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The Teaching and Learning International Survey (TALIS) 2018

Research report

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Contents

List of figures	4
List of tables	7
Acknowledgements	13
Executive summary	14
Chapter 1: Introduction	23
1.1 What is the policy background for TALIS in England?	24
1.2 What existing data sources are there for England?	26
1.3 What data were collected in England by TALIS 2018?	27
1.4 What can TALIS tell us – and what can it not tell us?	31
1.5 Which countries should England be compared with?	32
1.6 What does the report cover?	35
Chapter 2: The characteristics of teachers, headteachers and schools	37
2.1 The demographic characteristics of teachers in England compared to other countries	38
2.2 How well staffed were England's schools?	45
2.3 The educational qualifications and training of teachers and headteachers in England	50
2.4 How prepared did teachers feel following their initial teacher training?	57
2.5 Why did teachers decide to enter the teaching profession?	63
2.6 Was teaching the first-choice career amongst most teachers in England?	69
Chapter 3: Workload and flexible working	74
3.1 What were the average weekly working hours of teachers in England?	75
3.2 How much time did teachers spend on teaching and non-teaching activities?	81
3.3 What tasks did teachers feel they spent too much time on?	89
3.4 Did teachers believe that their workload was unmanageable?	94
3.5 How did headteachers spend their working week?	96
3.6 How did teachers and headteachers view flexible working?	102
Chapter 4: The views of teachers in England	107
4.1 Did teachers believe that their pay was fair?	108
4.2 Did teachers believe that their profession was valued by society?	116

4.3 Were teachers happy in their jobs?	122
Chapter 5: Professional development	130
5.1 What CPD was undertaken by teachers in the year prior to the TALIS survey?	131
5.2 What support did schools provide teachers undertaking CPD activities?	136
5.3 What were the characteristics of CPD activities that teachers felt had the greatest positive impact upon their practise?	140
5.4 What CPD did teachers in England say that they need?	145
5.5 What did teachers perceive to be the greatest barriers to receiving more CPD?	153
5.6 What were the CPD activities, barriers and needs of England's headteachers	160
Chapter 6: The school and class environment	172
6.1 To what extent was there noise and disorder in England's classrooms?	173
6.2 How confident were teachers in their ability to manage disruptive classrooms?	179
6.3 Headteachers views on school environment and discipline	184
6.4 How open were teachers in England to innovation and change?	190
6.5 Did teachers feel that they could rely upon colleagues for support?	193
Chapter 7: Views on school resources	195
7.1 If the education budget increased, how would teachers spend the money?	196
7.2 To what extent did headteachers believe that staff shortages were limiting their school's capacity to provide quality instruction?	203
7.3 Did headteachers in England believe that a shortage of instructional materials was limiting their school's capacity to provide quality instruction?	209
Bibliography	213
Appendix A: Sampling and response rates	215
Appendix B: High-performing and low-performing countries	220
Appendix C: Sample sizes for sub-groups in England	223

List of figures

Figure 2.1.1 The percentage of female teachers and headteachers across countries.	39
Figure 2.1.2. Years of teaching experience compared across countries.	41
Figure 2.1.3. Headteachers years of experience compared across countries.	43
Figure 2.2.1. The pupil:teacher ratio compared to average class sizes across countries. Lower-secondary schools.	46
Figure 2.2.2. The teacher:pedagogical support ratio compared to the teacher:administrator ratio across countries.	49
Figure 2.3.1 International comparison of whether teaching in mixed-ability / multicultural settings was part of formal training.	53
Figure 2.3.2 Variation in whether different components were covered within initial teacher education by year completed. Lower-secondary teachers in England.	54
Figure 2.3.3 Percentage of headteachers who completed a formal headship course.	56
Figure 2.4.1 Relationship between year of completion of formal education and feeling of preparedness for selected elements of teaching. Lower-secondary teachers in England.	60
Figure 2.4.2 Percentage of teachers who felt prepared following their initial teacher training in the content and pedagogy of the subjects that they teach. Cross-national comparison.	62
Figure 2.5.1 Gender differences in benefitting disadvantaged pupils being a strong motivation to enter the teaching profession. Cross-national comparison for lower-secondary teachers.	66
Figure 2.5.2 International comparison of motivations to enter the teaching profession. Lower-secondary teachers.	68
Figure 2.6.1 Gender differences in the percentage of lower-secondary teachers for whom teaching was their first-choice career. Cross-country comparison.	73
Figure 3.1.1 Inconsistencies in reported working hours. Results for primary and lower-secondary teachers in England.	78

Figure 3.2.1 Time allocation of full-time lower-secondary teachers in England by role.	83
Figure 3.2.2 Time spent upon teaching and non-teaching tasks reported by full-time lower-secondary teachers in England compared to other countries.	85
Figure 3.3.1 The hours primary teachers in England reported spending upon selected tasks compared to whether they felt the task took up too much time.	92
Figure 3.4.1 The association between working hours and whether primary teachers in England felt that their workload was manageable.	95
Figure 3.5.1 Percentage of time lower-secondary headteachers allocated to administration versus leadership duties. Cross-national comparison.	100
Figure 4.1.1 International comparisons of the satisfaction of lower-secondary teachers with pay.	110
Figure 4.1.2. Cross-national comparison of average lower-secondary teacher pay to the percentage of lower-secondary teachers satisfied with their salary.	111
Figure 4.1.3 The views of lower-secondary teachers in England towards pay in 2013 and 2018.	114
Figure 4.2.1. Cross-national comparison of whether lower-secondary teachers felt their profession was valued by policymakers and the media.	118
Figure 4.3.1. Cross-national comparison of aspects of lower-secondary teachers' job satisfaction.	124
Figure 5.1.1 International comparison of the percentage of lower-secondary teachers who completed CPD in person versus online.	135
Figure 5.2.1 International comparison of the percentage of lower-secondary teachers who reported their CPD costs were paid versus the percentage who said materials were provided.	139
Figure 5.3.1 Cross-national comparison of primary teachers' views of whether effective CPD focused upon innovation versus active learning.	143
Figure 5.4.1 Cross-national comparison of lower-secondary teachers' needs for CPD in teaching SEN pupils versus pupil-assessment practices.	150
Figure 5.5.1 International comparison of the barriers to CPD participation amongst lower-secondary teachers. Expense versus work schedule.	156

Figure 5.6.1 Cross-national comparison of the CPD needs of lower-secondary headteachers. Human resource management versus financial management.	166
Figure 5.6.2 International comparison of headteachers barriers to CPD. Expense versus conflict with work schedule.	169
Figure 6.1.1 Cross-national comparison of disruption within the target class. Results for lower-secondary teachers.	178
Figure 6.2.1. International comparison of whether primary teachers felt that they could maintain classroom behaviour.	183
Figure 6.3.1. Cross-national comparisons of hurtful information posted online and unwanted electronic contact amongst pupils. Reported frequency by lower-secondary headteachers.	187
Figure 6.4.1 International comparison of whether lower-secondary teachers felt their colleagues strived to develop new ideas or were open to change.	192
Figure 7.1.1. Cross-national comparison of the spending priorities of lower-secondary teachers. Increasing pay versus reducing class sizes.	198
Figure 7.2.1 International comparison of whether staff shortages had hindered school instruction. Lower-secondary headteachers.	206
Figure 7.3.1 Cross-country comparison of shortages of physical learning resources. Lower-secondary results.	211

List of tables

Table 1.3.1 The TALIS sample for England	29
Table 1.5.1 The classification of countries for lower-secondary school comparisons	33
Table 1.5.2 The classification of countries according to primary school performance	35
Table 2.1.1 Number of years of experience of lower-secondary headteachers. England compared to the OECD average and high-performing countries.	42
Table 2.1.2 The percentage of teaching career lower-secondary headteachers had spent working as a headteacher. Cross-national comparison.	44
Table 2.2.1. Pupil:teacher, teacher:pedagogical support staff and teacher:administrator ratios across participating countries. Primary schools.	47
Table 2.3.1. The educational qualifications of teachers compared across countries.	51
Table 2.5.2 Gender differences in motivations to enter teaching in England.	65
Table 2.5.3 The factors that motivated primary teachers to enter the profession. England compared to other participating countries.	67
Table 2.6.1 The percentage of teachers in England for whom teaching was their first-choice career.	69
Table 2.6.2 Differences in motivations for entering teaching by whether this was first-choice career. Results for England.	71
Table 2.6.3 The link between whether teaching was first-choice career and job satisfaction. Teachers in England.	72
Table 3.1.1 Weekly working hours amongst teachers in England.	76
Table 3.1.2 The distribution of working hours as reported by lower-secondary school teachers in England in 2013 and 2018.	77
Table 3.1.3 International comparison of the reported average number of hours worked by full-time lower-secondary teachers per week.	79
Table 3.1.4 International comparison of the reported average number of hours worked by full-time primary teachers per week.	80

Table 3.2.1 Average hours per week teachers in England reported spending upon selected tasks.	82
Table 3.2.2 Time lower-secondary teachers in England spent upon selected tasks. Change between 2013 and 2018.	84
Table 3.2.3 Average number of reported hours spent upon different tasks across selected countries (full-time teachers).	87
Table 3.3.1 Views of teachers in England with respect to the amount of time they spent upon selected tasks.	90
Table 3.3.2 The percentage of lower-secondary teachers in England who said they spent too long on selected tasks by job role.	93
Table 3.4.1 Did primary and lower-secondary teachers in England feel that their workload was unmanageable?	94
Table 3.4.2 Did perceptions of workload amongst lower-secondary teachers in England change between 2013 and 2018?	96
Table 3.5.1 Working hours amongst headteachers in England.	97
Table 3.5.2 Time allocation of primary and lower-secondary headteachers in England.	98
Table 3.5.3 Change to how lower-secondary headteachers in England allocated their time between 2013 and 2018.	99
Table 3.5.4 To what extent did headteachers in England believe that their workload was unmanageable?	101
Table 3.5.5 The perceptions of workload amongst lower-secondary headteachers in England. Change between 2013 and 2018.	101
Table 3.6.1 The attitude of primary and lower-secondary teachers in England towards flexible working.	103
Table 3.6.2 The attitude of primary and lower-secondary headteachers in England towards flexible working.	105
Table 3.6.3 Attitudes towards flexible working. A comparison of the views of lower-secondary teachers and headteachers in England.	106
Table 4.1.1 The views of primary and lower-secondary teachers in England towards pay.	108

Table 4.1.2. Views of pay by motivation for entering teaching. Results for teachers in England.	113
Table 4.1.3. Change in lower-secondary teachers' views of whether teachers were underpaid relative to other professionals. Results for England by school and teacher characteristics.	115
Table 4.2.1. Did primary and lower-secondary teachers in England believe that the teaching profession was valued by society?	117
Table 4.2.2 Did lower-secondary teachers in England change their views as to whether the teaching profession was valued by society between 2013 and 2018?	119
Table 4.2.3 Change in lower-secondary school teachers' views on the value society places upon teachers. Results for England by school and teacher characteristics.	119
Table 4.2.4 Linear probability model investigating the decline in lower-secondary teachers' views that society values the teaching profession between 2013 and 2018.	121
Table 4.3.1. Satisfaction with the teaching profession amongst primary and lower-secondary teachers in England.	123
Table 4.3.2. Linear probability model examining why lower-secondary teachers had lower levels of job satisfaction than primary teachers in England.	126
Table 4.3.3. Change in the job satisfaction of lower-secondary teachers in England between 2013 and 2018.	126
Table 4.3.4 Change in the percentage of lower-secondary teachers who wondered whether it would have been better to choose another profession. Results for England by school and teacher characteristics.	128
Table 5.1.1 The CPD activities completed by teachers in England during the 12 months prior to the TALIS survey.	131
Table 5.1.2 The relationship between number of years teaching experience and the types of CPD activities completed by teachers in England in the year prior to the TALIS survey.	133
Table 5.1.3 Change in lower-secondary teachers' CPD activities between 2013 and 2018 in England.	134
Table 5.2.1 The support and rewards teachers in England said they received for CPD in the 12 months preceding the TALIS survey.	137

Table 5.2.3 Changes in the support lower-secondary teachers in England said they received for their CPD activities between 2013 and 2018.	138
Table 5.3.1 The characteristics of CPD that teachers in England felt had the greatest impact upon their teaching.	141
Table 5.3.2 Differences in the views of the characteristics of high-quality CPD between full-time and part-time teachers in England.	143
Table 5.4.1 The CPD needs of teachers in England.	145
Table 5.4.2 The link between the CPD needs of teachers in England and number of years of teaching experience.	148
Table 5.4.3 Change in the CPD needs of lower-secondary teachers between 2013 and 2018. Results for England.	149
Table 5.4.4 The percentage of lower-secondary teachers who reported a <u>high</u> CPD need. England compared to the OECD average.	151
Table 5.5.1 The barriers to participation in CPD activities amongst teachers in England.	153
Table 5.5.2 Change in barriers to CPD participation between 2013 and 2018. Results for lower-secondary teachers in England.	155
Table 5.5.3. Barriers to the CPD of lower-secondary teachers. England in comparisons to high-performing countries and the OECD average.	157
Table 5.5.4. Barriers to the CPD of primary teachers. England in comparison to other participating countries.	158
Table 5.6.2 Cross-country comparison of the CPD activities of headteachers in 12 months prior to TALIS survey.	162
Table 5.6.3 CPD needs of headteachers in England.	164
Table 5.6.4. The percentage of lower-secondary headteachers who said that they had a <u>high</u> CPD need. England compared to the OECD average.	167
Table 5.6.5 What were the barriers that prevented primary and lower-secondary headteachers in England from completing more CPD?	168
Table 5.6.6. Barriers to CPD amongst lower-secondary headteachers. England compared to the OECD average and high-performing countries.	170

Table 5.6.7 Barriers to CPD amongst headteachers in England. Change between 2013 and 2018.	170
Table 6.1.1 Percentage of time teachers in England spent upon maintaining order in the classroom.	173
Table 6.1.2 The learning environment within the target class in England.	174
Table 6.1.3 Variation in lesson disruption by characteristics of the target class in England. Primary and lower-secondary combined.	175
Table 6.1.4 Relationship between teaching experience and disruption reported in the target class. Results for England.	176
Table 6.1.5 The behaviour of lower-secondary pupils in England. Change between 2013 and 2018.	177
Table 6.2.1 The views of primary and lower-secondary teachers in England as to whether they could maintain discipline within class.	180
Table 6.2.2. The link between teaching experience and whether teachers felt they could maintain discipline in their target class. Results for England.	181
Table 6.2.3. Did teachers who struggled to maintain classroom discipline feel that they needed further CPD in behaviour management? Combined results for primary and lower-secondary teachers in England.	181
Table 6.2.4. The views of lower-secondary teachers in England as to whether they could maintain classroom discipline. Change between 2013 and 2018.	182
Table 6.3.1. Behavioural issues within England's schools. Occurrences reported by headteachers in England.	185
Table 6.3.2. Occurrence of behavioural issues within England's schools. Change between 2013 and 2018.	186
Table 6.3.3. Reported behavioural issues within lower-secondary schools (at least weekly). England compared to the OECD average and high-performing countries.	189
Table 6.4.1 Teachers' reports of whether their colleagues developed and applied new teaching approaches within their school. Results for England.	190
Table 6.5.1 Could teachers rely upon each other for support? The views of teachers and headteachers in England.	193

Table 6.5.2 Lower-secondary teachers' views of whether they could rely upon each other for support. England compared to the OECD average and high-performing countries.	194
Table 7.1.1. The funding priorities of teachers in England.	196
Table 7.1.2. Priorities for additional spending compared across countries.	200
Table 7.2.1 Did headteachers believe staff shortages were hindering instruction within their school? Results for England.	204
Table 7.2.2 Change in whether lower-secondary headteachers felt staff shortages were hindering instruction within their school. Results for England.	205
Table 7.2.3 International comparison of whether staff shortages had hindered instruction in lower-secondary schools. England compared to high-performing countries and the OECD average.	207
Table 7.2.4 International comparison of whether staff shortages had hindered instruction in primary schools. England compared to other participating countries.	208
Table 7.3.1 Did a lack of physical learning resources hinder school instruction? The views of headteachers in England.	209
Table 7.3.2 The views of lower-secondary headteachers in England as to whether shortages of physical learning resources had hindered school instruction. Change between 2013 and 2018.	210
Table 7.3.3 Cross-national comparison of whether shortages of physical learning resources had hindered school instruction. Lower-secondary results comparing England to high-performing countries and the OECD average.	212
Table A1. Characteristics of the drawn and achieved state primary school sample	218
Table A2. Characteristics of the drawn and achieved state lower-secondary sample	218
Table B1. The classification of countries for lower-secondary performance	221
Table B2. The classification of countries according to primary school performance	222
Table C1 Teacher characteristics (number of teachers)	223
Table C2 School characteristics (number of teachers)	224

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Executive summary

Introduction

The Teaching and Learning International Survey (TALIS), run by the Organisation for Economic Co-operation and Development (OECD), provides new information on the views and practices of teachers and headteachers, and how these vary across countries. The survey was conducted in England between March and May in 2018. This was the second time lower-secondary school (key stage 3) teachers in England participated in the TALIS study (the first time was in 2013) and the first time for primary teachers. In total, 48 countries or economies participated in the lower-secondary school survey, with 15 participating in the primary school survey. The Department for Education (DfE) commissioned FFT Education and UCL Institute of Education to conduct the TALIS 2018 study in England.

The OECD is releasing data from the TALIS 2018 survey as part of 2 international reports: the first in June 2019 and the second in 2020. This report, which is focused upon England, is published simultaneously with the OECD's first volume. It covers issues such as the characteristics of teachers and headteachers in England, workload, job satisfaction, resources and the school and classroom climate. This complements the OECD's international report by (i) providing a more focused comparison of results in England with other countries and (ii) analysing differences within England across school and teacher characteristics. Findings relating to teacher retention and the well-being of teachers and headteachers in England will be released in spring 2020, to coincide with the release of the OECD's second volume.

For lower-secondary teachers and headteachers, results for England are compared with the average across OECD members. Comparisons are also made to a group of countries or economies with high-performing education systems (as defined by results from the Programme for International Student Assessment (PISA)): Japan, Korea, Singapore, Chinese Taipei, Shanghai (China), Finland, Estonia and Alberta (Canada). The report reveals that teachers' views and practices often vary widely among these high performers. Given the more limited number of participants in the TALIS primary school study, England is typically compared with all the available countries that met the TALIS technical standards. Similarly, as England only participated in the lower-secondary component of TALIS in 2013, comparisons over time are only possible for lower-secondary (and not primary teachers) in England. For further detail see the TALIS 2018 technical report¹.

¹ OECD (2019 - forthcoming).

The analysis of differences within England includes two types of information not available in the international data. First, it includes the answers to additional TALIS questions asked only in England. Second, it includes data linked from other sources such as school Ofsted rating and the percentage of pupils receiving Free School Meals (FSM).

The 2018 lower-secondary school survey had response rates of 82% for schools, 82% for headteachers and 84% for teachers. This yielded a final sample of 149 lower-secondary schools and 2,376 teachers. At the primary level, the response rates were 86% for schools, 90% for headteachers and 85% for teachers. This yielded a total sample size of 152 primary schools and 2,009 primary teachers. These are good response rates by the standards of previous school and teacher surveys in England; they are higher than achieved for the TALIS 2013 survey for England and considerably above the level for other teacher surveys that have been conducted. Nevertheless, the modestly sized sample of schools and headteachers means that some findings that relate to the variation between schools or headteachers, as opposed to teachers, need to be treated with caution.

The results refer to the spring of 2018, when TALIS was conducted, and should not necessarily be taken as a good indication of the situation at the present time. It should also be noted that the analysis in each chapter uncovers correlations but does not establish causal relationships.

Key Findings

The characteristics of teachers, headteachers and schools

Chapter 2 compares the profile of primary and lower-secondary teachers in England, and the schools in which they work, to other countries.

Primary and lower-secondary teachers in England had fewer years of experience, on average, than most other participating jurisdictions. For example, lower-secondary teachers in England had 13 years of teaching experience on average, compared to an OECD average of around 17 years.

Similarly, headteachers in England had fewer years of experience on average than headteachers in other countries, though this was compensated for by greater experience in other school management roles. For instance, the average lower-secondary headteacher in England had spent 6.3 years working as a head (OECD average 9.7 years) and 13.2 years working in other school management roles (OECD average 5.3 years).

Primary teachers in England were more likely to report having been trained in teaching mixed-ability and multicultural classes as part of their initial teacher training (ITT) than primary teachers in the other participating countries. For instance, around 91% of primary teachers in England reported that they received training in teaching in mixed-ability settings, compared to an average of around 73% across all participating countries. The equivalent figures for teaching in multicultural settings were 72% for England's primary teachers compared to around 40% or less in most of the other TALIS participating countries. Primary teachers in England also reported feeling more prepared for teaching in such situations by the end of their training. In contrast, primary teachers in England felt less prepared in subject-specific content (England = 64%; TALIS average = 77%) and pedagogy (England = 65%; TALIS average = 74%) than those in other participating countries.

