heads of department in secondary schools and full-time classroom teachers in primary and secondary schools.)
- Classroom teacher demographics – Tables A6-A8
- Distribution of total hours and teaching hours – tables A9-A17
- Part-time teachers – Table A18
- Special Schools – Tables A19-A20
- Detailed activities – Tables A21-A23
- Weekend and ‘out of hours’ working – Tables A24-A26

Workload activities

22. Analysis of the grouped activities that make up teachers’ workload is summarised in Table A1 (with more detailed analyses in Tables A21-A23). Key findings are:

Teaching

23. Classroom teachers in primary and secondary schools spend, on average, around one third of their working time on teaching activities, with the figure slightly higher in secondary schools than in primaries. Deputy and assistant heads in primary schools spend around a quarter of their working time teaching, compared with under 20 per cent by deputy heads in secondary schools (see Table A1).

Planning, preparation and assessment

24. On average, primary and secondary school classroom teachers spend just over 30 per cent of their working time on planning, preparation, and assessment (Table A1). Secondary school classroom teachers spend less time planning and preparing lessons but the same amount of hours assessing pupil work and writing reports as primary school teachers (Tables A21 and A22).

Non-teaching contact with pupils and parents

25. Teachers in primary and secondary schools spend between 10 per cent (primary classroom teachers) and 17 per cent (secondary deputy heads) of their time on non-teaching contact with pupils and parents (Table A1).

School/staff management

26. Secondary heads spend around seven hours more on school or staff management than primary heads. Heads in both types of school spend over half of their working time on management. Deputy heads in secondary schools spend around 35 per cent of their time on management; the corresponding figure in Primary schools is around 20 per cent (Table A1).

General administrative support

27. For all grades of teacher, the average hours spent on general administrative support tends to be higher in primary schools than in secondary schools (Table A1).

Individual/professional activity

28. On average, heads spend around 10 per cent of their time on individual or professional activities, compared with between 6 and 7 per cent for classroom teachers (Table A1).

Weekend and evening work

29. On average, full-time teachers in primary schools worked between 6 and 10 per cent of their hours at weekends. In secondary schools, the averages are ranged from 7 to 12 per cent. A further 14 to 18 per cent of hours worked in primary and secondary schools were worked after 6.00 pm, or before school starts, on weekdays (Table A24).

30. Around two-thirds of teachers' out of school hours work is spent on planning, preparation and assessment. The remaining time is predominantly taken up with other administrative and individual/professional activities (Table A25).

SURVEY RESULTS

Table

A1	Average hours worked by full-time teachers, in total and on grouped activities
A2	Average hours worked by full-time heads of department in secondary schools
A3	Average hours worked by full-time classroom teachers
A4	Average hours worked by full-time classroom teachers with management allowance
A5	Average hours worked by full-time classroom teachers without management allowance
A6	Average total hours worked by full-time classroom teachers in primary schools by teacher demographics
A7	Average total hours worked by full-time classroom teachers in secondary schools by teacher demographics
A8	Average total hours worked by full-time classroom teachers by school demographics
A9	Distribution of total hours worked by full-time head teachers
A10	Distribution of total hours worked by full-time deputy and assistant head teachers
A11	Distribution of total hours worked by full-time heads of department in secondary schools
A12	Distribution of total hours worked by full-time classroom teachers
A13	Distribution of total hours worked by full-time classroom teachers with management allowance
A14	Distribution of total hours worked by full-time classroom teachers without management allowance
A15	Distribution of teaching hours worked by full-time classroom teachers
A16	Distribution of teaching hours worked by full-time classroom teachers with management allowance
A17	Distribution of teaching hours worked by full-time classroom teachers without management allowance
A18	Average hours worked by part-time classroom teachers
A19	Average hours worked by full-time teachers in special schools
A20	Distribution of total hours, and of teaching hours, worked by full-time classroom teachers in special schools
A21	Average hours spent on individual activities by full-time head teachers, deputy and assistant head teachers and classroom teachers in primary schools
A22	Average hours spent on individual activities by full-time head teachers, deputy and assistant head teachers, heads of department and classroom teachers in secondary schools
A23	Average hours spent on individual activities by full-time classroom teachers in special schools

- A24 Percentage of total hours worked by full-time teachers at weekends, and before school or after 6 p.m. on weekdays
- A25 Composition of hours worked at weekends, before school and after 6 p.m. for full-time classroom teachers
- A26 Relationship of total hours worked to hours worked at weekends, before school and after 6 p.m. for full-time classroom teachers
- A27 General attitudes of teachers to their jobs and workloads
- A28 Average total hours, teaching hours and hours worked at weekends, before school and after 6 p.m. for full-time classroom teachers, by the teacher's view of "how much of the time it was possible to do the job as it should be done"

Notes on tables in Annex A

All tables are based on weighted data.

All bases are unweighted unless otherwise stated.

The following conventions have been used:

- nil
- * a non-zero value of less than 0.5% or of less than 0.05 hours
- () Less reliable because of low sample numbers, i.e. fewer than 50

Table A1 - Average hours worked by full-time teachers, in total and on grouped activities

Weighted

	Heads (a)				Deputy heads (a)				Classroom teachers							
	Primary		Secondary		Primary		Secondary		Primary		Secondary				Special	
	Hrs	%	Hrs	%	Hrs	%	Hrs	%	Hrs	%	Head dept		Classrm		Hrs	%
Teaching	3.4	6.2%	1.7	3.0%	13.1	25.5%	9.9	18.5%	16.6	32.2%	17.6	35.1%	18.8	38.7%	15.7	34.9%
Planning, preparation and assessment	3.3	6.0%	2.2	3.8%	13.6	26.4%	8.5	15.8%	16.7	32.5%	13.2	26.2%	14.8	30.4%	10.5	23.4%
Non-teaching pupil/parent contact	8.3	15.3%	8.5	14.8%	6.5	12.6%	9.1	17.0%	5.6	10.9%	7.2	14.3%	6.1	12.6%	7.3	16.2%
School/staff management	28.1	51.8%	35.5	61.6%	10.7	20.8%	18.8	35.1%	3.7	7.1%	5.3	10.5%	2.6	5.3%	4.6	10.1%
General administrative support	4.3	7.9%	3.0	5.2%	3.6	6.9%	2.8	5.3%	4.9	9.4%	3.8	7.6%	2.8	5.7%	3.1	6.8%
Individual/professional activity	6.2	11.4%	5.5	9.5%	3.3	6.4%	3.7	6.9%	3.6	6.9%	2.5	5.0%	2.9	6.0%	3.3	7.4%
All known working activities	53.4	98.6%	56.4	97.9%	50.8	98.7%	52.8	98.5%	51.0	99.0%	49.6	98.9%	48.0	98.7%	44.4	98.8%
Other working activities	0.7	1.3%	1.2	2.1%	0.7	1.4%	0.8	1.5%	0.5	1.0%	0.6	1.2%	0.6	1.2%	0.5	1.0%
All working activities	54.2	100%	57.6	100%	51.4	100%	53.6	100%	51.5	100%	50.2	100%	48.7	100%	45.0	100%

(a) excluding special schools where sample numbers were very low

Other working activities comprise multi-tasking working codes, imputed working codes, and authorised absence in school hours

Total hours worked and individual/professional activity include, as in previous years, completing the diary, which takes around an hour on average

Table A2 - Average hours worked by full-time heads of department in secondary schools

Weighted

	Average hours	Percentage of total
	Hrs	%
ALL		
Total	50.2	100%
On grouped activities		
Teaching	17.6	35.1%
Planning, preparation and assessment	13.2	26.2%
Non-teaching pupil/parent contact	7.2	14.3%
School/staff management	5.3	10.5%
General administrative support	3.8	7.6%
Individual/professional activity	2.5	5.0%
Other working activities	0.6	1.1%
MALES (a)		
Total	49.5	100%
On grouped activities		
Teaching	18.4	37.1%
Planning, preparation and assessment	13.4	27.1%
Non-teaching pupil/parent contact	6.4	12.9%
School/staff management	5.4	10.8%
General administrative support	3.8	7.6%
Individual/professional activity	1.9	3.8%
Other working activities	0.3	0.6%
FEMALES (b)		
Total	50.8	100%
On grouped activities		
Teaching	17.1	33.6%
Planning, preparation and assessment	12.9	25.5%
Non-teaching pupil/parent contact	7.9	15.6%
School/staff management	5.2	10.3%
General administrative support	3.9	7.7%
Individual/professional activity	3.1	6.0%
Other working activities	0.7	1.5%

(a) 132 teachers

(b) 171 teachers

Other working activities comprise multi-tasking working codes, imputed working codes, and authorised absence in school hours

Total hours worked and individual/professional activity include, as in previous years, completing the diary, which takes around an hour on average

Table A3 - Average hours worked by full-time classroom teachers

Weighted	Average hours		Percentage of total	
	Primary	Secondary	Primary	Secondary
	Hrs	Hrs	%	%
ALL				
Total	51.5	48.7	100%	100%
On grouped activities				
Teaching	16.6	18.8	32.2%	38.7%
Planning, preparation and assessment	16.7	14.8	32.5%	30.4%
Non-teaching pupil/parent contact	5.6	6.1	10.9%	12.6%
School/staff management	3.7	2.6	7.1%	5.3%
General administrative support	4.9	2.8	9.4%	5.7%
Individual/professional activity	3.6	2.9	6.9%	6.0%
Other working activities	0.5	0.6	1.0%	1.3%
MALES (a)				
Total	50.9	48.2	100%	100%
On grouped activities				
Teaching	17.5	19.4	34.4%	40.3%
Planning, preparation and assessment	18.0	14.2	35.4%	29.5%
Non-teaching pupil/parent contact	5.9	6.6	11.6%	13.8%
School/staff management	3.0	2.4	5.9%	4.9%
General administrative support	4.0	2.3	7.8%	4.8%
Individual/professional activity	2.3	2.7	4.5%	5.5%
Other working activities	0.3	0.6	0.5%	1.2%
FEMALES (b)				
Total	51.6	49.0	100%	100%
On grouped activities				
Teaching	16.5	18.4	31.9%	37.6%
Planning, preparation and assessment	16.6	15.2	32.1%	31.1%
Non-teaching pupil/parent contact	5.6	5.8	10.8%	11.8%
School/staff management	3.8	2.7	7.3%	5.5%
General administrative support	5.0	3.1	9.6%	6.4%
Individual/professional activity	3.7	3.1	7.2%	6.3%
Other working activities	0.5	0.7	1.0%	1.4%

(a) 74 teachers in primary schools and 166 in secondary schools

(b) 534 teachers in primary schools and 250 in secondary schools

Other working activities comprise multi-tasking working codes, imputed working codes, and authorised absence in school hours

Total hours worked and individual/professional activity include, as in previous years, completing the diary, which takes around an hour on average

Table A4 - Average hours worked by full-time classroom teachers with management allowance

Weighted	Average hours		Percentage of total	
	Primary	Secondary	Primary	Secondary
	Hrs	Hrs	%	%
ALL				
Total	51.7	49.2	100%	100%
On grouped activities				
Teaching	16.5	19.0	31.9%	38.6%
Planning, preparation and assessment	16.2	14.2	31.4%	28.9%
Non-teaching pupil/parent contact	5.3	5.7	10.3%	11.6%
School/staff management	5.3	3.4	10.2%	6.9%
General administrative support	4.8	3.0	9.4%	6.1%
Individual/professional activity	3.0	3.3	5.8%	6.6%
Other working activities	0.5	0.7	1.0%	1.4%
MALES (a)				
Total		49.9		100%
On grouped activities				
Teaching		19.9		39.9%
Planning, preparation and assessment		14.3		28.7%
Non-teaching pupil/parent contact		6.0		12.1%
School/staff management	(c)	3.2	(c)	6.4%
General administrative support		2.7		5.4%
Individual/professional activity		2.9		5.9%
Other working activities		0.8		1.6%
FEMALES (b)				
Total	51.7	48.7	100%	100%
On grouped activities				
Teaching	16.3	18.3	31.4%	37.5%
Planning, preparation and assessment	15.9	14.1	30.7%	28.9%
Non-teaching pupil/parent contact	5.5	5.5	10.6%	11.2%
School/staff management	5.5	3.6	10.6%	7.3%
General administrative support	4.9	3.2	9.4%	6.6%
Individual/professional activity	3.1	3.5	6.0%	7.2%
Other working activities	0.6	0.6	1.2%	1.2%

(a) 29 teachers in primary schools and 53 in secondary schools

(b) 147 teachers in primary schools and 65 in secondary schools

(c) Omitted because of low numbers

Other working activities comprise multi-tasking working codes, imputed working codes, and authorised absence in school hours

Total hours worked and individual/professional activity include, as in previous years, completing the diary, which takes around an hour on average

Table A5 - Average hours worked by full-time classroom teachers without management allowance

Weighted	Average hours		Percentage of total	
	Primary	Secondary	Primary	Secondary
	Hrs	Hrs	%	%
ALL				
Total	52.1	48.4	100%	100%
On grouped activities				
Teaching	16.3	18.7	31.2%	38.7%
Planning, preparation and assessment	17.7	15.7	33.9%	32.4%
Non-teaching pupil/parent contact	5.6	6.0	10.8%	12.5%
School/staff management	3.0	2.0	5.8%	4.1%
General administrative support	5.0	2.8	9.5%	5.7%
Individual/professional activity	4.1	2.8	7.8%	5.7%
Other working activities	0.5	0.4	0.9%	0.9%
MALES (a)				
Total		47.7		100%
On grouped activities				
Teaching		19.1		39.9%
Planning, preparation and assessment		15.2		31.8%
Non-teaching pupil/parent contact		6.7		13.9%
School/staff management	(c)	1.9	(c)	3.9%
General administrative support		2.1		4.4%
Individual/professional activity		2.4		5.1%
Other working activities		0.5		1.0%
FEMALES (b)				
Total	52.2	48.8	100%	100%
On grouped activities				
Teaching	16.2	18.6	31.0%	38.0%
Planning, preparation and assessment	17.6	16.0	33.6%	32.8%
Non-teaching pupil/parent contact	5.5	5.7	10.5%	11.6%
School/staff management	3.1	2.0	5.9%	4.1%
General administrative support	5.1	3.2	9.8%	6.5%
Individual/professional activity	4.3	3.0	8.1%	6.1%
Other working activities	0.5	0.4	0.9%	0.8%

(a) 31 teachers in primary schools and 78 in secondary schools

(b) 278 teachers in primary schools and 122 in secondary schools

(c) Omitted because of low sample numbers

Other working activities comprise multi-tasking working codes, imputed working codes, and authorised absence in school hours

Total hours worked and individual/professional activity include, as in previous years, completing the diary, which takes around an hour on average

Table A6 - Average total hours worked by full-time classroom teachers in primary school by demographics

Weighted

		Sample size (a)	Total hours worked
		Number	Hours
ALL		608	51.5
Age	under 25	58	51.5
	25-34	251	50.6
	35-44	113	51.1
	45-54	134	54.3
	55+	52	49.7
Sex	Male	74	50.9
	Female	534	51.6
Years in teaching	0-2	129	52.4
	3-9	241	50.6
	10-14	78	51.1
	15-19	47	(b)
	20+	108	53.0
Years in post	0	131	51.5
	1-2	175	51.9
	3-4	105	53.1
	5-9	122	51.4
	10+	63	49.5
Class size	< 25	126	51.1
	25-29	241	50.8
	30-34	174	53.2
	35+	18	(b)
Year group taught	Reception	66	49.3
	Y1	62	51.8
	Y2	59	51.9
	Y3	59	53.8
	Y4	61	52.1
	Y5	55	50.8
	Y6	56	53.4
Key stage taught	KS1	201	51.1
	KS2	279	52.7
	Other	79	50.0
Class type	Single yr	428	51.8
	Two yrs	83	52.5
% time classroom support	None/almost none	16	(b)
	10%	26	(b)
	20%	39	(b)
	30/40/50%	116	52.7
	60/70/80/90%	124	51.2
	All/almost all	115	51.3

(a) Unweighted sample size

(b) Data based on low sample numbers omitted

Table A7 - Average total hours worked by full-time classroom teachers in secondary school by demographics

Weighted

		Sample size (a)	Total hours worked
		Number	Hours
ALL		416	48.7
Age	under 25	40	(b)
	25-34	175	48.9
	35-44	78	49.1
	45-54	81	48.8
	55+	41	(b)
Sex	Male	166	48.2
	Female	250	49.0
Years in teaching	0-2	114	48.6
	3-9	158	48.9
	10-14	35	(b)
	15-19	20	(b)
	20+	84	48.4
Years in post	0	107	48.4
	1-2	112	49.3
	3-4	106	47.6
	5-9	60	48.8
	10+	28	(b)
Subject	Maths	60	47.3
	Science	68	49.2
	Foreign languages	36	(b)
	English	52	48.8
	<70% one subject	50	50.2
% yr 12/13 teaching	None/almost none	19	(b)
	10%-19%	35	(b)
	20%-29%	25	(b)
	30%-49%	21	(b)
	50%+	8	(b)
(a) Unweighted sample size			
(b) Data based on low sample numbers omitted			

Table A8 - Average hours worked by full-time classroom teachers by school demographics
Weighted