Around 40% of primary and lower-secondary teachers in England said that the reliable income of teaching was of high importance to their decision to enter the teaching profession, while only around 15% said this was of little or no importance. For more than 90% of primary and lower-secondary teachers in England, the chance to contribute to society and to aid the development of pupils were also key reasons why they chose to enter the teaching profession. Lower-secondary teachers in England were more likely to say that job security and the reliable income were what attracted them to teaching than lower-secondary teachers in other countries. For instance, 86% of lower-secondary teachers in England said that the reliable income provided by teaching was of moderate or high importance to their career decision, compared to an OECD average of 67%.

Teaching was the first-choice profession of 59% of lower-secondary teachers in England. This was below the OECD average (67%) and was some distance behind the levels observed in the high-performing East Asian economies of South Korea, Japan, Chinese Taipei and Shanghai (where more than 80% of teachers reported working in their first-choice career). For primary teachers in England, 72% said that teaching was their first-choice career.

Workload and flexible working

Chapter 3 examines teachers' and headteachers' working hours and perceptions of workload. This includes hours spent upon face-to-face teaching and time spent carrying out other activities, such as planning, marking and administration.

In 2013, full-time lower-secondary teachers in England reported working, on average, 48.2 hours per week. The equivalent figure in England in 2018 was 49.3 hours per week, which was above the OECD average (around 41 hours per week). Full-time primary teachers in England reported working somewhat longer hours each

week (52.1 hours), which was more than in any other participating country except Japan (56 hours).

Teachers were asked about the amount of time they spent upon different tasks in a different survey question, producing a slightly higher figure for total working hours. Full-time primary teachers in England reported spending, on average, 24.1 hours per week upon teaching and around 31.9 hours upon non-teaching tasks (including, but not exclusive to, marking, preparation, administration, management). The equivalent figures for full-time lower-secondary teachers were 20.5 hours (teaching) and 32.7 hours (non-teaching tasks). While the amount of time full-time lower-secondary teachers spent upon teaching was similar to the OECD average (around 21.5 hours per week), the amount of time spent upon non-teaching tasks was higher in England than across the OECD (26 hours per week). The total amount of time full-time lower-secondary teachers spent upon non-teaching tasks was similar in 2013 (32.5 hours per week) and 2018 (32.7 hours per week).

In total, 53% of primary and 57% of lower-secondary teachers in England felt that their workload was unmanageable. The figure for lower-secondary teachers increased between 2013 (51%) and 2018 (57%). More than half of primary and lower-secondary teachers in England reported that they spent too long upon marking and administrative work. In contrast, 35% of primary and 45% of lower-secondary teachers felt that they spent too little time upon continuing professional development (CPD).

In 2018, the average primary headteacher in England worked around 57 hours per week, compared to around 62 hours for the average lower-secondary headteacher. Lower-secondary headteachers in England spent a slightly smaller proportion of their time on administrative duties (25% versus 30%) but more on leadership tasks (27% versus 21%) than the average across OECD countries. A similar proportion of lower-secondary headteachers in England reported their workload was unmanageable in 2018 (43%) as did in 2013 (36%).

Around two-thirds of all primary and lower-secondary teachers in England felt that working part-time reduces career opportunities, with around a third indicating that they would not feel comfortable requesting part-time or flexible working. Despite this, most headteachers reported that school management were supportive of flexible working; 88% of primary and 93% of lower-secondary headteachers agreed or strongly agreed.

The views of teachers in England

Chapter 4 investigates primary and lower-secondary teachers' perceptions of their pay, including whether this changed between 2013 and 2018. It also explores whether teachers felt that their profession was valued by society, policymakers and the media, and whether teachers were satisfied in their jobs.

It is important to note that the TALIS 2018 survey was conducted before it was announced that the main pay range would be uplifted by 3.5%, the upper pay range by 2% and the leadership pay range by 1.5% the following academic year. Lower-secondary teachers in England were less satisfied with their pay in 2018 than in 2013. In total 89% of primary and 87% of lower-secondary teachers felt that teachers were underpaid compared to similarly qualified professionals. The equivalent figure in 2013 for lower-secondary teachers was 73%. However, lower-secondary teachers in England were somewhat more likely to indicate that they were satisfied with their salary than lower-secondary teachers in other OECD countries (54% in England versus an OECD average of 39%). England (49%) was around the international average (47%) in terms of how satisfied primary teachers were with their pay.

Around 30% of primary and lower-secondary teachers in England felt that the teaching profession was valued by society, around 20% valued by the media and 10% valued by policymakers. Similar figures were observed within most other developed countries. For instance, across the OECD, 19% of lower-secondary teachers felt their views were valued by the media (16% in England) and 14% that their views were valued by policymakers (11% in England). There was a decline between 2013 and 2018 in the percentage of lower-secondary teachers who felt the teaching profession was valued by society (from 35% in 2013 to 29% in 2018).

There was a decline in overall levels of job satisfaction amongst lower-secondary school teachers between 2013 and 2018. In 2018, more lower-secondary teachers wondered whether it would have been better to have chosen a different profession (35% in 2013 compared to 52% in 2018) and expressed regret at choosing to become a teacher (8% in 2013 compared to 13% in 2018). This change in sentiment was observed across the lower-secondary workforce and was not confined to any single demographic group or those working in any single type of school.

Overall, job satisfaction amongst lower-secondary teachers in England was low compared to other countries participating in TALIS. For instance, around half of lower-secondary teachers in England wondered whether they should have picked another profession, compared to around one-third of lower-secondary teachers across the OECD. Despite this, 72% of lower-secondary and 79% of primary teachers in England agreed that the advantages of being a teacher clearly outweighed the disadvantages.

Professional development

Chapter 5 turns to the CPD activities of teachers and headteachers. It covers the types of CPD teachers participated in over the 12 months prior to the TALIS survey, the support they received from their school to complete these activities, the areas in which teachers felt that they required further training, and perceived barriers to CPD activities.

Most primary (98%) and lower-secondary (97%) teachers in England completed some form of CPD in the year prior to the TALIS survey. Lower-secondary teachers in England were less likely to say there was no relevant CPD available than the OECD average (27% in England versus an OECD average of 38%).

Lower-secondary teachers in England were more likely to engage in peer observation than their OECD counterparts (71% versus 44%) but less likely to attend education conferences (34% versus 49%).

TALIS asked teachers about their level of need for additional CPD across several areas. Across all of these areas, teachers in England were less likely to report a high need for additional CPD than most other participating countries. For instance, 3% of lower-secondary teachers in England said they had a high need for CPD in classroom management skills, compared to the OECD average of 14%.

The areas in which teachers in England reported the greatest need for further CPD was in teaching pupils with Special Educational Needs (37% reported moderate or high need at primary; 37% lower-secondary), English as an additional language (30% primary; 29% lower-secondary) and assessment practice (23% primary; 29% lower-secondary).

Between 2013 and 2018, there was an increase in the proportion of lower-secondary teachers who reported a moderate or high need for additional training in knowledge of the curriculum (14% to 23%); pupil assessment practises (22% to 29%) and knowledge and understanding of their subject field (12% to 18%).

Lower-secondary teachers in England were increasingly concerned about the cost associated with their CPD activities. For example, whereas 44% agreed or strongly agreed that expense was a barrier to their CPD activities in 2013, this increased to 56% in 2018. The 2018 figure was above the OECD average (45%), with this and conflicts with work schedules (65%) identified as the key reasons why lower-secondary teachers in England reported not completing more CPD.

Headteachers in England were generally less likely to say that they had a high need for further CPD than headteachers from other parts of the world. For instance, just

2% of headteachers in England said that they had a high need for CPD in using data to improve the quality of their school, compared to an OECD average of 24%.

There were 3 areas in which headteachers in England felt they had a need for further CPD. The first was in the use of academic research evidence to improve teaching within their school; 37% of primary headteachers said that they had a moderate or high need in this area, along with 34% of lower-secondary headteachers. The second area was human resource management; this was deemed to be of a moderate or high need amongst 40% of primary and 31% of lower-secondary headteachers. Finally, just over a third of primary and lower-secondary headteachers said that they had a moderate or high need for further training in financial management.

The school and classroom environment

The sixth chapter investigates issues relating to the school and classroom environment. This includes the extent of noise and disorder reported in England's classrooms, whether teachers were confident in their ability to manage disruptive classrooms, whether teachers felt that their colleagues were open to change, and headteachers' perceptions of the frequency that serious behavioural problems (such as vandalism, bullying and verbal abuse) occurred within their school.

England was very much in line with other OECD countries in terms of the reported behaviour of pupils within classrooms. For instance, the amount of lesson time lost to disruption in lower-secondary schools was similar to the OECD average (13%). There was no evidence that pupil behaviour in lower-secondary school classes had substantially changed between 2013 and 2018: in 2018, 23% of lower-secondary teachers in England said that there was a lot of disruptive noise in their classroom, which was very similar to the figure in 2013 (22%).

Compared to other countries, a greater proportion of headteachers in England reported frequent occurrences of hurtful information being posted on the internet and unwanted electronic contact amongst pupils in their school. For instance, 14% of headteachers in lower-secondary schools in England said that parents or pupils reported hurtful information being posted online about pupils at least weekly, compared to the OECD average of 2%. A similar result occurred for unwanted electronic contact, with England (27%) above the OECD average (3%). This result should be interpreted cautiously, however, as it could reflect headteachers in England simply being more aware or focused on this problem than those in other countries. Alternatively, it could be driven by differences in views of what constitutes hurtful information and unwanted electronic contact in different cultural settings.

More headteachers in lower-secondary schools also reported bullying to be occurring at least monthly in 2018 (41%) than was the case in 2013 (26%).

England was around the international average in terms of teachers' perceptions of how open their colleagues were to change. For instance, 82% of lower-secondary teachers in England said that their colleagues strove to develop new ideas, compared to the OECD average of 79%. Additionally, 76% of lower-secondary teachers said that their colleagues were open to change, compared to 74% across the OECD. Primary teachers in England were somewhat more likely to believe that their colleagues strived to develop new ideas for teaching and learning than lower-secondary teachers (88% primary; 82% lower-secondary).

Views on school resources

The final chapter focuses upon school resources. This includes the areas that teachers would prioritise were additional funding to become available and the extent to which headteachers felt that staff shortages or shortages of instructional material were hindering instruction within their school.

If extra funding became available, reducing class sizes by recruiting more staff would be a high priority amongst most primary (65%) and lower-secondary (73%) teachers in England. In addition, 64% of primary and 66% of lower-secondary teachers in England thought recruiting more support staff to reduce teachers' administration load should be a high priority. Investing in ICT and supporting pupils from disadvantaged or migrant backgrounds were considered lower priorities.

England was below the OECD average in terms of the percentage of lower-secondary teachers who rated increasing teacher pay (53% versus 64%) and offering high-quality CPD (46% versus 55%) as high funding priorities. Further funding for support staff (66% in England versus an OECD average of 55%) and reducing class sizes (73% versus 65%) were priorities lower-secondary teachers in England placed higher in importance than the OECD average.

Just over a third (38%) of lower-secondary headteachers in England reported that a shortage of qualified teachers was hindering the quality of instruction provided by their school quite a bit or a lot. This was above the OECD (21%) average and was also higher than in many of the high-performing PISA countries. The proportion of lower-secondary headteachers who reported that shortages of teachers was hindering them 'a lot' increased from 6% in 2013 to 22% in 2018. England's primary headteachers were somewhat more favourable about the human resources that they had available; just 12% reported that teacher shortages were hindering instruction within their school (lower than in most other participating countries).

Most headteachers in England did not believe that a lack of learning materials or digital/physical infrastructure was limiting their school's capacity to provide effective instruction. For instance, only 7% of primary and 13% of lower-secondary headteachers in England felt that they had inadequate access to instructional materials. These figures were similar to international averages.

In 2013, 54% of lower-secondary headteachers in England said insufficient internet access was having at least some impact upon the quality of instruction provided by their school. This had fallen to 32% in 2018 and compared favourably to many other countries participating in TALIS.

Chapter 1: Introduction

1. Teachers are one of the key groups that influence children's development². Indeed, previous research has suggested that improving the quality of teaching young people receive has a significant influence upon their educational and labour market outcomes³. It is hence vital that robust research is conducted into the working lives of teachers, including their working conditions, professional development, job satisfaction and teaching practices. Such factors are influenced not just by government policy but by the organisation and leadership of schools⁴. Developing a better understanding of the views and leadership styles of headteachers is therefore another key area in which further research is needed.
2. The Organisation for Economic Co-operation and Development's (OECD) Teaching and Learning International Survey (TALIS) in 2018 provides new information on these matters for England and other countries. England first participated in the TALIS study in 2013, focusing upon teachers and headteachers of lower-secondary pupils (key stage 3). England enhanced its participation in TALIS in 2018, with the survey conducted amongst primary school teachers and headteachers for the first time, as well as in lower-secondary schools. The survey covers all types of mainstream schools in England including independent, fee-funded schools. Schools devoted solely to children with special educational needs (SEN) are not included. The Department for Education (DfE) commissioned FFT Education and UCL Institute of Education to conduct the TALIS 2018 study in England.
3. TALIS was conducted in England between March and May 2018. Information was collected on a range of topics from lower-secondary school teachers in 48 countries and economies⁵. The number of countries participating in the optional primary school study was smaller (15, including England). The information gathered covered a range of topics including, but not exclusive to, school staffing, school leadership, continuing professional development (CPD), workload and job satisfaction. These topics are all related to key issues in England's schools, and will be covered within this report.

² Daniels and Shumow (2003).

³ Sammons et al (2008).

⁴ Sims (2017).

⁵ Here, the term 'economies' is used where only selected geographic regions within a country took part in TALIS.

4. This chapter introduces TALIS by addressing the following questions:
 - What is the policy background for TALIS in England?
 - What is the existing evidence for England?
 - What data were collected in England within the TALIS 2018 survey and how does this compare to 2013?
 - What can TALIS tell us and what can it not tell us?
 - Which countries should England be compared with?
 - What does the report cover?

1.1 What is the policy background for TALIS in England?

5. The TALIS 2013 survey highlighted teacher workload, particularly time spent upon non-teaching tasks, to be a concern amongst lower-secondary school teachers in England⁶. Following this, the DfE launched the 2014 Workload Challenge, asking teachers across the country to help them review the problem and identify possible solutions. Since then, the DfE has undertaken a range of actions to address unnecessary workload in schools. Recent actions include the publication of a new workload reduction toolkit for schools in July 2018 (which has since been updated in March 2019), setting up a workload advisory group on data burdens and responding to their report, committing to a period of stability for curriculum and qualifications and a simplified accountability system, and collecting robust evidence on teacher workload every other year⁷. The DfE also conducted fieldwork for the second Teacher Workload Survey in March 2019.
6. A second major focus of education policy in England is the recruitment and retention of teachers. While the recruitment of initial teacher trainees was above target in each year from 2006-07 to 2011-12, it has been below target in each year since (albeit with wide variation across subjects). With pupil numbers expected to rise further over the coming years coupled with small increases in the rate of teachers leaving the profession, the need for increased recruitment is set to become more acute. In response, the government has undertaken a range of initiatives aimed at recruiting new teachers, encouraging former teachers to return to the profession and retaining a greater proportion of the existing teacher workforce. In January 2019, the DfE announced its first Teacher Recruitment and Retention Strategy, focussing on: providing new teachers with the

⁶ Micklewright et al (2014).

⁷ Further information can be found at Department for Education (2018).

foundations for a successful career through the Early Career Framework; extra financial incentives to encourage teachers to stay in the classroom; simplifying the process of applying to become a teacher; helping headteachers to reduce teacher workload; and creating a more diverse range of options for career progression.

7. Since the last TALIS survey in 2013, there have been several changes to the assessment and accountability systems in both primary and secondary schools in England, with several policy initiatives currently underway. Perhaps the most significant change in secondary schools has been the reform of GCSEs. This includes more challenging content being introduced, a move away from coursework/controlled assessment to final examinations and the introduction of the new 9-1 grading scale. These changes were on-going at the time of the TALIS 2018 data collection (March-May), with the first examinations of the new GCSEs in many subjects due to take place shortly after, in the summer of 2018. In primary schools, there have also been changes to accountability measures (key stage 2), with a shift from levels to scaled scores.
8. Since 2010, there has been a significant increase in the proportion of schools that are 'academies'. Unlike other state-funded schools, academies are independent from local authorities. They also have greater freedom over pay and the curriculum. Since the last TALIS survey, i.e. in the 2012/13 academic year, half of lower-secondary schools were academies, increasing to 72% in 2017/18⁸. For primary schools, the equivalent increase has been from 6% to 27%. Taken together, this constitutes a substantial increase in the proportion of teachers who are working in schools which have greater autonomy.
9. In 2010, public sector pay was frozen in nominal terms for 2 years and pay growth was then capped at a rate of one-percent for a further six years. This has resulted in teacher pay falling in real terms, as well as falling behind pay in other sectors⁹. Around 6 months before the TALIS survey was conducted it was announced that this pay cap would be lifted¹⁰. However, it was not until July 2018 (just after the TALIS survey was conducted) that the value of the pay rise was agreed (the main pay range was uplifted by 3.5%, the upper pay range by 2% and the leadership pay range by 1.5%). Since the last TALIS survey, there has also been the Pay Reform, which was introduced in September 2013 and implemented in maintained schools from September 2014. This made several changes to teacher and headteacher pay in England, including: linking pay to performance, rather than length of service; giving schools more freedom to set

⁸ National Audit Office (2018).

⁹ School Teachers' Review Body (2018).

¹⁰ Hinds (2018).

starting salaries; and setting new criteria for progression to the upper pay ranges. Research on the views of teachers, school leaders and governors found that *'headteachers and governors are more aware of (and more positive about) the different aspects of the framework and allowances, than teachers'*¹¹. Over the same period, many schools in England have gained greater autonomy over pay via conversion to academy status (see paragraph above). Research suggests that some academy schools have used this flexibility to offer higher starting salaries to newly qualified teachers (NQTs), particularly in London¹². Some schools are also providing performance-related bonuses¹³.

10. In 2015, the DfE released a call for evidence on effective CPD¹⁴. In response, a set of standards for teachers' CPD has been developed by a working group comprised of teachers, academics and education professionals¹⁵. This stipulated that CPD should focus upon improving and evaluating pupil outcomes; be underpinned by robust evidence; include collaboration and expert challenge; and be sustained over time. To follow this up, the DfE has committed £75 million to a Teaching and Leadership Innovation Fund aimed to share best practice and develop teachers' skills, confidence and knowledge in a range of areas. There has also been a commitment of £42 million to a Teacher Development Premium, along with a new professional qualification for headteachers and the development of 'Chartered Teacher Status' by the Chartered College of Teaching. As part of the Teacher Recruitment and Retention Strategy, the DfE is creating the Early Career Framework, whereby new teachers will receive a two-year package of training and support at the start of their career, including a reduced timetable to make space for the additional activity.

1.2 What existing data sources are there for England?

11. For several of the subjects covered in this report, TALIS does not provide the only quantitative evidence available. It is important that these alternative data sources are recognised.
12. At the national level, the School Workforce Census (SWC) provides valuable information about the organisation of schools (e.g. numbers of teachers and teaching assistants). As an administrative data source, its major strength is its population coverage and the fact that it allows teachers to be tracked over time.

¹¹ Dawson et al (2018).

¹² Office of Manpower Economics (2017).

¹³ Office of Manpower Economics (2017).

¹⁴ Department for Education (2015).

¹⁵ Department for Education (2016).

13. The DfE has at various points conducted surveys with a specific focus upon teacher workload. This includes the teacher workload diary survey at regular intervals up until 2013, and the 2016 Teacher Workload Survey. These surveys have gathered detailed information about the activities teachers carry out during their working hours. The biannual School Snapshot Survey also collects information about activities undertaken by schools to address workload, in addition to other topics related to teachers, pupils and schools.
14. There are also regular surveys conducted amongst teachers in England, using non-representative convenience samples of self-selecting individuals. Examples include the National Foundation for Educational Research (NFER) 'Teacher Voice' survey and the Teacher Tapp app, which asks a panel of teachers a small number of questions each day. Such surveys are able to quickly gather bespoke information about a range of topics.
15. At the international level, there are sources that allow comparison of teachers in England (or the UK as a whole) with those in other countries. These include the OECD's *Education at a Glance* publication and the triennial PISA study. PISA includes a school questionnaire, typically answered by the headteacher, which has been analysed in previous DfE research reports¹⁶. Other international studies which survey classroom teachers include the Trends in Mathematics and Science Study (TIMSS), which covers year 5 and year 9 pupils, and the Progress in International Reading Study (PIRLS), which covers year 5 pupils. However, the topics covered within these surveys are designed to add context to pupil outcomes, rather than focusing upon teachers *per se*.

1.3 What data were collected in England by TALIS 2018?

16. TALIS was conducted in England in the spring (March-May) of 2018. The survey collected information from 152 primary schools and 2,009 primary teachers, an average of just over 13 teachers for each school in the sample. The number of participating lower-secondary schools in England was similar (149), though the total number of teachers surveyed was higher (2,376), reflecting the greater number of teachers within lower-secondary schools. This reflects weighted school-response rates of 86% (primary) and 82% (lower-secondary) and weighted teacher-response rates of 85% (primary) and 84% (lower-secondary). These response rates are very good by the standards of many existing surveys of schools and their teachers in England. Weights provided by the OECD adjust for the level and pattern of school response and for the level of teacher response

¹⁶ Jerrim and Shure (2016). Although some countries also conducted a teacher survey as part of PISA 2015, England did not participate in this international option.

within each school. Unless otherwise indicated, these weights have been applied throughout the report. Further details about the TALIS sample design and response rates are provided in Appendix A.

17. The data used within this report is based upon teachers' and headteachers' responses to questions in the TALIS international questionnaires. These data have been augmented in 2 ways. First, some questions for the survey in England had additional elements to capture more information in the area concerned. A small number of questions were also added at the end of the questionnaires to collect additional information on topics of particular national interest. In 2018, many of the national questions focused upon teacher workload, replicating some questions asked in the 2016 Teacher Workload Survey.
18. Second, the data files have been linked at the school level with selected information drawn from the School Performance Tables (for 2017) and from Ofsted records. This includes the type of school (e.g. community school, academy, independent school), the percentage of pupils eligible for Free School Meals (FSM) and the most recent Ofsted rating of the school at the time of the survey (or up to 4 months afterwards). The inclusion of this information allows for a much richer analysis than would be possible using the TALIS data alone.
19. In England, as in other countries, TALIS had a two-stage sampling design. Schools were first divided into groups defined by region, number of teachers and independent/state sector. A random sample of schools was then selected to participate in the study from each group, with the probability of a school being selected being proportional to its size. The target school sample size was 200 primary schools and 200 lower-secondary schools. In the second stage, a random sample of 20 teachers was selected in each school. If there were fewer than 20 eligible teachers within a school, all teachers were sampled to take part. This random sampling of schools and teachers should ensure the TALIS data are representative of the population of primary and lower-secondary teachers in England.
20. Table 1.3.1 draws upon school administrative data to show the numbers of each type of school that took part in TALIS. Summary statistics are included for the percentage of FSM pupils in each school, average scores on key school performance measures (key stage 2 scores, Attainment 8, Progress 8) and the most recent Ofsted inspection rating. This table confirms that the characteristics of schools that participated in TALIS 2018 in England were similar to the initially selected sample. The TALIS 2018 sample of primary and lower-secondary state schools in England does indeed seem to be representative of the wider state school population.

Table 1.3.1 The TALIS sample for England

(a) Primary

	Sampled + open		Participating	
	N	Average	N	Average
Key stage 2 scores	143	104.3	124	104.3
Pupil teacher ratio	151	20.2	132	20.3
Pupil absence %	144	9%	123	8%
Teacher pay	146	£37,552	129	£37,571
School FSM %	151	23%	130	23%
	n	%	n	%
Ofsted grade				
Outstanding	30	19%	26	20%
Good	101	66%	89	67%
Requires improvement	21	14%	16	12%
Inadequate	2	1%	2	2%
School type				
Academy converter	23	15%	22	17%
Community school	80	52%	70	53%
Other	8	5%	9	7%
Sponsored academy	7	5%	5	4%
Voluntary	36	23%	27	20%

(b) Lower-secondary

	Sampled + open		Participating	
	N	Average	N	Average
Attainment 8 scores	148	46.8	124	47.4
Progress 8 scores	147	0.00	124	0.03
Pupil teacher ratio	154	15.7	131	15.8
Pupil absence %	157	14%	132	14%
Teacher pay	152	£39,492	129	£39,380
School FSM %	157	29%	132	28%
	n	%	n	%
Ofsted grade				
Outstanding	41	26%	32	24%
Good	76	49%	69	53%
Requires improvement	25	16%	22	17%
Inadequate	13	8%	8	6%
School type				
Academy converter	70	44%	64	48%
Community school	26	16%	23	17%
Other	13	8%	14	11%
Sponsored academy	32	20%	19	14%
Voluntary	19	12%	12	9%

Notes: Unweighted data. Analysis at the school level. Independent schools excluded. Number of observations does not equal state school total due to missing or suppressed data. Number participating may be greater than the number originally sampled due to the inclusion of 'replacement schools'. Source: TALIS database linked to school administrative data from the School Workforce Census, Ofsted records and school census.

21. As TALIS is a sample survey, there is some uncertainty in the results due to sampling variation. In other words, were another random sample of schools and teachers to be drawn, a different selection of teachers and headteachers would be chosen to take part in TALIS, who would likely provide slightly different responses to the questions asked. This uncertainty in results is usually reflected by standard errors, confidence intervals or tests of statistical significance, which are all standard indicators of sampling variation. There has been some recent criticism of this approach in the literature, in large part due to widespread misinterpretation of what ‘statistically significant’ means¹⁷. Importantly, statistical significance does *not* mean a difference or result is substantively important. Rather, it relates to whether a result is unlikely to be due to sampling variation (i.e. the fact that a random subset of teachers in England has completed the TALIS survey rather than all teachers). In large surveys such as TALIS, sampling variation is relatively small, meaning even small differences between groups can be ‘statistically significant’ – even if the magnitude of this difference is small and of little substantive importance. Consequently, within this report, readers are urged to focus upon the magnitude of differences between groups (e.g. between England and other countries, or between primary and lower-secondary teachers) instead. When it aids interpretation, the outcomes of statistical significance tests will occasionally be noted within the text. All such tests will be conducted at the conventional 5% level. See Appendix B of the TALIS 2013 report for England for further details of how sampling variation is estimated in TALIS¹⁸.
22. Although the TALIS samples for primary and lower-secondary schools in England include teachers within independent schools, there are some limitations with this data. First, the number of participating independent schools is relatively small (fewer than 20 primary and 20 lower-secondary) meaning results for this group will be surrounded by quite wide confidence intervals. Second, participation rates amongst independent schools were lower than within the state sector. The final response rates amongst independent schools in England was 48% in primary and 41% in lower-secondary. Hence there is greater risk of bias due to non-response when considering independent schools (and, consequently, how their results compare to state schools in England). Caution is hence needed when interpreting results pertaining to teachers in independent schools in England.
23. It should be noted that the OECD definition of ‘private schools’ is broader than just independent schools within the English context. Specifically, the international classification the OECD often uses to define ‘private schools’ is based upon

¹⁷ Gorard (2016).

¹⁸ Micklewright et al (2014).

questions included in the headteacher questionnaire covering school funding sources and whether the school is publicly or privately managed. These questions are not well suited to capture the structure of the school system in England, particularly the distinction that should be made between independent schools and academies. Within this report, the national definition of independent schools is preferred over the OECD classification of private schools.

24. Figures within this report are based upon the draft international database, received by the authors on the 28th February 2019. Any differences with the final international database (published in June 2019) are expected to be minor.
25. This report presents results for both primary and lower-secondary teachers and headteachers who took part in the TALIS 2018 survey. When comparisons are made across countries, the focus will generally be upon the lower-secondary school results due to the greater number of comparators available. Similarly, as England did not participate in the TALIS primary school survey in 2013, all analysis of trends over time will focus upon lower-secondary teachers and headteachers. The greater focus upon the lower-secondary results within this report reflects the additional opportunities for longitudinal analysis, rather than a judgement about the relative importance of the school phases.

1.4 What can TALIS tell us – and what can it not tell us?

26. TALIS can illustrate how teacher and headteacher attitudes and beliefs in England in 2018 vary by school and individual characteristics, and how this compares to other countries. For lower-secondary schools, it is also possible to investigate changes since 2013 – the last time the TALIS survey was conducted by the OECD¹⁹. However, there are some limitations, as outlined below.
27. TALIS 2018 is a descriptive study, providing cross-sectional information collected at a single point in time. It can therefore only illustrate correlations and not causation. Moreover, characteristics of teachers cannot be linked to the performance of the pupils they teach. The TALIS data cannot therefore be used to provide any evidence on the influence teachers have upon pupil outcomes²⁰.
28. TALIS gathers information directly from teachers and headteachers. It is therefore based upon self-reported data, which may not always be consistent with information drawn from alternative sources.

¹⁹ The OECD first conducted TALIS in 2008, though England did not take part.

²⁰ The OECD is currently completing a pilot of the TALIS video study. England is participating in the TALIS video study along with seven other countries. The TALIS video study may provide further evidence on the link between different teaching approaches and pupils' outcomes. Results of this study will be released in latter half of 2020.

29. Within cross-national surveys there is always a concern that certain questions may not be interpreted in the same way, for either cultural or linguistic reasons. For example, the concept of job satisfaction might mean subtly different things in different cultures. The same response to a question may therefore mean something different, in different countries. Indeed, there is an extensive academic literature on 'measurement invariance' (i.e. comparability of survey instruments across countries or between demographic groups) and the various ways that this can be tested.
30. The international organisers of TALIS put a great deal of effort into mitigating such concerns, yet it is unlikely that all such problems have been identified or resolved. Throughout this report, results are presented in terms of how teachers responded to the actual questions that they were presented, with issues of measurement invariance taken for granted. It is hence important for readers to remember that teachers in other countries could be interpreting certain questions in different ways to teachers in England.
31. Finally, the TALIS data for England were collected in the spring of 2018. It may be the case that, were the TALIS survey conducted at the time this report is published (June 2019), the responses of teachers or headteachers to certain questions would be different.

1.5 Which countries should England be compared with?

32. Part of this report considers differences in teacher and headteacher views within England. For example, does workload vary by region? However, in order to provide context, it is also important to compare the situation in England to other countries. This complements the analysis made by the OECD in their international TALIS report by placing England in clearer focus. A key issue that then arises is which countries to use when making such comparisons.

Possibilities include:

- All countries or 'sub-national entities' that took part in TALIS 2018 (England is classified as a sub-national entity, like the province of Alberta or the region of Flanders, which are the parts of Canada and Belgium that took part in the survey). When looking for general patterns across countries there is an argument for including all participating countries and entities.
- Just the OECD members that took part in the survey. This has the advantage of being a familiar geo-political and economic grouping. Yet potentially interesting countries (e.g. Singapore) would be excluded. It would also reduce the pool of countries against which comparisons can be made.

- All countries, but with subsets defined as ‘low performers’ and ‘high performers’ on the basis of the achievement of their pupils recorded in other international surveys. This has the advantage of highlighting correlates of high performance, at the cost of creating a simple binary distinction between ‘high-performing’ and ‘low-performing’ countries.
33. Throughout this report a combination of these approaches are used. For selected questions, scatterplots are presented illustrating the results for all participating countries. However, within this scatterplot the results for a group of low-performing and high-performing countries are also highlighted (see below for further details on how these groups are defined). These scatterplots thus have the benefit of providing the broadest possible set of comparators to benchmark England against, while allowing any common patterns amongst high-performing and low-performing countries to be spotted.
34. A series of tables are also presented within each chapter, highlighting how England compares to a set of high-performing countries. The OECD average (amongst those participating in TALIS) is also included for the lower-secondary comparisons²¹. These tables provide further insight into any commonalities that are shared between teachers in high-performing countries and whether England differs in important ways compared to this group.

Table 1.5.1 The classification of countries for lower-secondary school comparisons

Group	Countries
Low-performing	Mexico, Turkey, Argentina (Buenos Aries), Brazil, Bulgaria, Colombia, Cyprus, Georgia, Kazakhstan, Romania, Saudi Arabia, United Arab Emirates, South Africa
Performance similar to England	<u>England</u> , Australia, Austria, Belgium, Chile, Czech Republic, Denmark, France, Hungary, Iceland, Israel, Italy, Latvia, Netherlands, New Zealand, Norway, Portugal, Slovak Republic, Slovenia, Spain, Sweden, United States, Croatia, Lithuania, Malta, Russia, Vietnam
High-performing	Canada (Alberta), Estonia, Finland, Japan, South Korea, China (Shanghai), Chinese Taipei, Singapore

Notes: See Appendix B for definitions of high and low performance. In the following countries sub-national entities (rather than the whole country) took part: Canada (Alberta), Argentina (Buenos Aries) and China (Shanghai). The Flemish part of Belgium also participated as an adjudicated sub-national region. Throughout this report we focus upon the results for Belgium as a whole.

²¹ This is not possible for the primary school comparisons due to the much smaller number of countries that participated in the TALIS primary school survey.

35. Table 1.5.1 focuses upon lower-secondary schools and classifies countries (sub-national entities are included in this term from now on) that participated in TALIS 2018 into 3 groups. There were 8 'high performers' and 13 'low performers', leaving 26 other countries in a group that also includes England. Appendix B describes in detail how high-performing and low-performing countries were defined. For lower-secondary schools, results from the latest PISA assessment available (conducted in 2015) were used. High performers were defined as countries with average PISA scores that were at least 10 points higher than in England in at least 2 subjects, while low performers were countries with average scores in PISA below a given threshold in reading, maths, and science. The high-performing group includes 5 East Asian countries, 2 European countries along with the sub-national entity of Alberta (Canada). In contrast, the low-performing group contains mainly lower and middle-income countries, though also includes some members of the OECD (e.g. Chile and Mexico).
36. A different classification of countries was used for primary schools. This was due to (a) the potential for countries to have stronger/weaker results on primary assessments than lower-secondary assessments and (b) the much smaller number of countries participating in the TALIS primary school study. Countries were classified according to their performance in the TIMSS 2015 (mathematics and science) and PIRLS 2016 (reading) studies where possible, as can be seen in Table 1.5.2, with further details provided in Appendix B. The main difference was that Spain and France were within the low-achieving group for the primary school comparisons (both were defined as 'average-performing countries' within the lower-secondary school grouping). Note that, although Australia and the Netherlands participated in the TALIS primary school study, they are not included within the international comparisons presented in this report as these countries did not meet the required response rate (as discussed in the TALIS 2018 technical report²²).

²² OECD (2019 – forthcoming).

Table 1.5.2 The classification of countries according to primary school performance

	Mathematics	Science	Reading	Classification
South Korea	608	589	-	High
Chinese Taipei	597	555	559	High
Japan	593	569	-	High
England	546	536	559	
Vietnam	-	-	-	Average
Flemish Belgium	546	512	525	Average
Denmark	539	527	547	Average
Netherlands ⁺	530	517	545	Average
Sweden	519	540	555	Average
Australia ⁺	517	524	544	Average
Spain	505	518	528	Low
Buenos Aires	-	-	-	Low
France	488	487	511	Low
Turkey	483	483	-	Low
UAE	452	451	450	Low

Notes: Mathematics and science scores based upon the country average in the TIMSS 2015 4th grade (year 5) assessment. Reading based upon the country average for the PIRLS 2016 4th grade (year 5) assessment. ⁺ indicates means did not meet the TALIS response rate requirements. Source: TIMSS 2015 and PIRLS 2016 international databases.

1.6 What does the report cover?

37. The results from TALIS 2018 will be presented in the following chapters. Each chapter is organised around a series of questions. These are listed at the start of the chapter and form the headings for each section. A summary at the start of each chapter provides some key findings, with a 'key points' box also provided at the end of each sub-section.
38. Chapter 2 considers the profile of primary and lower-secondary teachers in England and the schools in which they work. It begins by documenting the school and individual characteristics of those individuals who took part in the TALIS 2018 study. This includes an analysis of the gender balance of teachers and headteachers and their teaching experience. The chapter then moves on to the issues of school staffing, teachers' qualifications and aspects of initial teacher training (ITT). This includes an analysis of how prepared teachers and headteachers felt they were when embarking upon their teaching career. The chapter concludes by examining the reasons why individuals chose to become teachers and the proportion for whom teaching was their first-choice career.
39. Teacher workload and flexible working is the focus of Chapter 3. This was flagged as a key issue facing lower-secondary school teachers in the TALIS 2013 survey and has been a key education policy issue ever since. The chapter begins by documenting the average weekly working hours of teachers in England and how this compares with other countries. This is then broken down

into the amount of time teachers spent upon teaching versus various non-teaching tasks. More subjective measures of teacher workload are then considered, including the tasks that teachers felt they spent too much or too little time upon, and whether they thought that their workload was manageable. To conclude, the chapter turns to attitudes towards flexible working arrangements.

40. Chapter 4 turns to the satisfaction of teachers with various aspects of their job. It begins by discussing the issue of pay, with a particular focus upon whether teachers felt that their pay was fair, and how this has changed since the TALIS 2013 survey (with the 1% public sector pay growth cap being in place throughout the intervening period). The extent that teachers in England thought that the teaching profession was valued by society and, more generally, whether they were happy in their jobs is then considered²³.
41. Chapter 5 provides a detailed analysis of the CPD activities and needs of teachers in England compared to other countries. It begins by documenting how frequently teachers in England undertook such activities, and the type of training provided. It then considers what schools did to encourage teachers to complete CPD, including reimbursement of costs and the use of incentives. The characteristics of high-quality CPD (in the view of teachers) is then established, before investigating the types of additional CPD teachers in England felt they needed. The chapter finishes by discussing the barriers that stopped teachers and headteachers from completing more CPD activities.
42. The penultimate chapter concentrates specifically upon the environment in England's classrooms and schools. This includes the extent to which teachers reported there to be noise and disorder in classrooms, as well as information provided by headteachers about the frequency of serious behavioural issues occurring in schools. To conclude, Chapter 6 considers whether teachers felt that their colleagues were open to innovation and change, and whether they thought that they could rely upon colleagues for support.
43. A key concern amongst teachers and headteachers at the time of writing is the resources available to schools. This topic is therefore the focus of Chapter 7. The chapter begins by putting teachers in the role of education policymakers, asking which areas of the education system they would prioritise for additional resources if the education budget were to increase by 5%. It concludes by summarising the views of headteachers with respect to the factors that they thought were hindering their school's capacity to provide a high-quality education.

²³ Job satisfaction for headteachers is not covered within this chapter, as these results are under embargo until the OECD publish the second volume of the TALIS 2018 report, due in spring 2020.

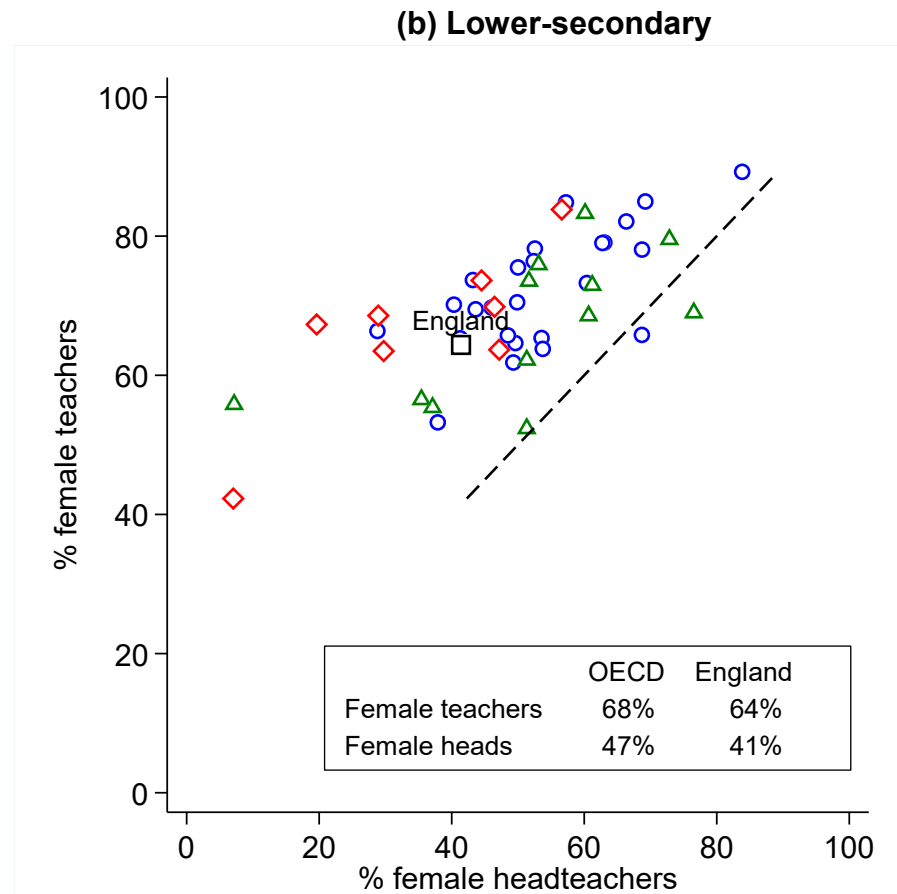
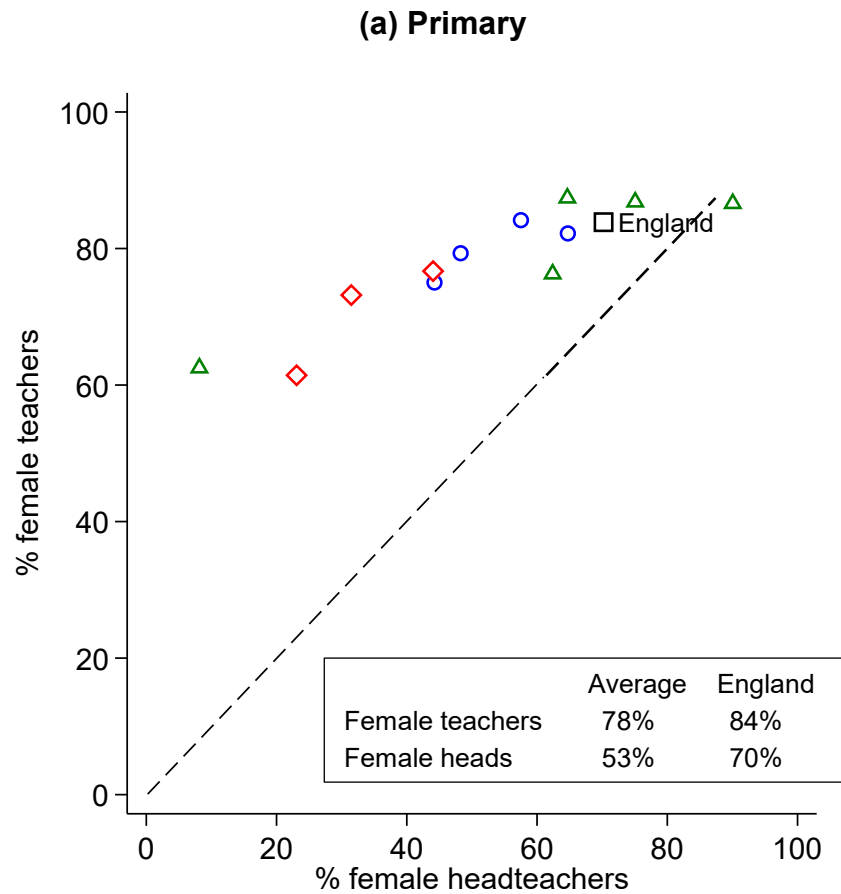
Chapter 2: The characteristics of teachers, headteachers and schools