	Primary		Secondary	
	Sample Nos (d)	Total hours	Sample Nos (d)	Total hours
ALL	No 608	Hrs 51.5	No 416	Hrs 48.7
Size of school (number of pupils)				
Under 50	1	(c)	-	-
51-200	160	51.2	-	-
201-400	295	52.4	2	(c)
401-600	148	49.6	38	(c)
601-800	10	(c)	83	46.0
801-1000	-	-	68	48.0
1000+	-	-	225	49.9
Unknown	-	-	-	-
% stated children				
Under 0.5	117	52.3	19	(c)
0.5 – 0.9	133	50.8	51	46.4
1.0 – 1.9	204	51.7	126	48.8
2.0 – 4.9	144	51.8	193	49.3
5.0 or over	10	(c)	27	(c)
% pupils receiving free meals				
Under 5.0	179	53.1	111	48.1
5.0 – 9.9	151	52.8	144	49.5
10.0 – 19.9	107	53.0	108	48.9
20.0 – 29.9	53	46.1	27	(c)
30.0 – 39.9	82	49.7	16	(c)
40.0 or over	36	(c)	10	(c)
Catchment area (a)				
Inner city	99	48.5	24	(c)
Urban/suburban	287	52.9	164	49.1
Rural	61	51.4	35	(c)
Inner city/urban	30	(c)	31	(c)
Urban/rural	97	53.3	146	49.6
Representativeness of week (a)				
More busy	85	51.3	37	(c)
About same	397	52.1	348	49.0
Less busy	96	50.6	17	(c)
Workload normal? (b)				
Greater	42	(c)	26	(c)
About same	294	53.0	236	49.7
Less	175	48.9	101	45.5

(a) Head teacher's description

(b) Teacher's own assessment

(c) Omitted because of low sample numbers

(d) Unweighted sample size

Table A9 - Distribution of total hours worked by full-time head teachers
Weighted

Total hours worked	Percentage of teachers	
	Primary	Secondary
	%	%
Up to 35	7.1%	-
Over 35 up to 40	0.7%	1.9%
Over 40 up to 45	2.7%	3.8%
Over 45 up to 50	15.2%	7.6%
Over 50 up to 55	23.9%	28.3%
Over 55 up to 60	20.7%	21.3%
Over 60 up to 65	15.1%	14.5%
Over 65 up to 70	6.8%	17.3%
Over 70	7.8%	5.3%
	Hours worked	Hours worked
Highest decile	67.2	65.8
Upper quartile	60.9	63.9
Median	55.1	56.4
Lower quartile	49.8	52.6
Lowest decile	45.0	47.9
Unweighted sample size	101	78

Table A10 - Distribution of total hours worked by full-time deputy and assistant head teachers
Weighted

Total hours worked	Percentage of teachers	
	Primary	Secondary
	%	%
Up to 35	6.3%	1.4%
Over 35 up to 40	5.1%	4.4%
Over 40 up to 45	7.2%	7.1%
Over 45 up to 50	20.9%	25.2%
Over 50 up to 55	26.6%	22.5%
Over 55 up to 60	18.2%	17.3%
Over 60 up to 65	11.8%	10.7%
Over 65 up to 70	4.1%	4.9%
Over 70	-	6.5%
	Hours worked	Hours worked
Highest decile	62.5	67.3
Upper quartile	57.6	58.8
Median	52.7	53.8
Lower quartile	46.7	48.1
Lowest decile	39.8	41.0
Unweighted sample size	99	76

Table A11 - Distribution of total hours worked by full-time heads of department in secondary schools
Weighted

Total hours worked	Percentage of teachers	
	%	
Up to 35	2.4%	
Over 35 up to 40	10.1%	
Over 40 up to 45	17.5%	
Over 45 up to 50	21.3%	
Over 50 up to 55	19.3%	
Over 55 up to 60	18.0%	
Over 60 up to 65	6.2%	
Over 65 up to 70	2.9%	
Over 70	2.4%	
Highest decile	60.5	
Upper quartile	56.3	
Median	49.8	
Lower quartile	43.4	
Lowest decile	39.0	
Unweighted sample size	303	

Table A12 - Distribution of total hours worked by full-time classroom teachers
Weighted

Total hours worked	Percentage of teachers	
	Primary	Secondary
	%	
Up to 35	4.2%	5.9%
Over 35 up to 40	4.2%	10.4%
Over 40 up to 45	12.0%	21.1%
Over 45 up to 50	25.6%	19.0%
Over 50 up to 55	21.7%	20.1%
Over 55 up to 60	15.3%	12.7%
Over 60 up to 65	10.2%	6.0%
Over 65 up to 70	3.0%	3.2%
Over 70	3.8%	1.4%
Highest decile	63.6	60.7
Upper quartile	57.1	54.5
Median	50.9	48.3
Lower quartile	46.4	42.8
Lowest decile	41.5	37.4
Unweighted sample size	608	416

Table A13 - Distribution of total hours worked by full-time classroom teachers with management allowance
Weighted

Total hours worked	Percentage of teachers	
	Primary	Secondary
	%	%
Up to 35	4.1%	8.5%
Over 35 up to 40	3.8%	5.9%
Over 40 up to 45	10.1%	19.5%
Over 45 up to 50	22.4%	18.6%
Over 50 up to 55	24.7%	21.0%
Over 55 up to 60	19.9%	17.6%
Over 60 up to 65	10.0%	3.8%
Over 65 up to 70	2.8%	3.7%
Over 70	2.0%	1.3%
Unweighted sample size	176	118

Table A14 - Distribution of total hours worked by full-time classroom teachers without management allowance
Weighted

Total hours worked	Percentage of teachers	
	Primary	Secondary
	%	%
Up to 35	3.7%	4.1%
Over 35 up to 40	3.4%	11.2%
Over 40 up to 45	12.1%	23.2%
Over 45 up to 50	28.2%	20.0%
Over 50 up to 55	20.5%	20.7%
Over 55 up to 60	12.0%	11.1%
Over 60 up to 65	10.7%	5.6%
Over 65 up to 70	3.4%	3.1%
Over 70	6.0%	0.9%
Unweighted sample size	309	200

Table A15 - Distribution of teaching hours (a) worked by full-time classroom teachers
Weighted

Total hours worked	Percentage of teachers	
	Primary	Secondary
	%	%
Up to 12.5	16.2%	8.5%
Over 12.5 up to 15	13.3%	7.9%
Over 15 up to 17.5	20.4%	14.7%
Over 17.5 up to 20	30.6%	27.2%
Over 20 up to 22.5	16.4%	27.9%
Over 22.5 up to 25	2.5%	10.3%
Over 25	0.5%	3.4%
Highest decile	20.8	23.0
Upper quartile	19.5	21.3
Median	17.6	19.5
Lower quartile	14.6	17.2
Lowest decile	10.6	13.4
Unweighted sample size	608	416

(a) Teaching in own lessons/tutorial or during cover for absent colleague in timetabled day outside the timetabled day, assisting in another teacher's lesson and on educational visits

Table A16 - Distribution of teaching hours (a) worked by full-time classroom teachers with management allowance
Weighted

Total hours worked	Percentage of teachers	
	Primary	Secondary
	%	%
Up to 12.5	19.4%	6.5%
Over 12.5 up to 15	15.1%	11.6%
Over 15 up to 17.5	17.3%	14.5%
Over 17.5 up to 20	26.4%	27.5%
Over 20 up to 22.5	14.9%	25.4%
Over 22.5 up to 25	5.8%	11.1%
Over 25	1.1%	3.3%
Unweighted sample size	176	118

(a) Teaching in own lessons/tutorial or during cover for absent colleague in timetabled day outside the timetabled day, assisting in another teacher's lesson and on educational visits

Table A17 - Distribution of teaching hours (a) worked by full-time classroom teachers without management allowance

Weighted

Total hours worked	Percentage of teachers	
	Primary	Secondary
	%	%
Up to 12.5	16.5%	9.4%
Over 12.5 up to 15	14.6%	4.2%
Over 15 up to 17.5	24.7%	16.0%
Over 17.5 up to 20	28.3%	28.6%
Over 20 up to 22.5	15.0%	28.4%
Over 22.5 up to 25	0.6%	11.5%
Over 25	0.4%	1.9%
Unweighted sample size	309	200

(a) Teaching in own lessons/tutorial or during cover for absent colleague in timetabled day outside the timetabled day, assisting in another teacher's lesson and on educational visits

A18 - Average hours worked by part-time classroom teachers

Weighted

	Average hours		Percentage of total	
	Primary	Secondary	Primary	Secondary
	Hrs	Hrs	%	%
Total (a)	30.6	35.2	(100.0%)	(100.0%)
On grouped activities				
Teaching	9.9	12.5	(32.4%)	(35.5%)
Planning, preparation and assessment	10.6	11.7	(34.6%)	(33.2%)
Non-teaching pupil/parent contact	3.2	3.8	(10.5%)	(10.8%)
School/staff management	1.9	2.1	(6.2%)	(6.0%)
General administrative support	2.4	2.7	(7.8%)	(7.7%)
Individual/professional activity (a)	2.1	1.7	(6.7%)	(4.8%)
Other working activities (b)	0.6	0.6	(2.0%)	(1.7%)
Unweighted sample size	187	119		

(a) Total hours worked and individual/professional activity include, as in previous years, completing the diary, which takes around an hour on average

(b) Other working activities comprise multi-tasking working codes, imputed working codes, and authorised absence in school hours

A19 - Average hours worked by full-time teachers in special schools
Weighted

	Classroom teachers %
Percentage distribution of hours worked on grouped activities	
Teaching	34.9%
Planning, preparation and assessment	23.4%
Non-teaching pupil/parent contact	16.2%
School/staff management	10.1%
General administrative support	6.8%
Individual/professional activity	7.4%
Other working activities	1.2%
Total hours worked	45.0
Unweighted sample size	95