- In 2018, 84% of primary teachers and 70% of primary headteachers in England were female. The equivalent figures within lower-secondary schools were 64% (teachers) and 41% (headteachers).
- The average lower-secondary teacher in England had around 13 years' teaching experience, which was around 4 years lower than the OECD average. The average primary teacher in England had 12 years' teaching experience, in most other countries the figure was between 15 and 17 years.
- Lower-secondary headteachers in England had spent less time leading a school than the average across OECD countries (6 versus 10 years). However, they had more experience in other school management roles (13 versus 5 years).
- There was 1 teacher for every 14.3 lower-secondary pupils in England, compared to the OECD average of 12.3. There were 20.7 primary pupils per teacher, which was higher than in many other participating countries.
- England had more pedagogical support staff and administrative staff per teacher than most other countries. For instance, there were 3.5 lower-secondary teachers for each member of administrative staff in England, below the OECD average of 6.9 teachers per administrator.
- 79% of primary headteachers in England had attended a school administration or headship course, compared to an average of around 90% across all participating countries. Likewise, 77% of lower-secondary headteachers in England had completed a school administration or headship course, below the OECD average (87%).
- More than 90% of primary and lower-secondary teachers in England said that contributing to society and influencing the development of children was of moderate or high importance to their decision to enter the teaching profession. More than 80% indicated that job security and the reliable income were important to their decision.
- Teaching was the first-choice career for 72% of primary and 59% of lower-secondary teachers in England. Teachers for whom teaching was not their first-choice career tended to have lower levels of job satisfaction.
- Lower-secondary teachers in England (59%) were less likely to say that teaching was their first-choice career than the OECD average (67%).

2.1 The demographic characteristics of teachers in England compared to other countries

1. Figure 2.1.1 compares the percentage of female teachers (vertical axis) to the percentage of female headteachers (horizontal axis) across countries.
2. There was limited cross-national variation in the proportion of female teachers across education systems within primary schools; in most countries between 75% and 85% of teachers were female. The gender balance of England's primary school teachers was therefore like other countries, with a clear female majority.
3. Keeping the focus upon primary schools, all data points except Buenos Aires are above the dashed 45-degree line (see Figure 2.1.1 panel (a)). Hence, in most countries, the proportion of female primary headteachers was lower than the proportion of primary teachers. This potentially indicates a gender disparity in females in primary schools reaching senior leadership positions. The difference in England was around 14 percentage points; 70% of primary headteachers were female compared to 84% of primary teachers. Although sizeable, Figure 2.1.1 panel (a) illustrates that the difference was much bigger in other nations. For instance, the difference was 33 percentage points in South Korea (77% of teachers were female compared to 44% of headteachers), 31 percentage points in Denmark (75% versus 44%) and 38 percentage points in Japan (61% versus 23%). Hence, compared to other countries that participated in TALIS, gender inequality in the ratio between female primary teachers and headteachers was smaller in England.
4. For lower-secondary schools, in most nations, women were more likely to become teachers than men. In England, 64% of teachers were female, which was similar to the OECD average (68%). Moreover, as illustrated by Figure 2.1.1 panel (b), the percentage of female lower-secondary headteachers was below the percentage of female teachers. In England, 41% of headteachers were female, which was slightly below the OECD average (47%), though the difference was not statistically significant.

Figure 2.1.1. The percentage of female teachers and headteachers across countries.



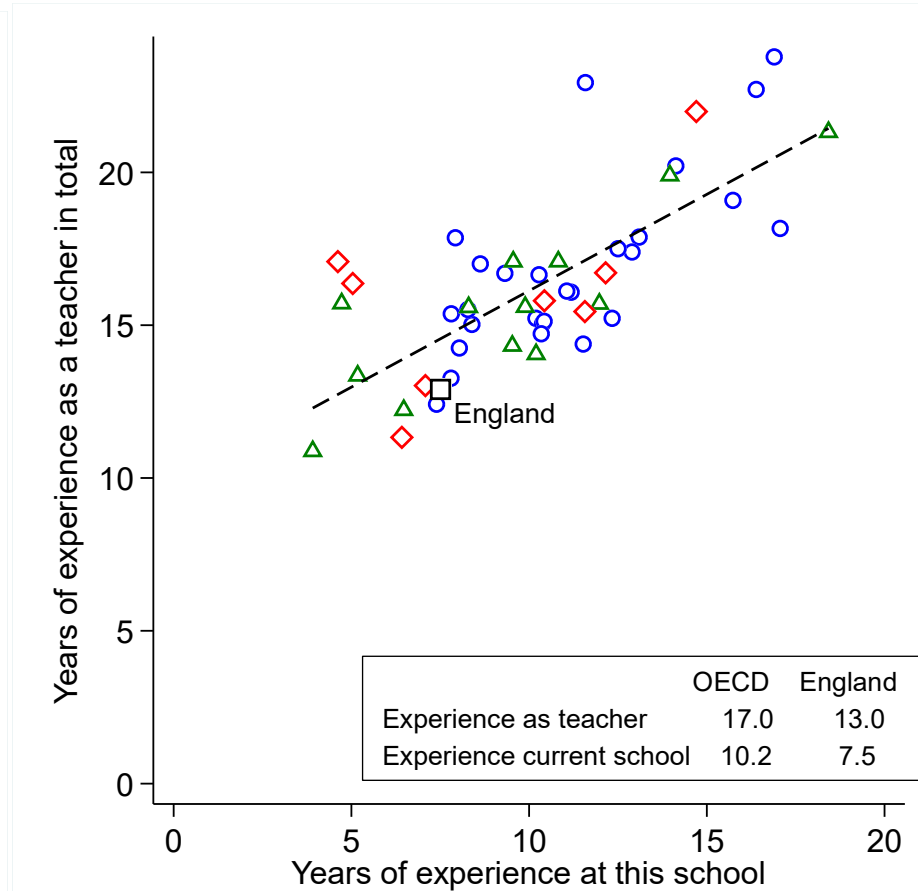
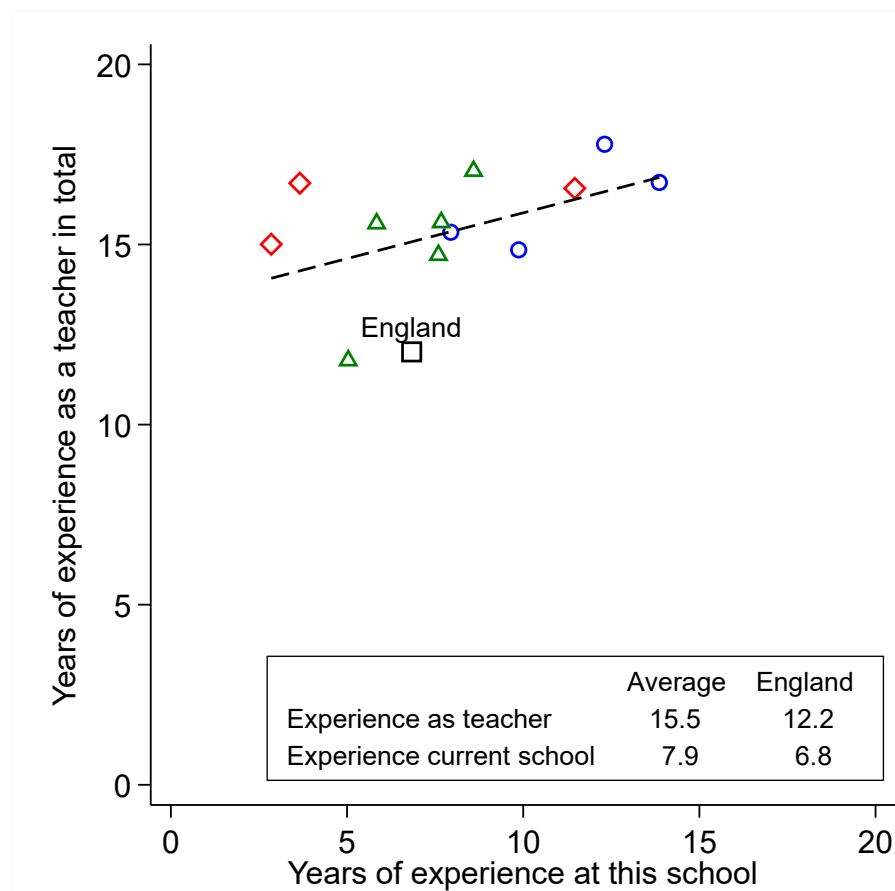
Notes: Dashed line refers to the line of equality, where the percentage of female teachers is equal to the percentage of female headteachers. Red diamonds = high-performing countries, green triangles = low-performing countries, blue circles = countries with similar performance to England. Source: TALIS 2018 database; question 1.

5. Figure 2.1.2 turns to the experience of England's school teachers. The vertical axis records the total number of years that respondents had worked as a teacher, whilst the horizontal axis plots the number of years that teachers had worked in their current school.
6. Starting with the results for primary schools (Figure 2.1.2 panel (a)), in 2018 England had a relatively inexperienced teaching workforce compared to other countries. The average primary teacher in England had 12.2 years of teaching experience, with only the UAE (11.8 years) at a comparable level. Indeed, in most other TALIS countries, primary teachers had (on average) between 15 and 17 years of experience. England and the UAE were clear outliers.
7. Despite England's comparatively inexperienced primary workforce, it was close to the international average in terms of the amount of time primary teachers had spent working in their current school (6.8 years in England compared to 7.9 years across all participating countries).
8. This pattern of an inexperienced teaching workforce is also found in the results for lower-secondary schools (see Figure 2.1.2 panel (b)). England is towards the bottom-left of this graph. This indicates that, compared to other countries, lower-secondary teachers in England had less experience overall, and less experience working in their current school. Indeed, the average lower-secondary teacher in England had around 13 years' total experience working as a teacher. This was significantly below the OECD average of 17 years. In England, lower-secondary teachers had worked for 7.5 years in their current school, again below the OECD average (10.2 years).
9. Despite the apparent inexperience of England's teaching workforce, it is notable how some high-performing nations were in a similar situation. For instance, the average lower-secondary teacher in Alberta (Canada) had a very similar amount of experience to the average teacher in England (13.1 compared to 13 years, respectively). In Singapore, the average figure was lower (11.6 years). At the other extreme was Estonia (22.7 years) and Japan (17.2 years), illustrating how there was substantial variation in teaching experience across countries, even amongst those that had performed strongly in PISA.

Figure 2.1.2. Years of teaching experience compared across countries.

(a) Primary

(b) Lower-secondary



Notes: Dashed line illustrates the ordinary least squares line-of-best-fit. A steeper line illustrates a stronger cross-country relationship between number of years of experience within current school and number of years of experience as a teacher in total. Red diamonds = high-performing countries, green triangles = low-performing countries, blue circles = countries with similar performance to England. Source: TALIS 2018 database; question 11.

10. Equivalent results with respect to the experience of headteachers can be found in Figure 2.1.3. The vertical axis in this graph plots the number of years of experience as a headteacher, with the horizontal axis presenting the number of years of experience headteachers had spent in other school management roles. Further details are provided for lower-secondary school heads in Table 2.1.1 (see the online data Table OT_2_1_1_Primary for the primary school results).

Table 2.1.1. Number of years of experience of lower-secondary headteachers. England compared to the OECD average and high-performing countries.

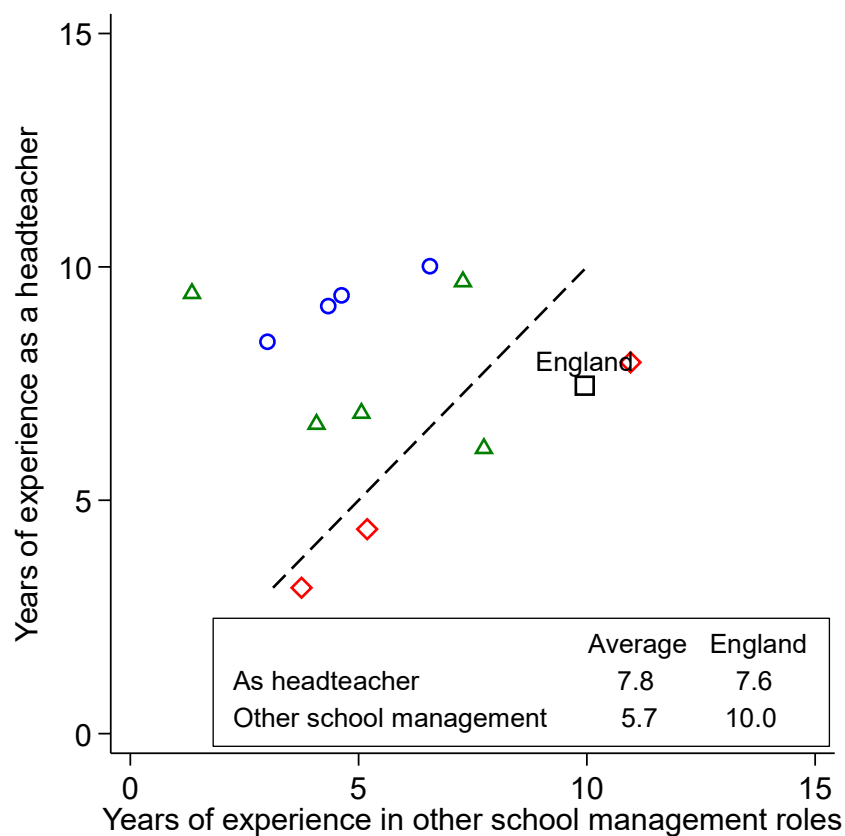
Country	Experience at this school	Experience as a head	Other school management roles	Total as a teacher	Other jobs
Estonia	10.0	14.0	5.1	22.0	6.0
Alberta	5.2	13.3	4.4	23.3	4.7
Finland	7.3	11.7	2.9	15.4	3.1
Shanghai	6.2	9.8	11.0	-	0.4
OECD 31	6.9	9.7	5.3	19.9	3.5
Singapore	3.6	9.0	8.0	14.7	1.7
Chinese Taipei	3.8	7.1	11.2	20.9	1.4
England	5.2	6.3	13.2	24.5	3.7
Japan	2.7	4.6	4.9	29.5	1.2
South Korea	1.8	3.4	3.9	27.8	1.6

Notes: Figures refer to the number of years. Shading should be read vertically, with darker cells illustrating higher values compared to other countries in the column. Data not available for Shanghai for total years working as a teacher. Source: TALIS 2018 database.

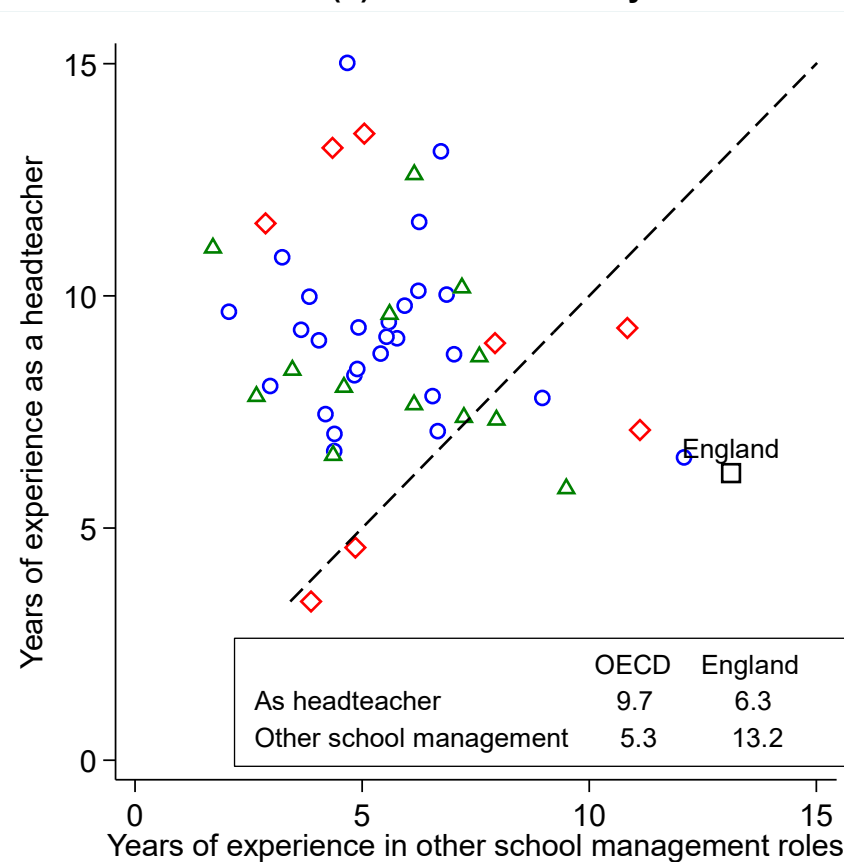
11. In 2018, headteachers in England had less experience working as a head than was the case in most other countries. For instance, as documented in Table 2.1.1, the average lower-secondary headteacher in England had around 6 years of experience in this role, which was around 3 years lower than the OECD average (9.7 years).
12. This was somewhat offset, however, by the experience England's headteachers had in other school management roles. As Figure 2.1.3 illustrates, England sits far below the dashed 45-degree line, suggesting that England's lower-secondary headteachers had more experience working in other school management roles. For example, lower-secondary headteachers in England had around 13.2 years of experience in other school management roles, compared to an OECD average of just over 5 years.

Figure 2.1.3. Headteachers' years of experience compared across countries.

(a) Primary



(b) Lower-secondary



Notes: Dashed line illustrates the line of equality, where the number of years of experience as a headteacher equals the number of years of experience in other school management roles. Red diamonds = high-performing countries, green triangles = low-performing countries, blue circles = countries with similar performance to England. Source: TALIS 2018 database; question 4.

13. This potentially suggests that the route to becoming a lower-secondary headteacher in England may be somewhat different to that in other countries. For instance, it could mean that a lot more is expected in terms of exposure to school management earlier in teachers' careers, or alternatively that it takes teachers longer to reach the top of their profession in England compared to elsewhere. Indeed, results from lower-secondary headteachers in England suggested that they had spent longer working in education than headteachers in most other countries (24.5 years compared to an OECD average of just under 20 years). The same was true of 2 high-performing countries (Japan and South Korea) where headteachers had spent comparatively little time (on average) in the role. This interpretation is also supported by Table 2.1.2, which documents the percentage of their total career in education lower-secondary headteachers had spent as a head. In England, headteachers had spent just 26% of their career in education (on average) as a headteacher, compared to an OECD average of around 49%. Together, this suggests that the time it takes to become a lower-secondary headteacher in England is longer than in many other countries.

Table 2.1.2. The percentage of teaching career lower-secondary headteachers had spent working as a headteacher. Cross-national comparison.

	% of teaching career as a headteacher
Finland	76%
Estonia	64%
Singapore	61%
Alberta	57%
OECD	49%
Chinese Taipei	34%
England	26%
Japan	16%
South Korea	12%

Note: For example, headteachers in England have (on average) spent a quarter of their career working as a headteacher, with the other three-quarters spent in other roles (e.g. deputy head, subject lead, regular classroom teacher). Darker shading illustrates higher values than for other countries included in the table. Data not available for Shanghai. Individual countries included in the table are all high-performing. Source: TALIS 2018 database; question 4.

14. Similar patterns emerged within primary schools, as evidenced within the online data tables (see online Table OT_2_1_2_Primary). In particular, primary headteachers in England had spent a comparatively long time working in education compared to in other countries and had several years of experience in other school management roles (around 10 years in England compared to an average of around 5.7 years across all TALIS countries). On the other hand, in

terms of experience as a headteacher, England was around the international average of 7.8 years (as evidenced by the vertical axis of Figure 2.1.3 panel (a)).

Key points

- The average lower-secondary teacher in England had around 13 years' teaching experience in 2018, which was around 4 years below the OECD average. Primary teachers in England also had fewer years' teaching experience (12 years) than primary teachers in most other participating countries.
- Lower-secondary headteachers in England had spent less time leading a school than the average across the OECD (6 versus 10 years) but had more experience working in other school management roles (13 versus 5 years).

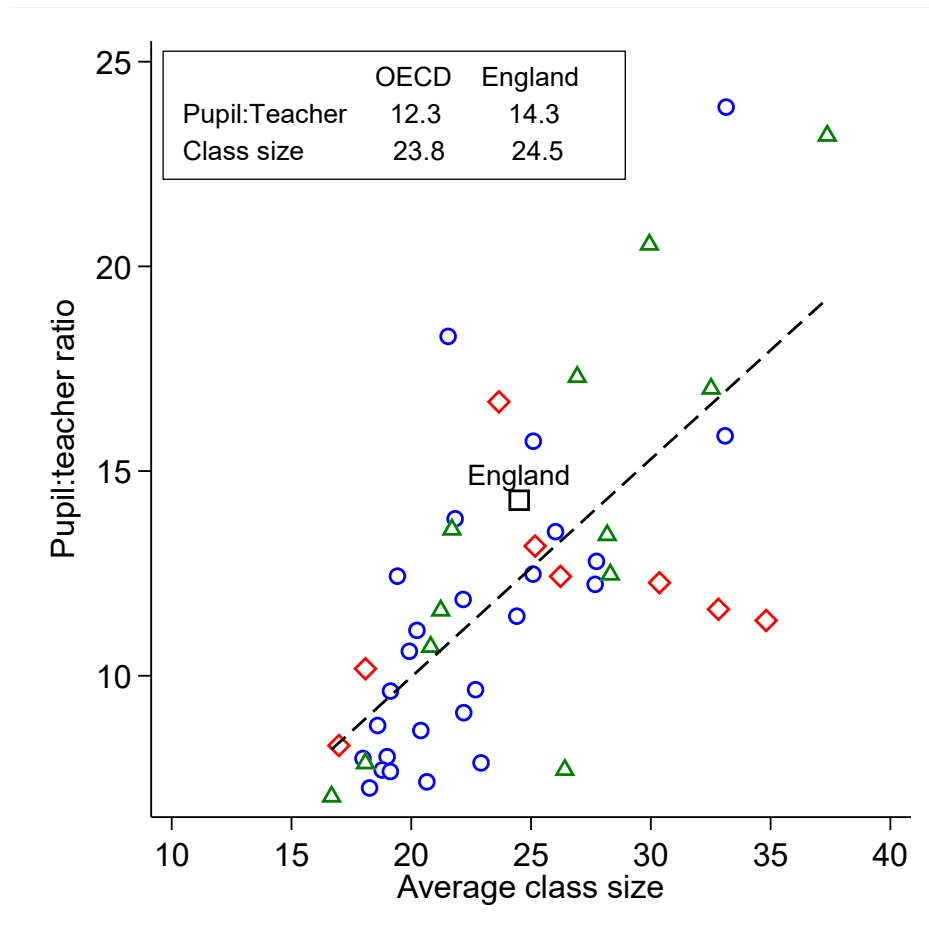
2.2 How well staffed were England's schools?

15. Figure 2.2.1 compares the average class size (horizontal axis) to the pupil:teacher ratio (vertical axis) across countries, along with a fitted regression line of best fit²⁴.
16. The average lower-secondary class size in England was 24.5 pupils; this was slightly above the OECD (23.8 pupils) average. Figure 2.2.1 also illustrates how there was substantial variation in lower-secondary class sizes across the high-performing countries. There were some with average class sizes much higher than in England, including Japan (30.4 pupils), Singapore (32.8 pupils) and Shanghai (34.8 pupils). Yet there were others where the class size was much smaller, most notably Finland (18.1 pupils) and Estonia (17.0 pupils). There was similar variation in class sizes amongst the low-performing countries. Hence TALIS provides no clear evidence that class size is linked to performance on international assessments, at least for analysis conducted at the country level.
17. The pupil:teacher ratio within lower-secondary schools was high in England compared to other countries. There was 1 teacher for every 14.3 lower-secondary school pupils in England, compared to an OECD average of 12.3.

²⁴ The average class size is based upon the TALIS 'target class'; the class the responding teachers were teaching at 11am on the Tuesday before the survey was conducted.

The only high-performing jurisdiction where this ratio was higher was Alberta-Canada (16.7 pupils per teacher), with it being substantially lower in Finland (10.2 pupils per teacher) and Estonia (8.3 pupils per teacher). Again, there was no evidence from TALIS that the pupil:teacher ratio for a country was linked to performance in PISA.

Figure 2.2.1. The pupil:teacher ratio compared to average class sizes across countries. Lower-secondary schools.



Notes: Dashed line illustrates the ordinary least squares line-of-best-fit. A steeper line illustrates a stronger cross-country relationship between average class size and the pupil:teacher ratio. Red diamonds = high-performing countries, green triangles = low-performing countries, blue circles = countries with similar performance to England. Source: TALIS 2018 database; question 38 (teacher), question 13a and question 16 (headteacher).

18. A similar result held within primary schools, albeit with a more limited set of comparator countries. As highlighted in Table 2.2.1, there were 20.7 primary pupils per teacher in England, which was similar to the ratio in some of the other participating countries (France, Turkey and Vietnam). In the other countries, the pupil:teacher ratio in primary schools was much lower (fewer than 16 pupils for each primary teacher), including the high-performing East Asian nations of South

Korea (15.3 primary pupils per teacher), Japan (15.3) and Chinese Taipei (12.0), along with several European countries such as Spain (13.2), Denmark (12.6) and Sweden (12.0). Overall, pupil:teacher ratios in primary schools were quite high in England compared to elsewhere.

Table 2.2.1. Pupil:teacher, teacher:pedagogical support staff and teacher:administrator ratios across participating countries. Primary schools.

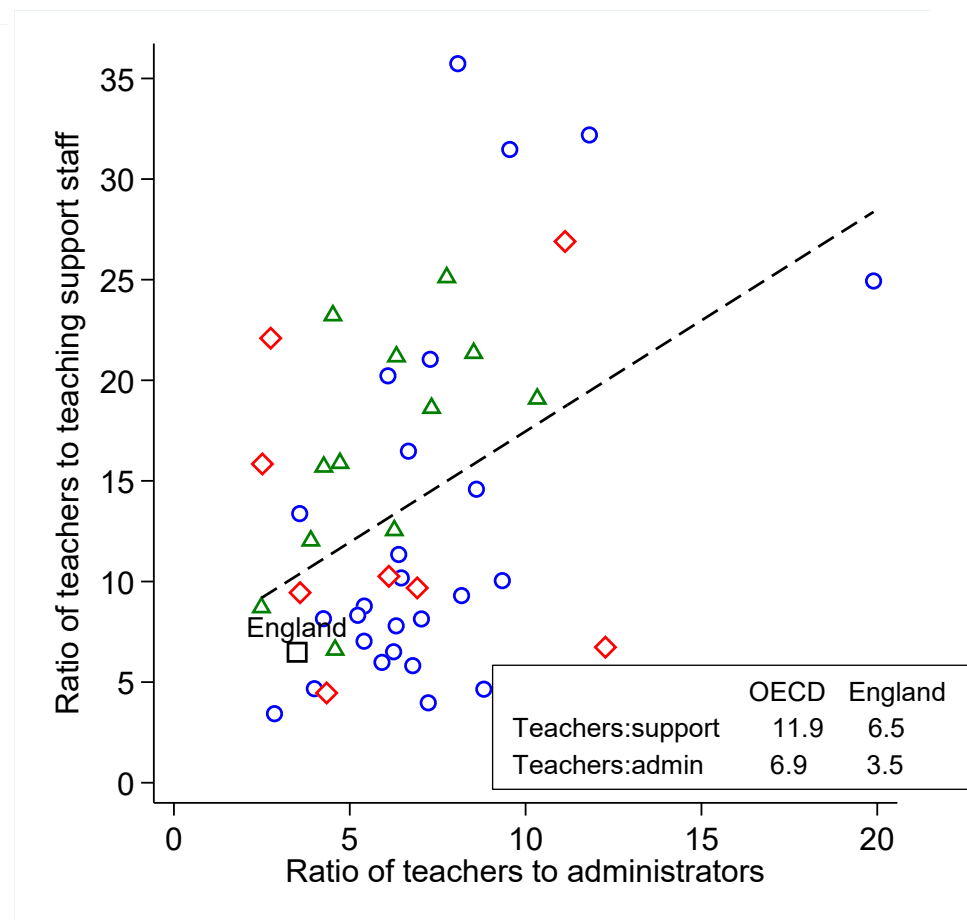
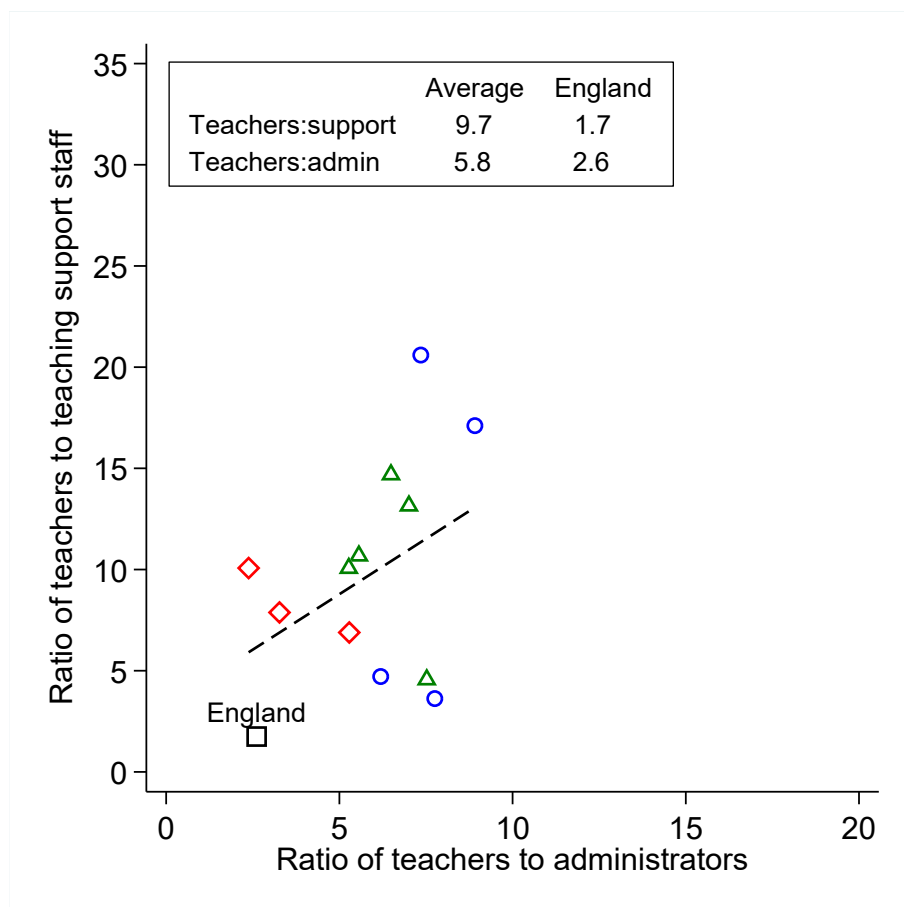
Country	Pupil : Teacher ratio	Teacher : pedagogical support ratio	Teacher : administrator ratio
France	21.7	4.6	7.5
Vietnam	21.1	20.6	7.4
England	20.7	1.7	2.6
Turkey	20.1	14.7	6.5
South Korea	15.3	7.9	3.3
Japan	15.3	6.9	5.3
Flemish Belgium	13.8	17.1	8.9
UAE	13.5	10.1	5.3
Spain	13.2	10.7	5.6
Buenos Aires	13.0	13.1	7.0
Denmark	12.6	4.7	6.2
Sweden	12.0	3.6	7.8
Chinese Taipei	12.0	10.1	2.4

Notes: For pedagogical support staff, headteachers were asked to include 'all teacher aides or other non-teaching professionals who provide instruction or support teachers in providing instruction, professional curriculum/instructional specialists, educational media specialists, psychologists and nurses'. For administrative staff, headteachers were asked to include all 'receptionists, secretaries, and administration assistants'. Shading should be read vertically, with darker cells containing higher values compared to other countries included in the column. Source: TALIS 2018 database; questions 13 and 16.

19. Although pupil:teacher ratios were comparatively high in England compared to other countries, there could also be differences across countries in terms of pedagogical and administrative support. This is considered in Figure 2.2.2, which compares the teacher:administrator ratio (horizontal axis) to the ratio of teachers to teaching support staff (vertical axis). Lower values on these ratios indicate that teachers received more support (e.g. a low teacher:administrator ratio indicates that there were fewer teachers sharing each administrator).

20. Teachers in England had more support staff assisting their activities than teachers in most other countries. Starting with primary schools, Figure 2.2.2 panel (a) illustrates that there were 1.7 teachers for each member of pedagogical support staff (see notes to Table 2.2.1 for the types of staff that this included). This was lower than in all other participating countries, perhaps suggesting that England was somewhat unusual in its extensive use of pedagogical support staff within primary schools. A similar result held for the ratio of primary teachers to the number of administrators. In England, there were 2.6 teachers for each administrator, with the average across all participating countries of around 6 primary teachers to each member of administrative staff.
21. Figure 2.2.2 (b) and the online data tables illustrate a similar result within lower-secondary schools (see online table OT_2_2_1_Secondary). Specifically, in England there were 3.5 lower-secondary teachers for each member of administrative staff, which was below the average across OECD countries (6.9 teachers for each administrator). The figure for England was also lower than in some high-performing jurisdictions. For instance, in Finland and Shanghai more than 10 lower-secondary teachers share each administrator. The same was also true with respect to pedagogical support. Across the OECD, there were 11.9 lower-secondary teachers for each member of pedagogical support staff, compared to 6.5 in England.

Figure 2.2.2. The teacher:pedagogical support ratio compared to the teacher:administrator ratio across countries.
(a) Primary **(b) Lower-secondary**



Notes: Dashed line illustrates the ordinary least squares line-of-best-fit. A steeper line illustrates a stronger cross-country relationship between the teacher:administrator and teacher:teaching support staff ratios. Red diamonds = high-performing countries, green triangles = low-performing countries, blue circles = countries with similar performance to England. Source: TALIS 2018 database; question 13

Key points

- There was 1 teacher for every 14.3 lower-secondary pupils in England, compared to an OECD average of 12.3. In England's primary schools, there were 20.7 pupils per teacher, which was higher than in many other participating countries.
- England had more pedagogical support and administrative staff per teacher than in most other countries. For instance, there were 3.5 lower-secondary teachers for each member of administrative staff in England, well below the OECD average of 6.9 teachers per administrator.

2.3 The educational qualifications and training of teachers and headteachers in England

22. In 2018, 86% of primary teachers in England had an undergraduate degree and 12% a postgraduate degree. This was comparable to the situation in many of the other participating countries in TALIS, as evidenced by Table 2.3.1.
23. For lower-secondary schools, around a quarter of teachers in England reported holding at least a Master's-level qualification. This was below the OECD average (44%). Some caution is required when interpreting this result, however, due to the differences in the structure of educational qualifications across countries and how they fit within the International Standard Classification of Education (ISCED) schema²⁵.

²⁵ ISCED is an international classification of educational qualifications. This provides a framework to facilitate comparisons of educational qualifications across countries. However, previous research has suggested that not all qualifications fit easily into the ISCED classification schema (Schneider, 2008).

Table 2.3.1. The educational qualifications of teachers compared across countries.

(a) Primary

Country	Bachelor's degree	Master's degree	Doctorate
Chinese Taipei	41%	58%	0%
France	47%	38%	1%
Sweden	52%	36%	0%
South Korea	67%	31%	1%
UAE	73%	20%	1%
England	86%	12%	0%
Buenos Aires	32%	8%	0%
Japan	87%	6%	0%
Denmark	86%	5%	0%
Turkey	86%	5%	0%
Flemish Belgium	96%	3%	0%
Vietnam	67%	0%	0%

(b) Lower-secondary

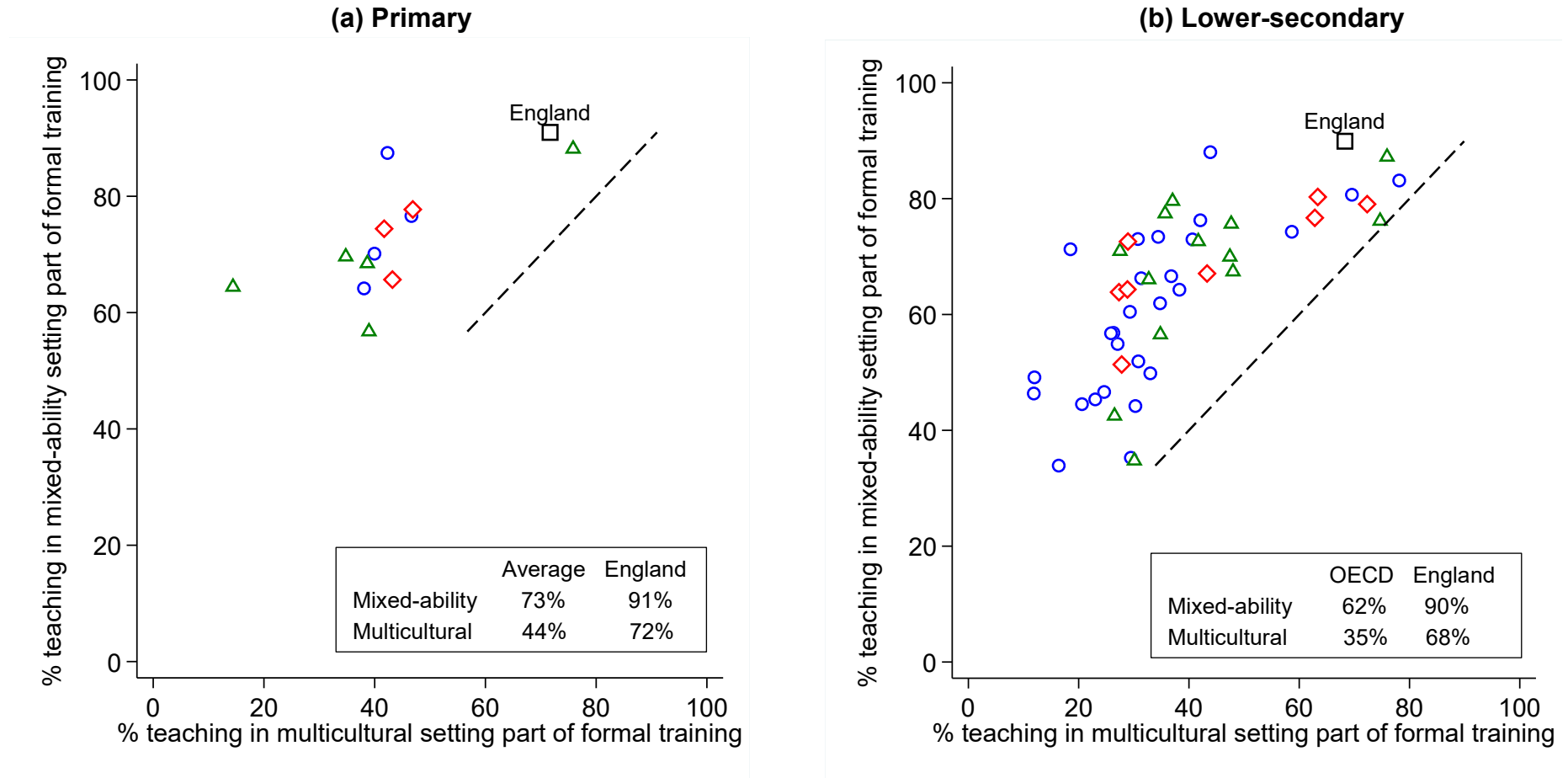
Country	Bachelor's degree	Master's degree	Doctorate
Finland	6%	91%	2%
Estonia	22%	71%	1%
Chinese Taipei	34%	65%	1%
OECD average	50%	44%	1%
South Korea	62%	37%	1%
England	73%	24%	2%
Singapore	72%	22%	1%
Alberta	84%	14%	2%
Shanghai	86%	13%	0%
Japan	86%	11%	0%

Notes: Figures refer to percentage of teachers who hold each type of qualification. Shading should be read vertically, with darker cells illustrating higher values relative to other countries in the column. Figures do not sum to 100 due to a minority of teachers not having at least a bachelor's degree. Spain excluded from primary comparison as data is not available. Source: TALIS 2018 database; question 3.

24. England was below the OECD average in terms of the percentage of lower-secondary headteachers who held a postgraduate degree (49% in England compared to an OECD average of 65%). There was substantial cross-national variation in the percentage of headteachers who held a postgraduate qualification; in some countries more than 80% of heads had a postgraduate qualification while it was fewer than 20% in others. However, little evidence emerged that this factor could distinguish between high and low-performing PISA countries.