Other working activities comprise multi-tasking working codes, imputed working codes, and authorised absence in school hours

Total hours worked and individual/professional activity include, as in previous years, completing the diary, which takes around an hour on average

Table A20 - Distribution of total hours and teaching hours worked by full-time classroom teachers in special schools

Weighted

	Percentage of teachers %
Total hours	
Up to 35	8.5%
Over 35 up to 40	11.4%
Over 40 up to 45	30.7%
Over 45 up to 50	29.7%
Over 50 up to 55	7.9%
Over 55 up to 60	11.9%
Over 60 up to 65	-
Over 65 up to 70	-
Over 70	-
Teaching hours	
Up to 12.5	19.3%
Over 12.5 up to 15	25.4%
Over 15 up to 17.5	19.8%
Over 17.5 up to 20	24.7%
Over 20 up to 22.5	7.2%
Over 22.5 up to 25	2.6%
Over 25	1.1%
Unweighted sample size	95

Table A21 - Average hours spent on individual activities by full-time head teachers, deputy head teachers and classroom teachers in primary schools

Weighted

	Head teacher Hrs	Deputy head Hrs	Classroom teacher Hrs
Teaching	3.4	13.1	16.6
Own lesson/teaching/tutorial within timetabled day	2.4	12.1	15.8
Teaching during cover for absent colleague within timetabled day	0.7	0.4	0.2
Teaching/tutorial outside the timetabled day (e.g.homework classes)	0.1	0.2	0.2
Assisting pupils in another teacher's lesson	0.2	0.3	0.3
Teaching pupils on an educational visit	0.1	0.1	0.2
Non-teaching pupil/parent contact	8.3	6.5	5.6
Supervising pupils before/during/after pupil day (eg. at break, taking/supervising assembly, going to/from sporting/cultural activities)	2.9	2.6	2.2
Registration/general classroom management/pastoral/counselling session	0.1	0.6	1.1
Covering for absent colleague, when cover takes the form of supervising pre-set work	0.2	0.1	-
Conducting external examinations (e.g. practical and oral examinations in your own subject)	-	-	-
Invigilating external examinations (e.g. National Curriculum tests, GCSE examinations)	-	-	-
Conducting other tests/exams	-	0.1	0.1
Invigilating other tests/exams	-	-	-
Coaching sport, rehearsing drama/music or organising pupil clubs/societies (not as part of timetabled teaching)	0.5	0.5	0.6
Disciplining/praising pupils (inc. detention)	0.7	0.3	0.2
Pastoral care with individual pupils	0.5	0.2	0.1
Any contact with parents/families (inc. contact with individual parents, PTA, parents' evening)	1.9	0.9	0.7
Supervising pupils on educational visits, or while external provider is teaching pupils	0.8	0.6	0.3
Other non-teaching activities relating to particular pupils or parents	0.6	0.6	0.4
Planning, preparation and assessment	3.3	13.6	16.7
Planning/preparing lesson, practical test or assessment (inc. gathering materials)	1.6	7.6	9.3
Assessing/marking pupil work (including exam/test)	0.7	4.6	5.6
Writing reports on pupil progress	0.5	0.6	0.6
Other non-contact activities relating to lesson planning, preparation or assessment	0.5	0.9	1.3
School/Staff management	28.1	10.7	3.7
General staff/management meeting (including preparation, writing agenda/minutes etc.)	2.7	2.2	1.2
Appraising and monitoring other teaching staff	0.9	0.6	0.1
Coaching , mentoring and training other teaching staff	0.7	0.6	0.2
Other contact/interaction with teaching staff in your own school (but not about specific pupils or planning)	2.6	1.4	0.5
Arranging teaching duties, timetables, pupil allocation or supply	1.0	0.6	0.1
Contact/interaction with support staff (not including lesson planning/pupil assessment)	1.2	0.5	0.3
School policy development (including planning, implementation)	3.1	1.0	0.3
Financial management and planning	2.9	0.1	-

	Head teacher Hrs	Deputy head Hrs	Classroom teacher Hrs
Publicity/marketing activities	0.4	-	-
Contact with governors (eg. telephone calls)	1.6	0.4	0.1
Contact with educational body (eg. DfES, NafW, LA, EWO, OFSTED/Estyn, TDA)	2.4	0.4	0.1
Contact with community (eg. social services, police, employers, newspapers)	0.9	0.1	0.1
Contact with other local education providers (e.g. other nurseries, schools or colleges)	1.7	0.2	0.1
Other management related activities	6.0	2.5	0.5
General Administrative Support	4.3	3.6	4.9
Keeping records on pupil performance (eg. for National Curriculum, school records, examination boards etc.)	0.4	0.4	0.5
Keeping records or department records (excluding those on pupil performance)	0.3	0.2	0.1
Organising resources and premises (eg. buildings, equipment, books, computers)	0.9	0.7	0.8
Displaying/mounting pupils' work or information for pupils	0.1	0.3	0.6
Setting up/tidying classroom, lab or other teaching area	0.2	1.0	2.1
Simple clerical activity (eg. photocopying)	0.3	0.3	0.4
Other kinds of administrative activities	2.1	0.7	0.4
Individual/Professional activity	6.2	3.3	3.6
Training or development activity, including INSET, peer observation or being mentored	2.8	1.3	1.4
Studying/background reading (excluding preparing for particular classes code M35)	0.7	0.6	0.5
Keeping this diary	0.8	0.8	1.0
Other individual/professional activity (please describe in notes column)	1.9	0.6	0.7
All known working activity	53.4	50.8	51.0
Other working activities	0.7	0.7	0.5
Authorised absence during school hours	0.1	0.2	0.1
Other activities (Multiple, unknown)	0.6	0.5	0.4
All working activities	54.2	51.4	51.5
Own time - non working break in school hours	2.7	3.1	3.5

Other working activities comprise multi-tasking working codes, imputed working codes, and authorised absence in school hours

Total hours worked and individual/professional activity include, as in previous years, completing the diary, which takes around an hour on average

Table A22 - Average hours spent on individual activities by full-time head teachers, deputy head teachers, heads of department and classroom teachers in secondary schools

Weighted

	Head teacher Hrs	Deputy head Hrs	Head of department Hrs	Classroom teacher Hrs
Teaching	1.7	9.9	17.6	18.8
Own lesson/teaching/tutorial within timetabled day	1.4	8.5	16.0	17.6
Teaching during cover for absent colleague within timetabled day	0.3	0.5	0.2	0.3
Teaching/tutorial outside the timetabled day (e.g.homework classes)	-	0.4	1.0	0.6
Assisting pupils in another teacher's lesson	-	0.1	0.2	0.2
Teaching pupils on an educational visit	-	0.5	0.3	0.2
Non-teaching pupil/parent contact	8.5	9.1	7.2	6.1
Supervising pupils before/during/after pupil day (eg. at break, taking/supervising assembly, going to/from sporting/cultural activities)	3.5	3.4	1.3	1.3
Registration/general classroom management/pastoral/counselling session	0.7	0.2	1.2	1.4
Covering for absent colleague, when cover takes the form of supervising pre-set work	0.1	0.3	0.4	0.3
Conducting external examinations (e.g. practical and oral examinations in your own subject)	-	-	0.2	0.1
Invigilating external examinations (e.g. National Curriculum tests, GCSE examinations)	-	0.1	-	-
Conducting other tests/exams	-	-	-	0.1
Invigilating other tests/exams	*	0.1	0.1	-
Coaching sport, rehearsing drama/music or organising pupil clubs/societies (not as part of timetabled teaching)	0.3	0.5	1.2	0.9
Disciplining/praising pupils (inc. detention)	0.9	1.5	0.7	0.5
Pastoral care with individual pupils	0.4	0.8	0.5	0.3
Any contact with parents/families (inc. contact with individual parents, PTA, parents' evening)	1.5	0.9	0.6	0.4
Supervising pupils on educational visits, or while external provider is teaching pupils	0.2	0.3	0.4	0.4
Other non-teaching activities relating to particular pupils or parents	0.9	1.1	0.6	0.4
Planning, preparation and assessment	2.2	8.5	13.2	14.8
Planning/preparing lesson, practical test or assessment (inc. gathering materials)	1.0	3.8	5.5	7.2
Assessing/marking pupil work (including exam/test)	0.6	3.3	5.5	5.6
Writing reports on pupil progress	0.5	0.7	1.3	1.1
Other non-contact activities relating to lesson planning, preparation or assessment	0.1	0.6	0.9	0.9
School/Staff management	35.5	18.8	5.3	2.6
General staff/management meeting (including preparation, writing agenda/minutes etc.)	4.8	4.8	1.8	1.1
Appraising and monitoring other teaching staff	1.1	0.8	0.3	0.1
Coaching , mentoring and training other teaching staff	0.7	1.2	0.4	0.3
Other contact/interaction with teaching staff in your own school (but not about specific pupils or planning)	3.7	1.5	0.7	0.4
Arranging teaching duties, timetables, pupil allocation or supply	0.2	1.5	0.3	0.1
Contact/interaction with support staff (not including lesson planning/pupil assessment)	1.5	0.7	0.2	0.1
School policy development (including planning, implementation)	4.2	2.4	0.2	0.1
Financial management and planning	1.9	0.3	0.1	-