25. The TALIS questionnaire also asked teachers a series of questions about whether various skills were taught within their teacher training. This included: (a) subject content; (b) subject pedagogy; (c) general pedagogy; (d) classroom practice; (e) teaching in mixed-ability settings; (f) teaching in multicultural settings; (g) cross-curricular skills; (h) ICT for teaching; (i) classroom management and (j) monitoring pupil development. The online data tables provide an overview of the results for England compared to other countries (see online Tables OF_2_3_1_Primary and OF_2_3_1_Secondary).
26. Figure 2.3.1 presents selected results from these online tables. Specifically, it compares the percentage of primary and lower-secondary teachers who reported that they developed skills to teach in multicultural settings (horizontal axis) to those who were taught how to teach mixed-ability classes (vertical axis). England sits in the top-right hand corner of the primary graph. This indicates that a greater proportion of primary teachers in England were taught these skills than in other TALIS countries. For instance, around 91% of primary teachers in England reported that they received training in teaching in mixed-ability settings, compared to an average of around 73% across all participating countries. The equivalent figures for teaching in multicultural settings were 72% for England's primary teachers, compared to an average of 44% across all TALIS participants. The online data tables also illustrate how primary teachers in England were also more likely to be taught ICT and classroom-management skills than teachers in most other European countries. Overall, these results suggest that the ITT of primary teachers in England covered a comprehensive set of key teaching competencies.
27. Similar results held within lower-secondary schools, with the right-hand panel of Figure 2.3.1 (b) illustrating how a greater proportion of lower-secondary teachers in England said that teaching in multicultural settings and teaching mixed-ability classes was part of their formal training than in many other countries.

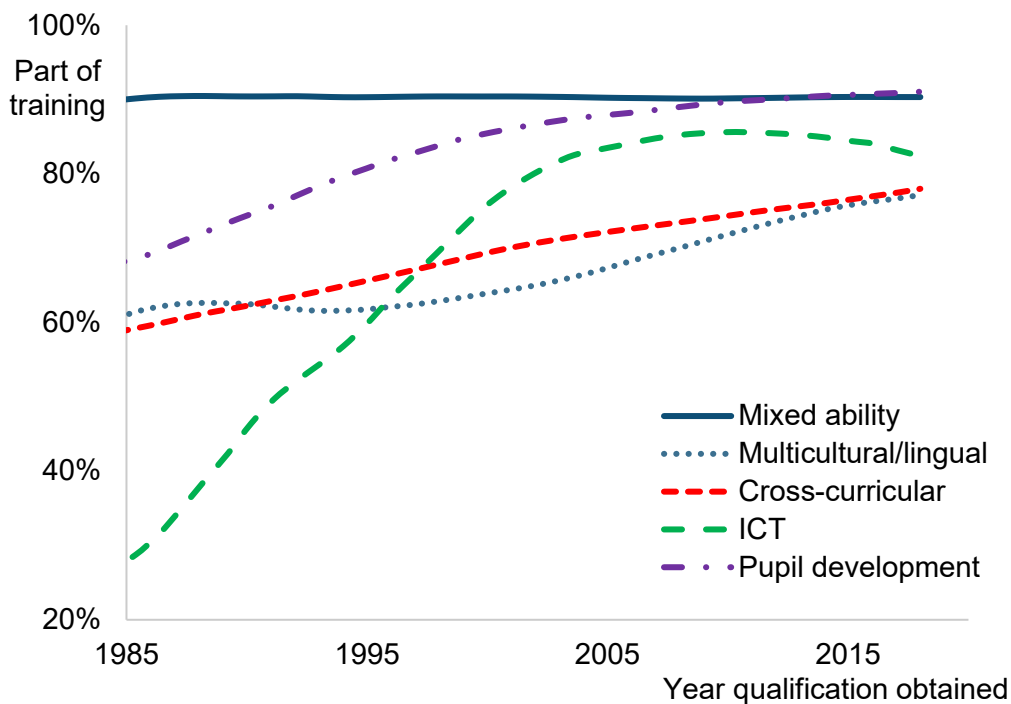
Figure 2.3.1. International comparison of whether teaching in mixed-ability / multicultural settings was part of formal training.



Notes: Dashed line illustrates the line of equality. This is where the percentage of teachers who received formal training in teaching in a multicultural setting equals the percentage who received formal training in teaching in mixed-ability settings. Red diamonds = high-performing countries, green triangles = low-performing countries, blue circles = countries with similar performance to England. Source: TALIS 2018 database; questions 6e and 6f

28. Figure 2.3.2 illustrates whether the skills lower-secondary teachers were taught as part of their ITT varied by the year that their qualification was obtained. This provides some evidence as to how the skills covered within ITT in England have changed over time. The most obvious change is the sharp increase in the training of ICT skills; fewer than 30% of teachers who gained their qualification in 1985 reported that this formed part of their ITT compared to around 80% in 2018. Similarly, around 95% of lower-secondary teachers who gained their qualification since 2015 reported monitoring pupils' development and learning to be part of their training, compared to around 70% of lower-secondary teachers who qualified in the 1980s. Some modest increases were also reported for training in teaching within multicultural/multilingual settings and in teaching cross-curricular skills. Broadly similar patterns were observed for primary teachers (see online Figure OF_2_3_2_Primary for further details).

Figure 2.3.2. Variation in whether different components were covered within initial teacher education by year completed. Lower-secondary teachers in England.



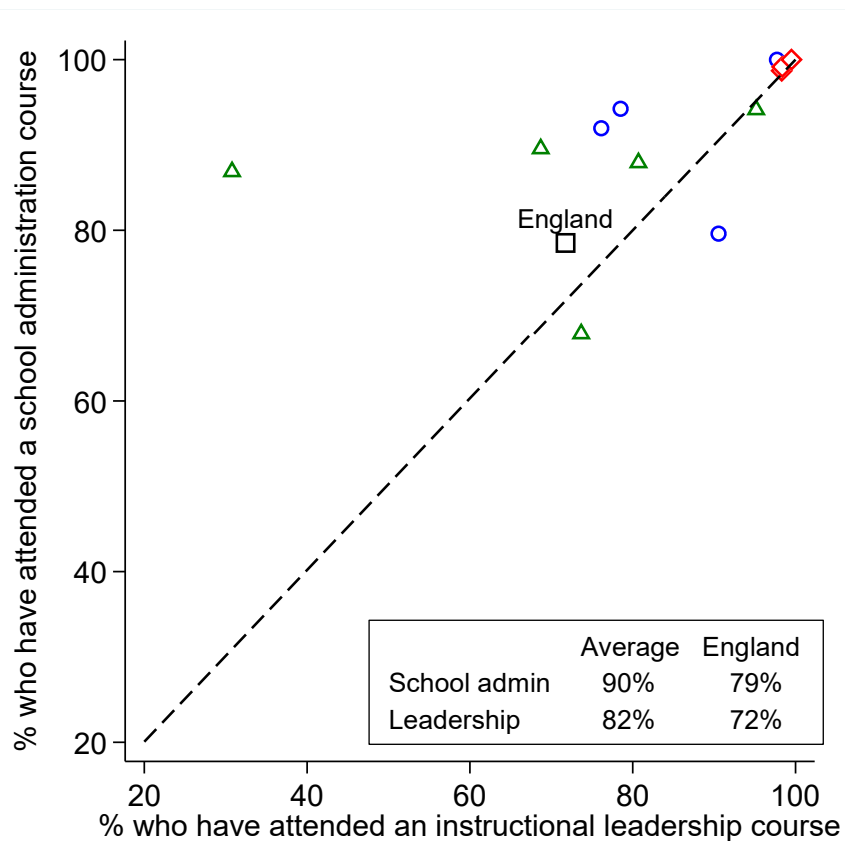
Notes: Graph based upon lower-secondary teachers in England. Those for primary teachers provided in the online data tables (OF_2_3_2_Primary). Source: TALIS 2018 database; questions 5 and 6.

29. Figure 2.3.3 provides a cross-national comparison of the percentage of headteachers who reported that their formal education or training included: (a) a school administration or headteacher training programme/course (vertical axis) and (b) instructional leadership training or course (horizontal axis).

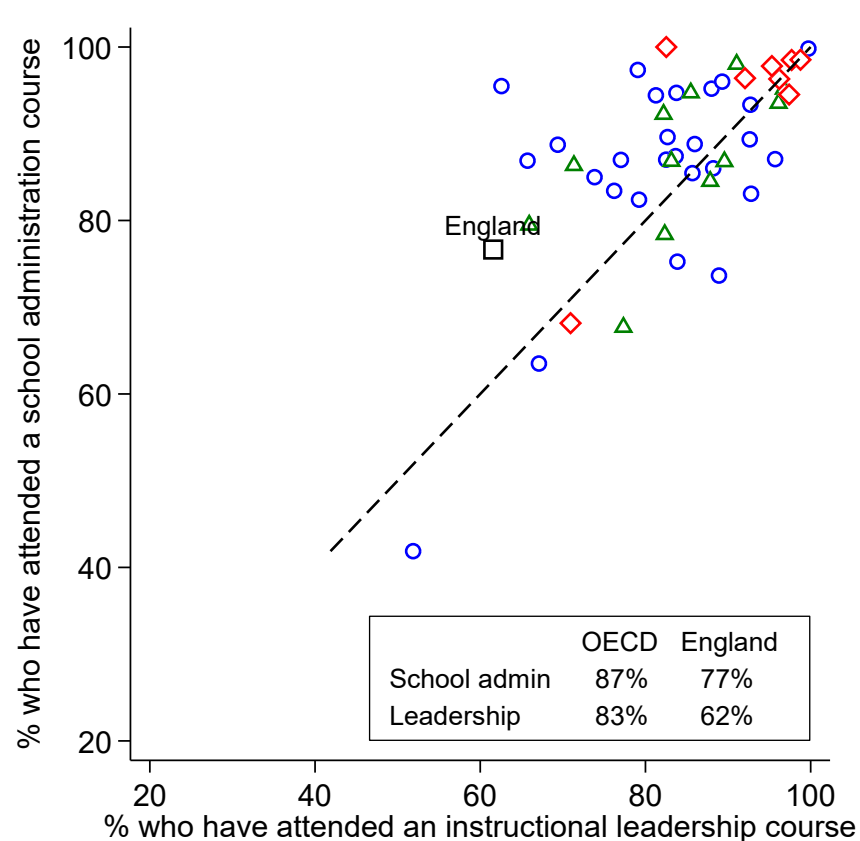
30. The results suggest that headteachers in England were less likely to have completed a formal school headship course than headteachers in other countries. This is illustrated by the fact that England is towards the bottom-left corner of data points. In particular, 79% of primary headteachers in England said they had attended a school administration or headteacher training course, whereas the average across participating countries was around 90%, with it being almost universal within the East Asian economies (more than 99% of primary headteachers said they had completed such a course in South Korea, Vietnam, Japan and Chinese Taipei). Similarly, the proportion of primary headteachers in England (72%) who reported attendance at a headship course was lower than in many other countries – particularly compared to East Asian countries (more than 98% reported completing such training in South Korea, Vietnam, Japan and Chinese Taipei).
31. Similar findings held with respect to the formal training of lower-secondary headteachers. Specifically, 62% of lower-secondary headteachers in England had completed a headship course, compared to an OECD average of 83%. Likewise, 77% of lower-secondary headteachers in England had completed a headship course, which was below the OECD average (87%).

Figure 2.3.3. Percentage of headteachers who completed a formal headship course.

(a) Primary



(b) Lower-secondary



Notes: Dashed line illustrates the line of equality. This is where the percentage of headteachers who have attended an instructional leadership course equals the percentage who have attended a school administration course. Red diamonds = high-performing countries, green triangles = low-performing countries, blue circles = countries with similar performance to England. Source: TALIS 2018 database; questions 6a and 6c.

Key points

- 79% of primary headteachers in England had attended a school administration or headship course, compared to an average of around 90% across all participating countries. Likewise, 77% of lower-secondary headteachers in England had completed a school administration or headship course, which was below the OECD (87%) average. In contrast, in almost all high-performing countries, the vast majority of primary and lower-secondary headteachers had completed such courses.

2.4 How prepared did teachers feel following their initial teacher training?

32. At the end of their ITT, most teachers in England felt well or very well prepared in several key competencies, as presented in Table 2.4.1. For instance, 79% of primary teachers in England felt prepared in classroom practices in the subjects that they would go on to teach, 71% in general pedagogy and 65% in classroom management. Similar results emerged for lower-secondary teachers in England. Hence, in many key areas, most primary and lower-secondary teachers in England felt that their ITT had prepared them well.
33. However, primary teachers in England felt less well prepared in the content, pedagogy and classroom practice in the subjects they would go on to teach than their lower-secondary counterparts. For instance, 17% of primary school teachers said they felt very well prepared in terms of subject content, compared to 32% of lower-secondary teachers. More generally, some of the biggest differences between primary and lower-secondary teachers in England (in terms of how prepared they felt following their ITT) were in reference to the subjects they were required to teach. This may be due to lower-secondary teachers in England specialising in specific subjects, while primary teachers are typically required to teach across a broad range of subjects.
34. There are a few other points to note from Table 2.4.1. First, lower-secondary teachers in England felt much better prepared for use of ICT for teaching than their primary counterparts. Approximately 41% of primary teachers said they were well or very well prepared for the use of ICT skills in their teaching compared to 51% of lower-secondary teachers. On the other hand, primary teachers were much more likely to indicate that they were comfortable at the end of their training in facilitating play; around two-thirds of lower-secondary teachers

(65%) reported that they were not at all prepared for this aspect of their teaching compared to less than two-fifths (39%) of primary teachers.

35. In terms of absolute magnitude, the area in which primary teachers reported feeling the least prepared at the end of their training was in facilitating the transition of pupils to key stage 3. Half of all primary teachers in England did not feel at all prepared for this aspect of the job at the end of their training, while only 21% said that they were well (16%) or very well (5%) prepared. This potentially highlights an important area within primary teachers' ITT where further attention is needed.

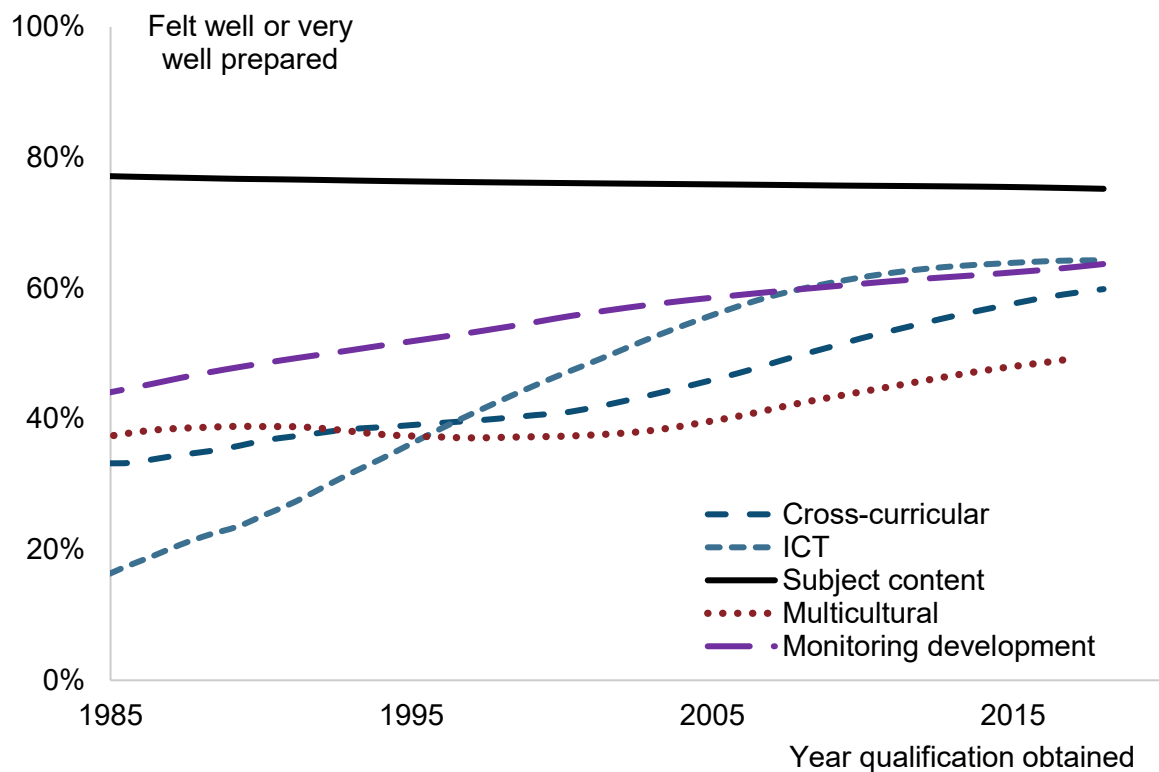
Table 2.4.1. In what aspects did primary and lower-secondary teachers feel prepared, following their initial teacher education?

		1. Not at all	2. Somewhat	3. Well	4. Very well	Average
Content of some or all subject(s) I teach	Primary	1%	34%	48%	17%	2.80
	L. Secondary	2%	22%	44%	32%	3.06
Pedagogy of some or all subject(s) I teach	Primary	3%	32%	50%	15%	2.77
	L. Secondary	2%	23%	50%	25%	2.99
General pedagogy	Primary	2%	27%	53%	18%	2.87
	L. Secondary	2%	23%	53%	23%	2.96
Classroom practice in some or all subject(s) I teach	Primary	1%	20%	53%	25%	3.03
	L. Secondary	1%	17%	46%	36%	3.16
Teaching in a mixed-ability setting	Primary	6%	26%	46%	21%	2.82
	L. Secondary	6%	25%	44%	24%	2.87
Teaching in a multicultural or multilingual setting	Primary	22%	36%	29%	13%	2.33
	L. Secondary	22%	35%	27%	15%	2.36
Teaching cross-curricular skills	Primary	13%	37%	37%	13%	2.50
	L. Secondary	17%	35%	35%	12%	2.42
Use of ICT for teaching	Primary	17%	42%	32%	9%	2.34
	L. Secondary	15%	34%	35%	15%	2.51
Pupil behaviour and classroom management	Primary	4%	30%	46%	19%	2.80
	L. Secondary	4%	28%	46%	22%	2.86
Monitoring pupils' development and learning	Primary	8%	36%	43%	13%	2.61
	L. Secondary	7%	36%	43%	14%	2.64
Facilitating pupils' transitions from primary to KS3	Primary	50%	29%	16%	5%	1.77
	L. Secondary	-	-	-	-	-
Facilitating play	Primary	39%	32%	20%	9%	1.99
	L. Secondary	65%	19%	11%	5%	1.57

Notes: The 'average' column treats each question as a 4-point ordinal variable, with a value of 1 assigned to the lowest category ('not at all') and 4 to the highest category ('very well'). The average (mean) has then been calculated along this 4-point scale. Source: TALIS database; question 6.

36. The online data tables illustrate how responses to these issues varied by school and teacher characteristics in England (see online tables OT_2_4a to OT_2_4l). Focusing upon responses to the question about teaching in multicultural or multilingual settings (OT_2_4f), there was no marked difference by gender or job role. However, full-time primary teachers felt more prepared to teach in multicultural settings than their part-time counterparts (44% versus 34%). Similarly, 52% of lower-secondary teachers in England with 5 years of experience or less felt prepared to teach in multicultural settings following their initial training, compared to around 40% of those with more than 5 years of experience.
37. The most notable difference by school type was with respect to the proportion of disadvantaged pupils. In high-FSM lower-secondary schools, 55% of teachers said that they felt prepared to teach in multicultural settings compared to 38% of those in low-FSM schools. A similar difference was also observed within primary schools. This may have been due to teachers working within socio-economically disadvantaged schools having had greater exposure to pupils from migrant backgrounds. A similar result held with respect to teachers who worked in London, who felt more prepared to teach in multicultural/multilingual settings than teachers who worked in some other parts of England (e.g. the South West).
38. The online data tables provide equivalent results for other areas of initial teacher education covered within the TALIS survey (see online Tables OT_2_4a to OT_2_4l). Key findings include a gender difference in ICT skills (male primary teachers in England felt more prepared in the use of ICT for teaching than their female counterparts) and in facilitating play (male primary teachers felt less confident in facilitating play than females, though the opposite held true for lower-secondary teachers). Part-time primary teachers in England also felt less prepared in classroom management following their initial training than full-time teachers.
39. Figure 2.4.1 illustrates whether lower-secondary teachers who obtained their teaching qualification more recently felt more prepared in selected aspects of their job. There was a substantial increase in the percentage of lower-secondary teachers who felt prepared in using ICT skills between those who qualified in 1985 and those who qualified in 2005 (after this point the trend plateaued). However, even amongst recent teaching graduates, only around 60% felt prepared in the use of ICT skills. There was also an increase in the proportion of lower-secondary teachers in England who felt prepared in teaching cross-curricular skills and monitoring pupils' development between those who qualified in 1985 and those who qualified in 2005. Equivalent results for primary teachers in England are available in online Figure OF_2_4_1_Primary.

Figure 2.4.1. Relationship between year of completion of formal education and feeling of preparedness for selected elements of teaching. Lower-secondary teachers in England.