	Head teacher Hrs	Deputy head Hrs	Head of department Hrs	Classroom teacher Hrs
Publicity/marketing activities	0.3	0.2	-	-
Contact with governors (eg. telephone calls)	2.0	0.3	-	*
Contact with educational body (eg. DfES, NafW, LA, EWO, OFSTED/Estyn, TDA)	3.0	0.6	0.2	-
Contact with community (eg. social services, police, employers, newspapers)	0.8	0.2	0.1	-
Contact with other local education providers (e.g. other nurseries, schools or colleges)	2.7	0.5	0.2	0.1
Other management related activities	8.6	3.9	0.8	0.3
General Administrative Support	3.0	2.8	3.8	2.8
Keeping records on pupil performance (eg. for National Curriculum, school records, examination boards etc.)	0.2	0.3	0.7	0.4
Keeping records or department records (excluding those on pupil performance)	0.1	0.3	0.3	0.2
Organising resources and premises (eg. buildings, equipment, books, computers)	0.2	0.4	0.7	0.5
Displaying/mounting pupils' work or information for pupils	*	-	0.1	0.1
Setting up/tidying classroom, lab or other teaching area	-	0.2	0.8	0.8
Simple clerical activity (eg. photocopying)	0.1	0.4	0.4	0.3
Other kinds of administrative activities	2.4	1.3	0.9	0.5
Individual/Professional activity	5.5	3.7	2.5	2.9
Training or development activity, including INSET, peer observation or being mentored	1.4	1.4	0.9	1.1
Studying/background reading (excluding preparing for particular classes code M35)	1.9	0.6	0.3	0.7
Keeping this diary	0.5	0.7	0.8	0.8
Other individual/professional activity (please describe in notes column)	1.7	0.9	0.5	0.4
All known working activity	56.4	52.8	49.6	48.0
Other working activities	1.2	0.8	0.6	0.6
Authorised absence during school hours	0.1	0.1	0.1	0.1
Other activities (Multiple, unknown)	1.1	0.6	0.4	0.5
All working activities	57.6	53.6	50.2	48.7
Own time - non working break in school hours	2.0	2.1	3.7	3.6

Other working activities comprise multi-tasking working codes, imputed working codes, and authorised absence in school hours

Total hours worked and individual/professional activity include, as in previous years, completing the diary, which takes around an hour on average

Table A23 - Average hours spent on individual activities by full-time classroom teachers in special schools
Weighted

	Classroom teacher Hrs
Teaching	15.7
Own lesson/teaching/tutorial within timetabled day	14.2
Teaching during cover for absent colleague within timetabled day	0.3
Teaching/tutorial outside the timetabled day (e.g.homework classes)	0.1
Assisting pupils in another teacher's lesson	0.6
Teaching pupils on an educational visit	0.4
Non-teaching pupil/parent contact	7.3
Supervising pupils before/during/after pupil day (eg. at break, taking/supervising assembly, going to/from sporting/cultural activities)	3.3
Registration/general classroom management/pastoral/counselling session	1.4
Covering for absent colleague, when cover takes the form of supervising pre-set work	0.1
Conducting external examinations (e.g. practical and oral examinations in your own subject)	-
Invigilating external examinations (e.g. National Curriculum tests, GCSE examinations)	-
Conducting other tests/exams	-
Invigilating other tests/exams	-
Coaching sport, rehearsing drama/music or organising pupil clubs/societies (not as part of timetabled teaching)	0.2
Disciplining/praising pupils (inc. detention)	0.3
Pastoral care with individual pupils	0.5
Any contact with parents/families (inc. contact with individual parents, PTA, parents' evening)	0.7
Supervising pupils on educational visits, or while external provider is teaching pupils	0.1
Other non-teaching activities relating to particular pupils or parents	0.7
Planning, preparation and assessment	10.5
Planning/preparing lesson, practical test or assessment (inc. gathering materials)	6.6
Assessing/marking pupil work (including exam/test)	1.3
Writing reports on pupil progress	1.3
Other non-contact activities relating to lesson planning, preparation or assessment	1.4
School/Staff management	4.6
General staff/management meeting (including preparation, writing agenda/minutes etc.)	1.8
Appraising and monitoring other teaching staff	0.1
Coaching , mentoring and training other teaching staff	0.3
Other contact/interaction with teaching staff in your own school (but not about specific pupils or planning)	0.4
Arranging teaching duties, timetables, pupil allocation or supply	0.3
Contact/interaction with support staff (not including lesson planning/pupil assessment)	0.3
School policy development (including planning, implementation)	0.4
Financial management and planning	-
Publicity/marketing activities	-
Contact with governors (eg. telephone calls)	-
Contact with educational body (eg. DfES, NafW, LA, EWO, OFSTED/Estyn, TDA)	0.1
Contact with community (eg. social services, police, employers, newspapers)	0.2
Contact with other local education providers (e.g. other nurseries, schools or colleges)	0.1
Other management related activities	0.5

	Classroom teacher Hrs
General Administrative Support	3.1
Keeping records on pupil performance (eg. for National Curriculum, school records, examination boards etc.)	0.4
Keeping records or department records (excluding those on pupil performance)	0.1
Organising resources and premises (eg. buildings, equipment, books, computers)	0.6
Displaying/mounting pupils' work or information for pupils	0.2
Setting up/tidying classroom, lab or other teaching area	1.1
Simple clerical activity (eg. photocopying)	0.2
Other kinds of administrative activities	0.5
Individual/Professional activity	3.3
Training or development activity, including INSET, peer observation or being mentored	1.1
Studying/background reading (excluding preparing for particular classes code M35)	0.5
Keeping this diary	1.0
Other individual/professional activity (please describe in notes column)	0.8
All known working activity	44.4
Other working activities	0.5
Authorised absence during school hours	0.1
Other activities (Multiple, unknown)	0.5
All working activities	45.0
Own time - non working break in school hours	3.2

Other working activities comprise multi-tasking working codes, imputed working codes, and authorised absence in school hours

Total hours worked and individual/professional activity include, as in previous years, completing the diary, which takes around an hour on average

Table A24 - Percentage of total hours worked by full-time teachers at weekends, before school or after 6pm on weekdays

Weighted

	Percentage of total hours worked	
	At weekends	Before school/after 6pm
	%	%
Primary schools		
Head teachers	7.6%	16.2%
Male	7.6%	17.5%
Female	7.7%	15.0%
Deputy head teachers	6.9%	14.9%
Male	6.3%	14.4%
Female	7.1%	15.0%
Classroom teachers	8.8%	14.4%
Male	8.6%	14.0%
Female	8.9%	14.5%
Classroom teachers with management allowance	8.1%	15.0%
Male	8.5%	15.1%
Female	8.1%	15.0%
Classroom teachers without management allowance	9.8%	14.4%
Male	8.9%	14.0%
Female	9.9%	14.4%
Secondary schools		
Head teachers	7.5%	16.9%
Male	7.8%	17.0%
Female	6.7%	16.8%
Deputy head teachers	8.1%	16.5%
Male	8.0%	15.3%
Female	8.3%	18.1%
Heads of department	8.8%	14.8%
Male	6.9%	15.0%
Female	10.3%	14.7%
Classroom teachers	9.1%	14.8%
Male	9.3%	14.9%
Female	8.9%	14.7%
Classroom teachers with management allowance	9.6%	14.8%
Male	11.6%	14.9%
Female	8.0%	14.7%
Classroom teachers without management allowance	9.3%	14.5%
Male	9.0%	14.8%
Female	9.4%	14.3%

Table A25 - Composition of hours worked at weekends, before school and after 6 p.m. for full-time classroom teachers

Weighted

	Primary	Secondary
	%	%
Teaching	0.1%	0.4%
All planning, preparation, and assessment	67.8%	71.3%
<i>Planning</i>	38.3%	33.5%
<i>Assessing/marking</i>	21.6%	28.9%
<i>Other lesson preparation, marking etc (a)</i>	0.0%	0.0%
Non-teaching pupil/parent contact	1.8%	4.3%
School/staff management	5.1%	4.5%
General administrative support	12.5%	7.3%
Individual/professional activity (b)	12.1%	11.0%
Other working activities (c)	0.7%	1.2%
Total hours	100.0%	100.0%
Unweighted sample size	608	416

(a) i.e. "lesson preparation, marking etc" excluding planning and assessing/marking

(b) Total hours worked and individual/professional activity include, as in previous years, completing the diary, which takes around an hour on average

(c) Other working activities comprise multi-tasking working codes, imputed working codes, and authorised absence in school hours

Table A26 - Relationship of total hours to hours worked at weekends, before school and after 6 p.m. for full-time classroom teachers