Notes: Figures based upon local polynomial smoothed estimates. This provides a weighted average of the percent of lower-secondary teachers who felt prepared within each activity each year. Source: TALIS 2018 database; questions 5 and 6.

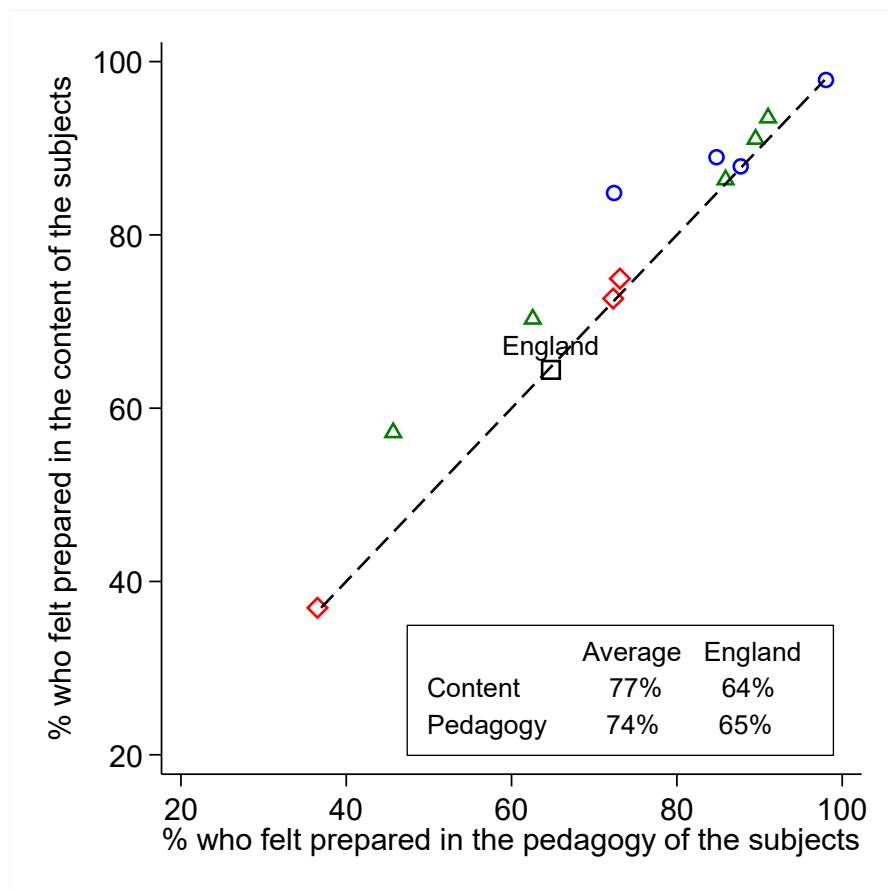
40. The online data tables illustrate that primary teachers in England felt more prepared at the end of their training for teaching mixed-ability classes and in multicultural settings than their counterparts in other countries (online Table OF_2_4_2_Primary). For instance, 42% of primary teachers in England said they felt well or very well prepared to teach in multicultural/multilingual settings at the end of their training. This compares to figures of 31% in Sweden, 26% in Denmark, 16% in Flemish-Belgium and just 4% in France. This is consistent with the results presented in the previous sub-section, which illustrated how a greater proportion of primary teachers in England reported training in these skills than in other countries.
41. Figure 2.4.2 compares England to other countries in terms of how well prepared teachers felt at the end of their teacher training with respect to the content (vertical axis) and pedagogy (horizontal axis) of their subjects. Compared to other participating countries, primary teachers felt less confident at the end of their training in these areas; the point for England is below and to the left of most of the other data points presented in Figure 2.4.2 panel (a). Specifically, only

primary teachers in France and Japan felt less prepared for their subjects than primary teachers in England, while primary teachers in countries such as Sweden, Denmark, Flemish-Belgium and South Korea felt more prepared.

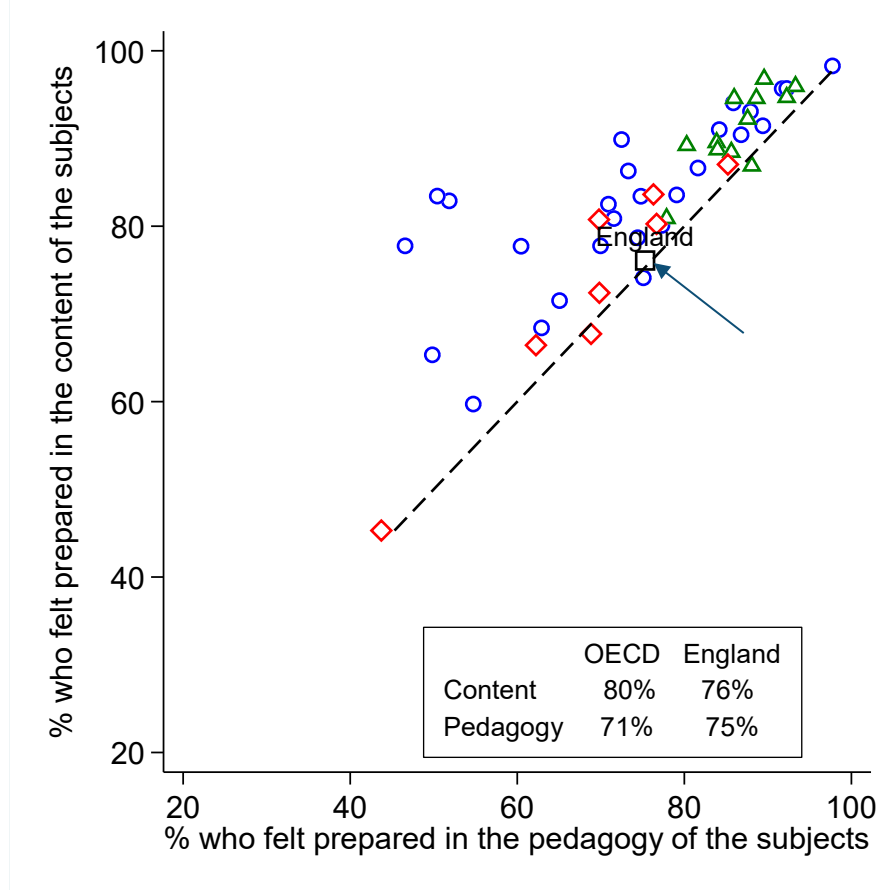
42. As exhibited by Figure 2.4.2 (b), lower-secondary teachers in England did not particularly stand out from other countries in terms of the percentage who felt prepared in the content and pedagogy of their subjects at the end of their training. In England, 76% of lower-secondary teachers said that they felt well or very well prepared in the content of their subject, and 75% in the pedagogy of their subject, at the end of their training. Both of these figures were similar to the OECD average (80% for subject content and 71% for subject pedagogy). Likewise, the online data tables illustrate how teachers in England felt more prepared for teaching in multicultural setting and teaching mixed-ability classes than their peers in other countries at the end of their training period (see online Tables OF_2_4_2_Primary and OF_2_4_2_Secondary).
43. When looking at lower-secondary schools in Figure 2.4.2 panel (b), note how the low-performing nations (green triangles) are clustered in the top right-hand corner of the graph. This suggests that teachers in these countries were very confident in how well prepared they were in these areas at the end of their training. In contrast, the higher-performing countries (red diamonds) are further towards the bottom left corner, with lower levels of preparedness reported. Hence lower-secondary teachers in high-performing countries felt no more prepared in subject content and pedagogy at the end of their training than teachers in low-performing countries; rather, the opposite may hold true.

Figure 2.4.2. Percentage of teachers who felt prepared following their initial teacher training in the content and pedagogy of the subjects that they teach. Cross-national comparison.

(a) Primary



(b) Lower-secondary



Notes: Dashed line illustrates the line of equality. This is where the percentage of teachers who felt prepared in the pedagogy of their subjects is equal to the percentage who felt prepared in the content of their subjects following their initial teacher training. Red diamonds = high-performing countries, green triangles = low-performing countries, blue circles = countries with similar performance to England. Source: TALIS 2018 database; question 6.

Key points

- At the end of their training, primary and lower-secondary teachers in England felt more confident in their readiness to teach mixed-ability classes and in multicultural settings than teachers in other countries.

2.5 Why did teachers decide to enter the teaching profession?

44. There are many reasons why people decide to become teachers, including being involved in the development of the next generation, the security of employment and contributing to society²⁶. These motivations were investigated within TALIS, with teachers asked: *'How important were the following for you to become a teacher?'* The statements teachers responded to are presented in Table 2.5.1, along with the 4 possible response options ('not important' to 'high importance').
45. The most important motivations for becoming a teacher in England, for both primary and lower-secondary teachers, were the contribution it enables individuals to make to society and the ability to influence the development of pupils. Most teachers in England said these factors were of high importance. Very few teachers (less than 10%) said such factors were of low or no importance to their career choice. Giving something back to society was therefore clearly an important factor in the career choice of teachers in England.
46. Yet a significant proportion of teachers also highlighted other benefits that motivated their decision to become a teacher. Having a secure job with reliable income was of high importance to around 40% of teachers in England, while only around 15% said this was of little or no importance. Similarly, teaching schedules fitting in with personal responsibilities was flagged as an issue of high importance by 23% of primary and 27% of lower-secondary teachers in England.

²⁶ Alexander, Chant & Cox (1994).

Table 2.5.1. Motivations for entering teaching amongst teachers in England.

		1. Not important	2. Low	3. Moderate	4. High	Average
Teaching offered a steady career path	Primary	4%	15%	49%	31%	3.08
	L. Secondary	4%	14%	48%	34%	3.11
Teaching provided a reliable income	Primary	4%	13%	49%	35%	3.15
	L. Secondary	4%	10%	47%	39%	3.22
Teaching was a secure job	Primary	3%	10%	47%	40%	3.24
	L. Secondary	3%	10%	44%	43%	3.26
The teaching schedule (e.g. hours, holidays, part-time positions) fit with responsibilities in my personal life	Primary	14%	26%	37%	23%	2.69
	L. Secondary	10%	25%	38%	27%	2.81
Teaching allowed me to influence the development of children and young people	Primary	0%	1%	16%	83%	3.81
	L. Secondary	1%	2%	25%	73%	3.69
Teaching allowed me to benefit the socially disadvantaged	Primary	2%	11%	41%	47%	3.33
	L. Secondary	3%	15%	40%	42%	3.19
Teaching allowed me to provide a contribution to society	Primary	1%	5%	29%	65%	3.58
	L. Secondary	1%	6%	31%	61%	3.52

Notes: The 'average' column treats each question as a 4-point ordinal variable, with a value of 1 assigned to the lowest category ('not important') and 4 to the highest category ('high importance'). The average (mean) has then been calculated along this 4-point scale. Source: TALIS database; question 7.

47. In England, the motivations to become a teacher were similar across those working in primary and lower-secondary schools. The only notable difference in Table 2.5.1 is that primary teachers were somewhat more likely to say that influencing the development of pupils was of high importance to their decision (83% versus 73%).

48. The online data tables investigate how responses to these questions varied by school and teacher characteristics in England (see Table OT_2_5 a to OT_2_5 g). Within lower-secondary schools, those who worked part-time were more likely to indicate teaching schedules fitting in with personal responsibilities was of high importance than those who worked full-time (34% versus 25%). However, the same difference was not observed for primary teachers (24% versus 23%). Full-time primary teachers were more likely to be attracted to teaching because of the steady career path than part-time primary teachers (33% versus 24%). More experienced lower-secondary teachers placed less importance on teaching allowing them to provide a contribution to society (66% with 5 years or fewer of experience said this was of high importance, compared to 56% of those with more than 20 years of experience).
49. Female teachers in England were more likely to report the factors listed in Table 2.5.1 as a strong motivation for entering the teaching profession than men. This is illustrated by most of the figures in the 'Diff' columns in Table 2.5.2 being positive for the comparison between female to male responses. For primary teachers, the most pronounced gender difference emerged for influencing the development of pupils (84% of female primary teachers said this was of high importance compared to 75% of male primary teachers) and the teaching schedule fitting in with other responsibilities (24% versus 18%). Within lower-secondary schools, the greatest gender difference observed was with respect to benefitting socially disadvantaged pupils; this was a high-priority for 45% of women compared to 36% of men.

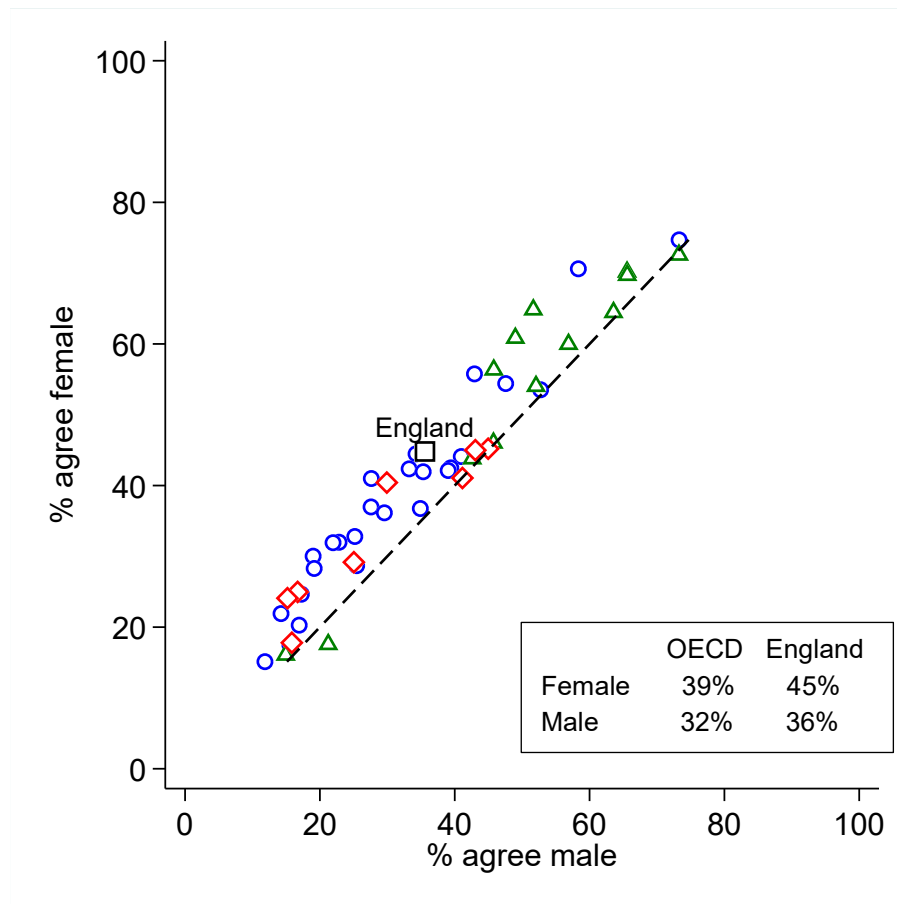
Table 2.5.2. Gender differences in motivations to enter teaching in England.

	Primary			Lower-secondary		
	Female	Male	Diff	Female	Male	Diff
Steady career	31%	32%	-0.3%	35%	31%	4.1%
Reliable income	36%	33%	2.9%	41%	37%	3.4%
Secure job	41%	36%	5.1%	43%	42%	1.9%
Teaching schedule	24%	18%	6.6%	28%	24%	4.2%
Influence development	84%	75%	9.2%	75%	68%	6.7%
Benefit disadvantaged	47%	44%	3.1%	45%	36%	9.2%
Contribute society	65%	65%	-0.1%	63%	58%	5.7%

Notes: Figures refer to the percentage of male and female teachers who reported each factor to be of 'high importance' to their decision to enter the teaching profession. 'Diff' refers to the difference.

Source: TALIS database; questions 1 and 7.

Figure 2.5.1. Gender differences in benefitting disadvantaged pupils being a strong motivation to enter the teaching profession. Cross-national comparison for lower-secondary teachers.



Notes: Dashed line illustrates the line of equality. This is where the percentage of male teachers who reported benefitting disadvantaged pupils was of high importance to their decision to enter the teaching profession is equal to the percentage of female teachers who rated this as of high importance. Red diamonds = high-performing countries, green triangles = low-performing countries, blue circles = countries with similar performance to England. Source: TALIS 2018 database; questions 1 and 7.

50. In almost every country, female lower-secondary teachers were more likely than male lower-secondary teachers to say that benefitting disadvantaged pupils was of high importance to their decision to enter teaching. The difference between men and woman was, on average, 7 percentage points across the OECD, similar to the magnitude of the difference observed in England. Similarly, online data Table OF_2_5_1_Secondary reveals that female lower-secondary teachers across the OECD were also more likely to say influencing pupils' development was of high importance than male teachers. However, the gender gap in most of the high-performing East Asian nations (e.g. Japan, Shanghai, Singapore) was often smaller and sometimes reversed. Across the OECD, men were just as likely as women to say that the reliable income of teaching and the steady career

path was of high importance to their decision to become a lower-secondary teacher.

51. Compared to primary teachers in most other European countries, those in England were more likely to be attracted to the profession by the steady career path, reliable income and job security, as can be seen in Table 2.5.3. For instance, 87% of primary teachers in England said that the security of the job was of moderate or high importance to their decision to enter teaching, compared to 71% in Sweden, 59% in France, 45% in Denmark and 44% in Spain. In contrast, more than 90% of primary teachers said that this was of moderate or high importance in South Korea, Japan and Chinese Taipei.

Table 2.5.3. The factors that motivated primary teachers to enter the profession. England compared to other participating countries.

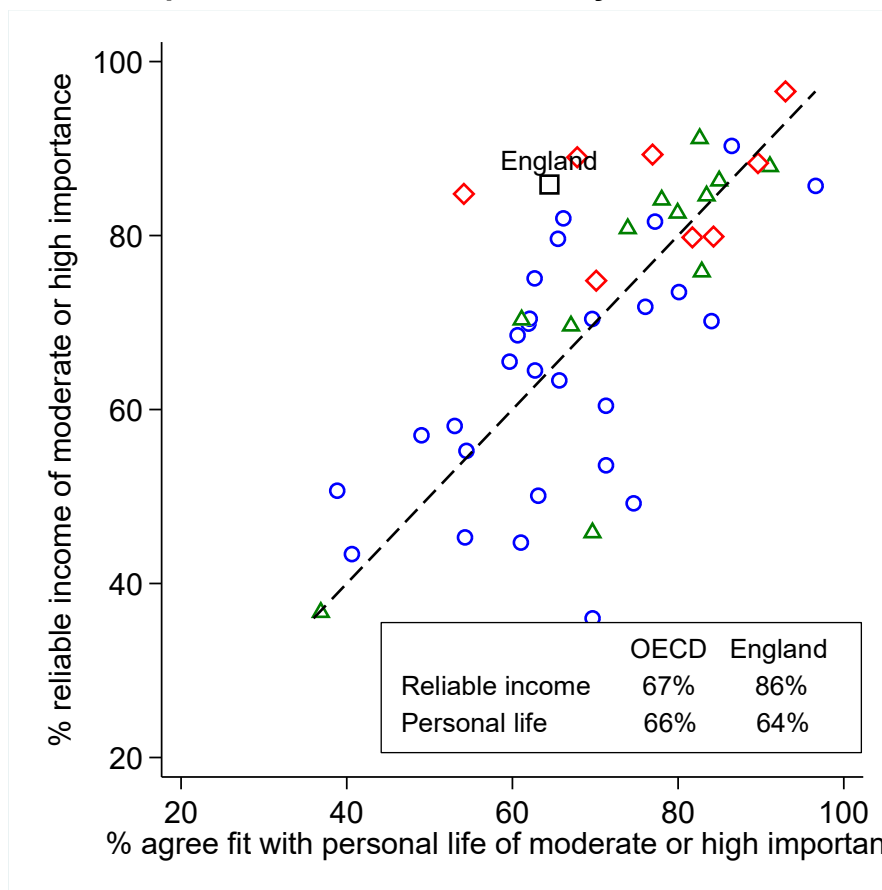
Country	Steady career	Reliable income	Secure job	Personal life	Influence children	Benefit the disadvantaged	Contribute to society
Vietnam	98%	89%	91%	98%	99%	97%	99%
Chinese Taipei	96%	97%	95%	94%	95%	90%	95%
UAE	92%	86%	89%	85%	98%	92%	98%
England	80%	84%	87%	60%	99%	88%	94%
South Korea	79%	86%	92%	88%	89%	73%	80%
Flemish Belgium	69%	73%	62%	59%	99%	85%	94%
France	67%	64%	59%	50%	98%	78%	89%
Turkey	66%	84%	86%	85%	98%	93%	98%
Spain	53%	47%	44%	47%	93%	87%	93%
Japan	52%	89%	91%	68%	88%	68%	81%
Sweden	51%	67%	71%	60%	97%	86%	90%
Buenos Aires	41%	34%	31%	33%	91%	82%	93%
Denmark	35%	45%	45%	61%	95%	67%	77%

Note: Shading to be read vertically, with darker shading indicating higher values compared to other countries in the column. Figures refer to the percentage of teachers who said it was of moderate or high importance. Source: TALIS 2018 database; question 7.