Weighted	Total hours worked									Total
	<35	35-	40-	45-	50-	55-	60-	65-	70+	
Primary schools	No.	No.	No.	No.	No.	No.	No.	No.	No.	No
Up to 2.5	13	7	9	3	-	-	-	-	-	33
Over 2.5 up to 5	8	9	25	15	1	-	-	-	-	59
Over 5 up to 7.5	2	6	33	45	8	-	-	-	-	94
Over 7.5 up to 10	3	3	6	58	36	2	-	-	-	108
Over 10 up to 12.5	-	1	3	22	40	16	-	-	-	83
Over 12.5 up to 15	-	1	1	17	35	31	6	1	-	92
Over 15 up to 17.5	-	-	-	4	16	27	12	2	-	61
Over 17.5	-	-	-	-	3	21	47	16	24	112
Weighted Total	27	27	77	164	139	98	65	19	24	641
Unweighted sample size	22	26	74	157	143	94	57	20	15	608
Secondary schools	No.	No.	No.	No.	No.	No.	No.	No.	No.	
Up to 2.5	16	6	6	-	-	-	-	-	-	28
Over 2.5 up to 5	6	14	23	3	-	-	-	-	-	46
Over 5 up to 7.5	4	18	29	14	2	-	1	-	-	69
Over 7.5 up to 10	1	10	26	23	5	2	-	-	-	67
Over 10 up to 12.5	-	1	14	28	25	5	-	-	-	73
Over 12.5 up to 15	1	-	3	19	32	17	-	-	-	72
Over 15 up to 17.5	-	-	1	2	14	16	4	-	-	38
Over 17.5	-	1	-	2	19	22	24	16	7	90
Weighted Total	29	50	102	92	97	61	29	16	7	483
Unweighted sample size	20	39	96	86	75	51	27	15	7	416

Table A27 - General Attitudes of teachers to their jobs and workloads

Weighted

	Head teacher		Deputy head		Head of dept	Classroom teacher				
	Primary Full-time	Secondary Full-time	Primary Full-time	Secondary Full-time	Secondary Full-time	Primary		Secondary		Special Full-time
						Full-time	Part-time	Full-time	Part-time	
Proportion of respondents who thought they:	%	%	%	%	%	%	%	%	%	%
WERE CONFIDENT IN THEIR ALLOCATION OF TIME										
All of the time	3.5%	5.4%	8.5%	7.3%	4.7%	8.0%	8.0%	9.3%	5.1%	6.1%
Most of the time	49.4%	62.0%	66.6%	66.9%	66.3%	67.0%	58.3%	67.5%	49.8%	68.1%
From time to time	16.4%	6.2%	11.0%	5.6%	14.0%	11.0%	10.3%	7.6%	7.0%	9.8%
Rarely	1.8%	2.2%	-	3.7%	2.7%	1.2%	2.7%	2.8%	2.7%	-
Never	1.0%	-	0.9%	-	0.3%	-	-	0.2%	-	1.4%
Not stated	27.8%	24.3%	13.0%	16.5%	12.0%	12.8%	20.6%	12.6%	35.4%	14.6%
WERE EXPECTED TO DO THINGS THAT WERE NOT PART OF THEIR JOB										
All of the time	10.5%	1.7%	0.8%	4.0%	2.0%	2.4%	-	4.1%	-	2.0%
Most of the time	10.9%	5.5%	4.6%	1.2%	13.7%	9.0%	5.9%	6.8%	4.3%	1.4%
From time to time	39.0%	36.1%	42.8%	36.4%	52.0%	47.3%	45.2%	50.4%	36.5%	43.7%
Rarely	5.9%	29.6%	32.3%	33.1%	18.1%	24.2%	23.1%	23.4%	20.3%	38.3%
Never	5.8%	2.8%	6.5%	8.7%	2.2%	4.2%	5.2%	2.7%	3.5%	-
Not stated	27.8%	24.3%	13.0%	16.5%	12.0%	12.9%	20.6%	12.6%	35.4%	14.6%
WERE UNABLE TO DO THINGS WHICH SHOULD BE PART OF THEIR JOB										
All of the time	2.5%	-	2.0%	1.5%	1.6%	2.9%	0.8%	4.4%	-	5.4%
Most of the time	10.3%	10.3%	16.1%	12.0%	19.5%	13.3%	7.6%	14.0%	5.8%	15.2%
From time to time	35.1%	47.0%	39.9%	36.3%	43.9%	42.2%	43.5%	39.2%	31.2%	38.8%
Rarely	20.7%	16.0%	22.4%	25.5%	20.6%	21.8%	19.9%	25.2%	21.6%	25.0%
Never	3.5%	2.4%	6.6%	8.1%	2.4%	6.1%	7.6%	4.6%	6.0%	1.1%
Not stated	27.8%	24.3%	13.0%	16.5%	12.0%	13.6%	20.6%	12.6%	35.4%	14.6%

	Head teacher		Deputy head		Head of dept	Classroom teacher				
	Primary Full-time	Secondary Full-time	Primary Full-time	Secondary Full-time	Secondary Full-time	Primary		Secondary		Special Full-time
						Full-time	Part-time	Full-time	Part-time	
Proportion of respondents who thought they:	%	%	%	%	%	%	%	%	%	%
BELIEVED THEY HAD THE TIME TO DO THE JOB AS IT SHOULD BE DONE										
All of the time	1.9%	1.6%	-	-	0.3%	2.5%	2.0%	1.8%	1.1%	0.9%
Most of the time	32.2%	43.7%	53.2%	53.0%	35.7%	52.2%	57.8%	44.7%	41.3%	57.3%
From time to time	23.2%	17.9%	23.4%	17.5%	30.7%	21.2%	11.1%	23.1%	11.4%	17.1%
Rarely	13.2%	12.5%	10.3%	9.6%	19.5%	10.5%	6.5%	15.5%	9.9%	8.7%
Never	0.5%	-	-	3.3%	1.8%	1.1%	1.9%	2.2%	0.9%	1.4%
Not stated	29.0%	24.3%	13.0%	16.5%	12.0%	12.6%	20.6%	12.6%	35.4%	14.6%
FELT THEIR DUTIES REPRESENTED A GOOD USE OF THEIR TIME										
All of the time	3.4%	2.1%	1.9%	3.6%	2.4%	4.4%	5.9%	2.7%	4.8%	2.0%
Most of the time	32.2%	60.7%	61.6%	55.6%	37.7%	46.6%	48.0%	44.4%	39.2%	57.8%
From time to time	32.5%	8.3%	16.0%	17.3%	38.2%	28.5%	20.4%	28.9%	15.9%	20.8%
Rarely	4.1%	4.7%	7.5%	6.9%	8.2%	7.7%	3.4%	9.6%	4.8%	4.7%
Never	-	-	-	-	0.6%	0.3%	1.0%	0.8%	-	-
Not stated	27.8%	24.3%	13.0%	16.5%	12.9%	12.6%	21.3%	13.5%	35.4%	14.6%
FELT THEIR WORKLOAD ALLOWED THEM TO PURSUE PERSONAL INTERESTS OUTSIDE WORK										
All of the time	0.6%	-	2.4%	5.0%	1.9%	2.3%	11.0%	5.1%	5.2%	5.3%
Most of the time	16.5%	7.0%	22.0%	17.7%	19.0%	22.7%	32.5%	26.3%	15.1%	37.6%
From time to time	20.9%	27.8%	39.5%	30.2%	33.5%	31.6%	24.1%	29.1%	24.3%	28.9%
Rarely	27.7%	36.0%	19.3%	27.9%	29.1%	28.1%	10.0%	22.5%	20.0%	13.5%
Never	6.5%	4.9%	3.7%	2.8%	4.2%	2.6%	1.8%	4.4%	-	-
Not stated	27.8%	24.3%	13.0%	16.5%	12.4%	12.7%	20.6%	12.6%	35.4%	14.6%
Unweighted sample size	101	78	99	76	303	608	187	416	97	58

NB Proportion may not add to 100 as some teachers did not respond

Table A28 - Average total hours, teaching hours and hours worked at weekends, before school and after 6 pm for full-time classroom teachers, by the teachers view of "how much of the time it was possible to do the job as it should be done"

Weighted

How much of the time is it possible to do your job as it should be done	Sample Number (a)	Hours		
		Total	Teaching	At weekends, before school & after 6 p.m.
Primary schools	No	Hrs	Hrs	Hrs
	608	51.5	16.6	12.0
All of the time	11	(b)	(b)	(b)
Most of the time	323	51.5	16.3	12.4
From time to time	128	51.0	15.7	11.4
Rarely	64	53.9	18.0	12.9
Never	7	(b)	(b)	(b)
Secondary schools	416	48.7	18.8	11.6
All of the time	9	(b)	(b)	(b)
Most of the time	284	48.0	18.3	11.0
From time to time	180	49.8	18.3	12.1
Rarely	123	51.9	18.2	13.5
Never	17	(b)	(b)	(b)

(a) those giving no answer are included in the total but not the breakdown; unweighted sample numbers

(b) Omitted because of low sample numbers

Annex B1

TECHNICAL NOTES

Fieldwork

1. All sampled schools were sent an advance letter from BMRB informing them of the survey and asking for their co-operation. The advance letter was accompanied by a letter from the Chairman of the School Teachers' Review Body and the main teaching unions giving further information about the purpose of the survey.

2. BMRB interviewers arranged to visit each school. At that visit, they carried out a short interview with the head teacher and distributed pre-prepared survey packs within the school, placed personally with teachers wherever possible. At the same time, further appointments were made to undertake individual interviews with as many participating teachers as possible, in the week after the diaries had been completed. These follow-up interviews were designed in part to resolve any difficulties or queries arising from the diary, as well as serving to ensure that diaries were collected promptly.

Quality control

3. The results from the survey form a large and complex database of records relating to schools, teachers and working days. BMRB employed extensive data processing and checking procedures. Initial checks took place in the follow-up interview, at which obvious gaps or errors were corrected, where possible, in consultation with the appropriate teacher. Subsequently, a comprehensive edit specification, agreed with the OME, was used as the basis for extensive manual and computer editing. Careful checks were carried out for missing or conflicting information about start-times and durations of activities, missing activity codes, etc, and controlled editing undertaken where necessary to ensure the data conformed to basic design rules. On the whole, the quality of the data provided by teachers was good, although the volume of data produced an extensive editing task.

Sample design

4. The Teachers' Workload survey uses a multi-stage stratified random sample with clustering. It is drawn from a comprehensive listing of all schools in England and Wales, provided by the Department for Children, Schools and Families and the National Assembly for Wales. Sampling involves stratifying schools by type (and within primary only, by size). Schools within each stratum were then selected using different sampling schemes within different strata. Head teachers were selected from each school with certainty and the remaining teachers were selected with different probabilities, depending on the size of the school, with up to 14 teachers being selected in addition to the head teacher. The survey departs from Simple Random Probability Sampling (SRS) through the stratification of school types; clustering of teachers within schools; unequal selection probabilities, both of schools and teachers; and also the use of systematic sampling without replacement.

5. Tables B1.1 to B1.3 set out the drawn sample (i.e. the sample of schools approached to participate in the survey).

Table B1.1 **Primary schools**

Area	Number of schools		
	15 teachers or fewer	16 teachers or more	Total
London	2	13	15
Metropolitan	18	21	39
Unitary	19	13	32
County	55	28	83
Wales	8	3	11
Total	102	78	180

Table B1.2 **Secondary schools**

Area	No of schools
London	22
Metropolitan	57
Unitary	44
County	122
Wales	15
Total	260

Table B1.3 **Special schools**

Area	No of schools
England	19
Wales	1
Total	20

Response

6. Response rates are set out in Table B1.4.

Table B1.4 **Response rates**

	Schools			Teachers (a)			
	Approached	Co-operating		Approached	Responding	Useable	
		Number	Percent			Number	Percent
	No.	No.	%	No.	No.	No.	%
Primary	180	115	64%	1276	1064	1000	78%
London	15	7	47%	98	59	53	54%
Metropolitan	39	27	69%	336	273	255	76%
Unitary	32	22	69%	253	225	214	85%
County	83	56	67%	570	497	469	82%
Wales	11	3	27%	19	10	9	47%
Secondary	260	90	35%	1335	1039	994	74%
London	22	2	9%	30	16	14	47%
Metropolitan	57	16	28%	240	201	188	78%
Unitary	44	15	34%	214	183	174	81%
County	122	49	40%	731	563	544	74%
Wales	15	8	53%	120	76	74	62%
Special	20	16	80%	203	167	157	77%
England	19	15	79%	188	157	148	79%
Wales	1	1	100%	15	10	9	-
TOTAL	460	221	48%	2814	2270	2151	76%

(a) – only in schools which cooperated

7. The overall school response rate was higher in 2007 than in the 2006 survey, at 48 per cent compared with 43 per cent. This rise was largely accounted for by response in the primary and special sectors, with the overall response rate for primary schools up from 54 per cent to 64 per cent, and the response rate for special schools up from 70 per cent to 80 per cent. The response rate in secondary schools also increased from 33% to 35%.

8. The response rate in London, particularly that in secondary schools, is below the response rate achieved for other parts of the country, and hence could introduce non-response bias into the overall survey results. Detailed analysis shows that the average number of hours worked by the various categories of teacher in London can vary when compared with teachers outside London. The survey data have been weighted to the population of teachers in different areas to ensure that schools from different regions (including London) and different phases (primary, secondary, special) are properly represented in the overall results. However, if schools responding to the survey have different characteristics from those not responding then the results could be affected by some non-response bias. This has not been directly measured.

9. Some returned diaries were classified as unusable. Those excluded from the analysis included any where the teacher was absent for a day or more due to illness, or where he or she had not fully completed the diary for other reasons. The results are therefore based on a final sample of 2,151 teachers (up from 2,003 in 2006). The small proportion of excluded teachers was spread widely across the sample and their omission does not have any noticeable effect on the sample structure or its representation of teachers as a whole.

Diary completion

10. Overall, the diaries were well completed. However, some effects of the diary design and of the accuracy of completion should be noted.

11. The diary asked teachers to record the duration of each activity they carried out but, to avoid constant 'clock watching' and to ease completion, suggested that a minimum activity length of about 5 to 10 minutes be

used unless the teacher considered that the activity warranted a separate entry. Activities which normally occupy very short time periods will, therefore, tend to be under-represented in the analyses but, as each day's diary covered a continuous period from the start of the first working activity to the end of the last, the time occupied by such activities will be included in the total worked either under another specific heading or under "not allocated".

12. Teachers were also asked to record only their main activity if two or more activities took place simultaneously. This again may have altered the balance of time distribution in favour of activities which last for longer periods. However, teachers were asked to split the recording of an activity if there was an interruption (e.g. talking to a parent) or if another activity was carried out. Some teachers occasionally entered two or more activities against a period of work and these are shown as multi-coded activities.

13. Some teachers did not adhere to the rule that the diary should account for all the time between the first and the last work-related activity on each of the seven days. From a detailed inspection of a number of diaries in which there were gaps in the time recorded, from notes written in by the teachers, from checking against the start and end times of the school day and from the experience of earlier surveys, it was clear that such teachers had omitted their "own time", particularly at the start of the diary week and at the weekend. In the preparation of the data, additional entries were inserted to account for any gaps. Where the gap occurred at the weekend, ended before the start of the school day, started after the end of the school day or was wholly within the school lunch break or other breaks, the entry has been coded as "own time". Other missing time periods, which were within school hours or included the start or end times of the school day or of the lunch break, have been treated as "not allocated", together with those activities for which the teacher did not enter an activity code.

Classification of teachers to analysis categories

14. For purposes of analysis, teachers have been grouped by a number of attributes: some of these relate to the school (e.g. its size in terms of pupils, or its type of catchment area); others to the teachers as individuals (e.g. their age or length of service); and others to their circumstances within the school (e.g. the year group taught, or the number of pupils in their class). All these attributes were obtained explicitly from the former DfES/National Assembly for Wales, the head teacher or the individual teachers.

Weighting

15. The results have been re-weighted, to account for the different sampling fractions and different response rates between types of school and region, in order to have a representative sample. The re-weighting also accounts for the numbers of each type of teacher responding, compared to the overall numbers in all schools. All the tables in Annex A are based on the re-weighted results, while sample sizes are given as unweighted figures (ie the actual number of usable responses).

Estimates of precision

16. Because the Teachers' Workloads Diary Survey is based on a *sample* of teachers and not the whole teacher population, the results are liable to differ to some degree from those that would have been obtained if every single teacher had been covered. We can make some assessment of sampling variability, that is the differences in hours worked between the teachers in the sample and in the whole population that arise from random chance. The degree of possible measurement error depends on both the sample size and on how widely estimates of hours worked vary between teachers. This 'sampling error' is likely to be smallest for categories of teacher with a large sample and whose reported hours do not vary greatly. Conversely, it is likely to be largest where sample sizes are small and the numbers of hours reported vary considerably.

Design Effects and Standard Errors

17. Due to the complex sampling design used, the margins of error associated with the survey estimates are likely to be larger than if a simple random sample (SRS) design had been used. To take account of this, Design Effects (DEFFs) have been calculated for the most important estimates. The Design Effect is the ratio of the variance under the complex sample design to the variance of a SRS design.

18. While stratification will tend to decrease the variance, unequal selection probabilities (design weighting) and clustering will both tend to increase it. Generally most overall design effects for surveys with complex sample designs, such as this one, are greater than one.

19. For this survey, Design Effect and complex Standard Error calculations for key measures have been undertaken using STATA statistical software and employing the “Taylor Series” or “Taylor Linearization” method. These calculations take account of the design of the sample and the achieved sample sizes (and resultant weighting) within strata.

Confidence Intervals

20. We can use the resultant Standard Errors to assess what the margins of error (‘confidence intervals’) are likely to be around the survey’s key estimates. It is common when quoting confidence intervals to refer to the 95% confidence interval around a survey estimate. This is calculated as 1.96 times the Standard Error on either side of the estimated percentage or mean since, under a normal distribution, 95% of values lie within 1.96 standard errors of the mean value. If it were possible to repeat the survey under the same conditions many times, 95% of these confidence intervals would contain the population values but, when assessing the results of a single survey, it is usual to assume that there is only a 5% chance that the true population value falls outside the 95% confidence interval calculated for the survey estimate.

21. We can therefore establish the interval as $\bar{x} \pm 1.96 \text{ SEs}$ (where \bar{x} represents the mean obtained from the survey). Taking an example from the 2007 survey, the confidence interval for the average total hours worked by Primary School Heads in 2007 is:

$$\begin{aligned}\bar{x} \pm 1.96 \text{ SE} &= 54.2 \text{ hours} \pm (1.96 * 1.22 \text{ hours}) \\ &= 54.2 \text{ hours} \pm 2.4 \text{ hours}\end{aligned}$$

In summary, although the survey provides our best estimate ($\bar{x} = 54.2$ hours) of the population mean, statistical theory can be used to show we can be very confident that the true population mean lies between 51.8 and 56.6 hours.

Measuring whether differences between surveys are real

22. Once the complex Standard Errors have been calculated, a survey estimate, e.g. the average (mean) total hours worked per week, can be compared with the corresponding estimate from a previous survey to test whether any difference in their values is statistically significant. To undertake this comparison, we conduct ‘Hypothesis Tests’.

23. To illustrate this, let us take an example of the estimated average total hours by Primary Head Teachers in 2000 (58.9 hours) and 2007 (54.2 hours). Using the language of hypothesis testing, let us say that we want to test the ‘null hypothesis (H_0)’ that the difference between the two population means for which we have these estimates is zero, i.e. that there is no true difference between them. The ‘alternative hypothesis (H_1)’ is that there *is* a difference between the population means.

There are four possibilities that might arise when we draw our conclusions.

1. The null hypothesis is correct (there is no true difference) and we correctly conclude this.
2. The null hypothesis is correct (there is no true difference) but we incorrectly conclude otherwise. Hence, an error is made.
3. The null hypothesis is incorrect (there is in fact a difference) and we correctly conclude this.
4. The null hypothesis is incorrect (there is in fact a difference) and we incorrectly conclude otherwise. Hence, an error is made.

In possibilities 1 and 3 we reach the correct conclusions. In possibility 2, we erroneously reject the null hypothesis – this is referred to as a *Type I error*. In possibility 4, we erroneously accept the null hypothesis – this is referred to as a *Type II error*.

24. Statistical hypotheses are statements concerning *population* parameters but we are working here with sample estimates for those parameters. Therefore, the question we are asking is whether we are willing to

attribute the difference between the two sample means to chance. If, on the basis of our test, we find that the difference is too large to attribute to chance, then we can conclude that the *populations* from which the samples were drawn have unequal means.

25. Returning to our example, the surveys estimates are as follows:

Average total working hours of Primary Heads

	Mean	Complex Std error
2000	58.9	0.67
2007	54.2	1.42
Difference between years	4.7	1.57 (SE of the difference)

We are prepared to run a 5 per cent risk of incorrectly rejecting the null hypothesis (a Type 1 error) that the population means in the respective years were the same. If we refer to the mean total hours working of *all* Primary Heads (i.e. the *population* mean) in 2000 and 2007 as μ_1 and μ_2 respectively, the hypotheses to be tested are:

$$H_0: \mu_1 - \mu_2 = 0$$

$$H_1: \mu_1 - \mu_2 \neq 0$$

26. Having set the risk of a Type 1 error at 5 per cent, we turn to the decision rule (based on the appropriate random sampling distribution). The test is two-tailed, because the hypothesis of equal population means will be rejected if $\bar{x}_1 - \bar{x}_2$ differs significantly from zero by lying sufficiently far above or below it. For a significance level of 5 per cent, we will reject the null hypothesis if the sample difference $\bar{x}_1 - \bar{x}_2$ falls more than 1.96 Standard Errors* from the expected value of zero.

*The standard error of the difference between the means

The test statistic we employ is z (the difference between the sample means divided by the standard error of that difference)

In terms of z values, the decision rule can be stated:

$$\text{If } z < -1.96 \text{ or } z > 1.96 \text{ reject } H_0$$

Applying the decision rule to our example, we have

$$z = \frac{4.7}{1.57} = 2.99$$

27. Because 2.99 exceeds 1.96, the null hypothesis is rejected. Hence it is extremely unlikely that these two samples represent populations with the same mean. In terms of the example, we conclude that the 2007 survey estimate of 54.2 hours represents a statistically significant change from the 2000 survey figure of 58.9 hours.

28. Significant changes in key estimates between 2007 and earlier years are included in Table 1.

Annex B2

ACHIEVED SAMPLE DETAILS

Table

- B2.1 Distribution of schools by area, region, status and catchment area
- B2.2 Distribution of schools by size and number of deputy and assistant heads
- B2.3 Distribution of schools by pupil-related factors
- B2.4 Distribution of schools by head teacher's view of diary week

Notes on tables in Annex B2

All tables are based on unweighted data

The following conventions have been used:

- nil

Table B2.1 Distribution of schools by area, region, status and catchment area

Unweighted

		Primary	Secondary	Special
		%	%	%
Area	London	3.6	2.4	12.5
	Metropolitan	22.1	14.2	31.2
	Unitary	19.6	17.2	12.5
	County	51.3	55.2	37.5
	Wales	3.5	11.0	6.3
Region	North East	7.7	4.8	-
	North West	11.4	10.5	18.8
	Yorkshire and the Humber	15.2	6.6	12.5
	East Midlands	6.6	7.2	-
	West Midlands	15.4	13.8	12.5
	South West	11.9	11.8	6.3
	Eastern	13.4	14.9	18.8
	Greater London	3.6	2.4	12.5
	South East	11.3	15.2	12.5
Wales	3.5	11.0	6.3	
Status	Foundation	7.3	13.6	12.5
	Voluntary	28.3	13.0	-
	Community	61.0	66.5	81.3
	Not known	3.4	6.9	6.3
Catchment	Inner City	11.6	7.4	-
	Urban/suburban	34.0	27.8	12.5
	Rural	26.6	14.5	-
	Inner city/urban	5.0	9.3	25.0
	Urban/rural	18.8	33.2	43.8
	None of these	1.2	4.1	12.5
	Not known	2.9	3.8	6.3
Schools	Schools in sample	115	90	16

Table B2.2 Distribution of schools by size and number of deputy heads

Unweighted

		Primary	Secondary	Special
		%	%	%
FTE pupil numbers	Under 50	3.5	-	25.0
	51- 200	53.3	-	75.0
	201- 400	35.0	5.8	-
	401- 600	7.7	15.8	-
	601- 800	0.6	29.3	-
	801- 1000	-	15.9	-
	1001- 1500	-	29.7	-
	1501 or over	-	3.5	-
	Not known	-	-	-
Total FTE staff	Under 4	4.6	-	-
	4- 6	24.3	-	6.3
	7- 9	28.9	-	18.8
	10- 12	21.4	-	25.0
	13- 20	17.4	5.8	31.2
	21- 40	3.4	30.0	18.8
	41- 60	-	30.6	-
	61- 80	-	20.5	-
	81- 100	-	11.6	-
	101 or over	-	1.5	-
Not known	-	-	-	
Number of deputy heads	None	16.1	0.8	-
	1	65.7	4.7	25.0
	2	9.2	22.1	43.8
	3	4.2	10.7	18.8
	4 or more	2.0	57.4	6.3
	Not known	2.9	4.3	6.3
Schools	Schools in sample	115	90	16

Table B2.3 Distribution of schools by pupil related factors

Unweighted

		Primary	Secondary	Special
		%	%	%
Percentage of statemented pupils	Under 0.5	25.4	6.3	-
	0.5 – 0.9	21.3	10.3	-
	1.0 – 1.9	27.6	26.0	-
	2.0 – 4.9	25.3	45.9	-
	5.0 or over	0.4	11.5	100.0
Percentage pupils free meals	Under 5.0	32.7	30.6	12.5
	5.0 – 9.9	24.8	30.8	-
	10.0 – 19.9	18.0	22.6	12.5
	20.0 – 29.9	10.1	8.3	12.5
	30.0 – 39.9	10.4	5.2	37.5
	40.0 or over	4.0	2.5	25.0
	Not known	-	-	-
Schools	Schools in sample	115	90	16

Table B2.4 Distribution of schools by head teacher's view of diary week

Unweighted

		Primary	Secondary	Special
		%	%	%
Representativeness of diary week	More busy	17.1	5.8	-
	About same	66.7	82.1	93.8
	Less busy	12.9	5.8	-
	Not known/stated	3.3	6.3	6.3
Special events in diary Week	Yes	54.9	49.9	37.5
	No	36.6	42.6	50.0
	Not stated	8.5	7.5	12.5
Schools	Schools in sample	115	90	16