52. Job security was a more important factor in the career choice of lower-secondary teachers in England than in other countries. By way of example, Figure 2.5.2 demonstrates this result by plotting the percentage of teachers who said that the teaching schedule fitting with responsibilities in their personal life was a key motivation for entering the teaching profession (horizontal axis) against the percentage who said that the reliability of the income was an important factor (vertical axis). England was around the international average in terms of the

proportion of lower-secondary teachers who said teaching schedules fitting with personal responsibilities was of moderate or high importance to their decision (64% of lower-secondary teachers in England reported this to be of moderate or high importance, compared to an OECD average of 66%). On the other hand, reliability of income was clearly more important to lower-secondary teachers in England than in most other countries (86% of lower-secondary teachers in England said this was of moderate or high importance compared to an OECD average of 67%). Similar results held for other questions that focused upon security of the teaching profession, as evidenced in the online data tables (see online Table OT_2_5_3_Secondary).

Figure 2.5.2. International comparison of motivations to enter the teaching profession. Lower-secondary teachers.



Notes: Dashed line illustrates the line of equality. This is where the percentage of teachers who indicated fit with responsibilities in their personal life was of moderate or high importance to their decision to enter the teaching profession was equal to the percentage who said the reliable income of teaching was of moderate or high importance. Red diamonds = high-performing countries, green triangles = low-performing countries, blue circles = countries with similar performance to England. Source: TALIS 2018 database; questions 7b and 7d.

Key points

- More than 90% of primary and lower-secondary teachers in England said that making a contribution to society and influencing the development of children was of moderate or high importance to their decision to enter the teaching profession. England (86%) was above the OECD average (67%) in terms of the proportion of lower-secondary teachers who said reliable income was of moderate or high importance in their career choice.

2.6 Was teaching the first-choice career amongst most teachers in England?

53. The previous sub-section highlighted how being able to benefit society, while also having a secure and steady job, were key reasons why teachers in England decided to enter teaching. Yet, despite these advantages, it is important to recognise that teaching may have not been respondents' first-choice careers. This information was captured in TALIS through a simple yes or no question: '*Was teaching your first-choice career?*' The responses teachers in England provided to this question can be found in Table 2.6.1.
54. For 72% of primary and 59% of lower-secondary teachers in England, teaching was their first-choice career. The difference between primary and lower-secondary teachers was statistically significant at the 5% level.

Table 2.6.1. The percentage of teachers in England for whom teaching was their first-choice career.

	% first choice
Primary	72%
Lower-secondary	59%

Source: TALIS database; question 8.

55. The online data tables illustrate how primary and lower-secondary teachers responses varied by selected school and teacher characteristics (see online Table OT_2_6a). Consistent with the findings presented in the previous section, women were more likely to say that teaching was their first-choice career than men. The magnitude of this gender difference was around 15 percentage points in primary school (74% of women said yes compared to 58% of men) and almost 10 percentage points amongst lower-secondary teachers (62% versus 53%). This may help explain the gender gap observed in the previous sub-section;

women were perhaps more likely to express strong motivations for why they entered the teaching profession as it was more likely to be their first-choice career than men.

56. While there was little difference in how teachers responded by employment status (full versus part-time) or management responsibilities, there was some evidence of an association with teaching experience. In particular, the most experienced teachers (those who had been teachers for 20 years or more) were more likely to say teaching was their first-choice career than less experienced teachers. Some caution is needed when interpreting this result, as it could either be an 'age' or 'cohort' effect (i.e. it could be that teaching is now less likely to be teachers' first-choice careers or it could be that as teachers age they are more likely to report that teaching was their first-choice career). This result could also be driven by 'survivor' bias, with teachers more likely to leave the profession early if it was not their first-choice job.
57. There were some differences in motivations to enter the teaching profession depending upon whether this was their first-choice career. One of the largest differences was with respect to influencing the development of pupils; respondents whose first-choice career was not teaching were more than 10 percentage points less likely to say that this was of high-importance to their decision to become a teacher (this holds true within both primary and lower-secondary schools). A similar, though smaller, difference was observed for the statement that '*Teaching allowed me to provide a contribution to society.*' Conversely, the convenience of teaching schedules around personal lives was a more important motivation for those teachers who did not have teaching as their top career choice (e.g. 30% of primary teachers said this was of high importance if teaching was *not* their first-choice job, compared to 21% for whom it was their first job-choice). These results can be found in Table 2.6.2.

Table 2.6.2 Differences in motivations for entering teaching by whether this was first-choice career. Results for England.

	Primary			Lower-secondary		
	No	First-choice	Diff	No	First-choice	Diff
A steady career path	32%	31%	-0.9%	32%	35%	3.7%
Provided a reliable income	38%	34%	-4.4%	39%	40%	0.5%
A secure job	42%	40%	-1.9%	41%	44%	2.5%
Teaching schedule fit with my personal life	30%	21%	-8.9%	30%	25%	-4.9%
Influence the development of young people	74%	86%	12.7%	67%	77%	10.5%
Benefit the socially disadvantaged	45%	47%	2.2%	37%	44%	7.0%
Provide a contribution to society	62%	66%	3.8%	57%	64%	6.7%

Notes: Figures refer to the percentage of teachers in England who said the factor was of 'high importance'. 'No' column is where teaching was not respondents' first-choice career. 'Diff' illustrates the difference. Source: TALIS 2018 database; questions 7 and 8.

58. Job satisfaction was significantly lower amongst respondents for whom teaching was not their first-choice occupation. This group were more than 10 percentage points less likely to agree or strongly agree that *'the advantages of being a teacher clearly outweigh the disadvantages'* and that if they could decide again, they would still choose to work as a teacher. Similarly, they were more likely to wonder if they should have chosen another profession. Table 2.6.3 provides further details, highlighting how there may be particular challenges in retaining teachers for whom teaching was not their first-choice career.

Table 2.6.3 The link between whether teaching was first-choice career and job satisfaction. Teachers in England.

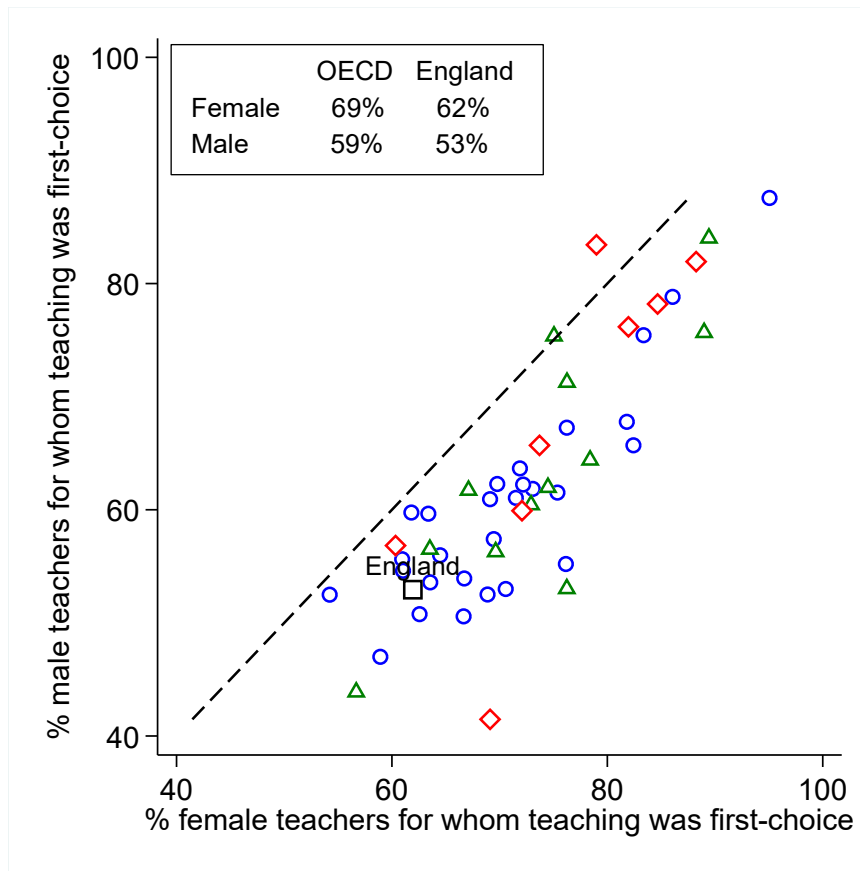
	Primary			Lower-secondary		
	No	First-choice	Diff	No	First-choice	Diff
The advantages of being a teacher clearly outweigh the disadvantages	69%	82%	12%	66%	76%	10%
If I could decide again, I would still choose to work as a teacher	64%	80%	17%	61%	73%	12%
I regret that I decided to become a teacher	16%	9%	-7%	15%	11%	-4%
I wonder whether it would have been better to choose another profession	51%	37%	-14%	56%	49%	-7%
All in all, I am satisfied with my job	76%	87%	11%	74%	80%	6%

Notes: Figures refer to the percentage of teachers in England who agreed or strongly agreed with each statement. The 'no' column is where teaching was not respondents' first-choice career. 'Diff' illustrates the difference. Source: TALIS 2018 database; questions 8 and 53.

59. Overall, 59% of lower-secondary teachers in England said that teaching was their first choice of job, which was below the OECD average of 67%. There was no high-performing country where this percentage was lower than in England (it was equal in Finland at 59%). The percentages within the high-performing East Asian nations were particularly high; teaching was the first-choice career of more than 80% of lower-secondary teachers in South Korea, Japan, Chinese Taipei and Shanghai. This is evidenced by Figure 2.6.1, which plots the percentage of female lower-secondary teachers who said teaching was their first-choice career (horizontal axis) against the percentage of male teachers who said teaching was their first-choice career (vertical axis)²⁷. Equivalent cross-national results for primary teachers can be found in online Figure OF_2_6_1_Primary.

²⁷ Note that Figure 2.6.1 indicates that England was not unusual in having a gender gap in response to this question; in almost every country female lower-secondary teachers were more likely to say that teaching was their first-choice career than men.

Figure 2.6.1 Gender differences in the percentage of lower-secondary teachers for whom teaching was their first-choice career. Cross-country comparison.



Notes: Dashed line illustrates the line of equality. This is where the percentage of female teachers for whom teaching was their first-choice profession is equal to the percentage for male teachers. Red diamonds = high-performing countries, green triangles = low-performing countries, blue circles = countries with similar performance to England. Source: TALIS 2018 database; questions 1 and 8.

Key points

For around 72% of primary and 59% of lower-secondary teachers in England, teaching was their first-choice profession. Lower-secondary teachers in England (59%) were less likely to say that teaching was their first-choice career than in the average OECD country (67%). Teachers for whom teaching was not their first choice tended to have lower levels of job satisfaction.

Chapter 3: Workload and flexible working

- Full-time primary teachers in England reported working, on average, 52.1 hours per week, compared to 49.3 hours for their full-time lower-secondary counterparts. The average working hours of lower-secondary teachers in England has remained stable since 2013 (48.2 hours per week).
- Full-time lower-secondary teachers in England reported working longer hours than the average full-time lower-secondary teacher across OECD countries (49.3 versus 40.8 hours). However, the average number of hours spent teaching was similar (20.5 in England compared to 21.5 across the OECD).
- Full-time primary teachers in England reported spending, on average, 24.1 hours per week on teaching and around 31.9 hours on non-teaching tasks (such as marking, preparation, administration, management). The equivalent figures for lower-secondary teachers were 20.5 hours (teaching) and 32.7 hours (non-teaching tasks). Note that total teaching hours and hours spent upon different tasks were asked in separate questions and hence result in different overall values.
- Most primary and lower-secondary teachers in England felt that they spent about the right amount of time upon most tasks. Exceptions included marking, on which 58% of primary and 65% of lower-secondary teachers thought they spent too much time, and administration, on which 64% of primary and 72% of lower-secondary teachers felt they spent too much time.
- In contrast, 35% of primary and 45% of lower-secondary teachers in England felt they spent too little time on CPD.
- 53% of primary and 57% of lower-secondary teachers in England thought that their workload was unmanageable. The figure for lower-secondary teachers increased between 2013 (51%) and 2018 (57%).
- Primary headteachers in England reported working, on average, 57 hours per week and lower-secondary headteachers in England reported working, on average, 62 hours per week.
- 53% of primary and 43% of lower-secondary headteachers in England felt their workload was unmanageable. This represented an increase for lower-secondary headteachers since 2013 (36%).
- Most headteachers reported that school management were supportive of flexible working; 88% of primary and 93% of lower-secondary headteachers agreed or strongly agreed. The level of agreement amongst teachers was lower, though still quite high overall, standing at 80% amongst primary teachers and 75% amongst lower-secondary teachers.

3.1 What were the average weekly working hours of teachers in England?

1. As part of the TALIS 2018 survey, primary and lower-secondary school teachers in England were asked the following question designed to capture the number of hours that they worked per week:

'During your most recent complete calendar week, approximately how many 60-minute hours did you spend in total on tasks related to your job at this school?'.

2. Respondents were instructed to include all the activities undertaken as part of their job (e.g. teaching, CPD, marking, planning, staff meetings) regardless of when these took place (i.e. they were explicitly told to include the time they spent on such tasks in the evening and weekends). How teachers responded to this question is the focus of this sub-section.
3. On average, primary school teachers in England reported working 48.3 hours per week in 2018. The equivalent figure for lower-secondary teachers was 46.9 hours. These figures refer to results including both full-time and part-time teachers.
4. Note that, within this national report, results are reported separately for full-time and part-time teachers²⁸. The international TALIS report, produced by the OECD, takes a different approach where average hours are reported across all teachers (i.e. both full-time and part-time staff). The authors of this national report have made this decision as they believe separating out results for full-time and part-time workers provides a more meaningful basis for comparisons of working hours across countries and over time. For instance, it rules out the possibility that average working hours may differ across countries simply due to differences in the proportion of teachers who are contracted to work part-time.
5. The average number of hours for full-time teachers in England was 52.1 hours for primary and 49.3 hours for lower-secondary, as illustrated by Table 3.1.1.
6. There is a lot of variation in hours that full-time teachers reported. For instance, 10% of full-time lower-secondary school teachers reported working 28 hours per week or less, while at the other extreme 10% reported working 65 hours or more. There was hence a 37-hour difference between the top and bottom 10% of the working hours distribution.

²⁸ The distinction between full-time and part-time staff was based upon question 10b from the TALIS questionnaire. Anyone who reported being contracted to work 90% of a full-time teacher or more was recorded as full-time. Part-time was defined as anyone who reported being contracted to work less than 90% of a full-time teacher.

- Total reported working hours for part-time teachers were significantly lower, with part-time primary and lower-secondary teachers reported they worked, on average, around 36 hours per week.

Table 3.1.1. Weekly working hours amongst teachers in England.

	Full-time		Part-time	
	Primary	L. Secondary	Primary	L. Secondary
10 th percentile	35	28	14	15
25 th percentile	48	43	26	25
50 th percentile	55	50	35	36
75 th percentile	60	60	46	45
90 th percentile	66	65	58	55
Mean	52.1	49.3	35.7	36.1
P90-P10	31	37	44	40

Notes: Figures refer to the number of hours worked per week, as reported by teachers in England. This is based upon a single question that asked teachers about total hours in a working week. An alternative, based upon time spent upon a series of separate tasks, is provided in the online data tables. Source: TALIS 2018 database; question 16.

- The online data tables illustrate how total weekly working hours varied by school and teacher characteristics (see online Table OT_3_1_2a_Q16). Teachers who had additional managerial responsibilities (e.g. subject leads, heads of year groups) tended to report working longer hours than classroom teachers. For instance, the weekly reported hours of regular full-time class teachers in primary schools was 50.2 hours per week, compared to around 53 hours for subject leads/heads of Department and 56.4 hours for those who were head of year. Similar differences were observed for full-time lower-secondary teachers, where average reported working hours of classroom teachers (46.8 hours) were around 3 hours lower than for subject leads/heads of Department and those who led a phase/key stage.
- There was relatively little variation in full-time teachers' hours or work by school characteristics. Differences by school Ofsted rating, proportion of pupils eligible for FSM, region, academic achievement quartile and school type were typically small and not statistically significant. Exceptions included full-time primary teachers in the South East and South West working slightly longer hours than those in the North West. Teachers within independent lower-secondary schools also reported working around 5 hours more per week than lower-secondary teachers in the state sector.
- The average reported working hours of lower-secondary teachers in England were broadly stable between 2013 and 2018. For full-time teachers, the mean slightly increased (from 48.2 to 49.3 hours per week) while the median was

unchanged (50 hours per week). Table 3.1.2 also illustrates how the overall distribution of reported working hours for full-time teachers remained stable, with similar figures emerging at each percentile of the working hours distribution.

11. Part-time teachers reported working slightly longer hours in 2018 than in 2013; in TALIS 2013 the average part-time lower-secondary teacher reported working 31.1 hours per week (median of 30 hours), compared to 36.1 hours (median of 36 hours) in TALIS 2018. It should be noted, however, that this increase amongst part-time teachers could have been due to a change in teachers' preferences (e.g. more teachers deciding to work 4 days a week rather than 3 days) rather than an increase in workload *per se*. Specifically, in TALIS 2013, 38% of part-time workers reported holding between 71%-90% of a full-time contract, compared to 53% of part-time workers in 2018²⁹.

Table 3.1.2 The distribution of working hours as reported by lower-secondary school teachers in England in 2013 and 2018.

	Full-time		Part-time	
	2013	2018	2013	2018
10 th percentile	30	28	15	15
25 th percentile	40	43	23	25
50 th percentile	50	50	30	36
75 th percentile	58	60	38	45
90 th percentile	65	65	47	55
Mean	48.2	49.3	31.1	36.1
P90-P10	35	37	32	40

Notes: Figures refer to total working hours per week. The 'P90-P10' row refers to the difference between the 90th and 10th percentile. Source: TALIS 2013 and 2018 databases for England; analysis of question 16.

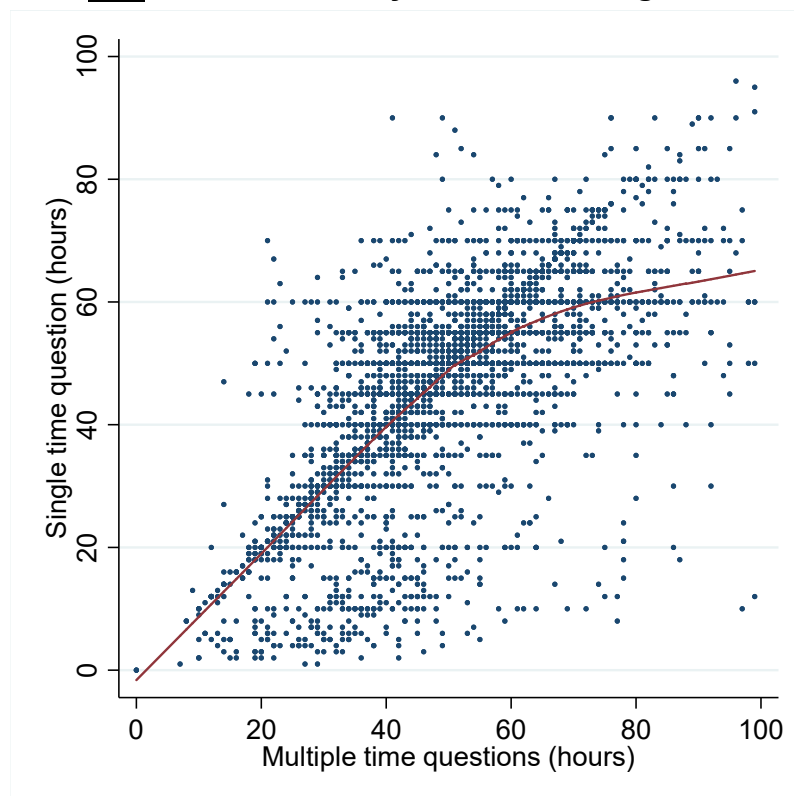
12. A potential issue with the data on working hours collected within TALIS is that it is based upon teachers' self-reports. These data are therefore likely to suffer from some measurement error. It is therefore important to consider the extent of this problem and the potential impact it could have upon the results.
13. To do so, comparisons can be made with another question teachers were asked in the TALIS survey. In a separate question, they were instructed to report the amount of time they spent upon various tasks as part of their job (further details about this question are provided in the following section). By summing the

²⁹ If this difference is controlled for in a regression model, then the increase in the working hours reported by part-time teachers between 2013 and 2018 falls from around 5 to around 3 hours per week.

amount of time spent upon these tasks together, it is possible to create a second alternative measure of total working hours for teachers in England.

14. For teachers who worked below 60 hours per week, these measures correlate reasonably well (correlation = 0.68), though differences did emerge for some individuals. However, for those teachers who reported working more than 60 hours per week, the consistency between the measures is somewhat lower (correlation = 0.15) as illustrated by Figure 3.1.1³⁰.

Figure 3.1.1. Inconsistencies in reported working hours. Results for primary and lower-secondary teachers in England.



Note: The question along the vertical axis was phrased: ‘During your most recent complete calendar week, approximately how many 60-minute hours did you spend in total on tasks related to your job at this school’. The question on the horizontal axis was phrased: ‘Approximately how many 60-minute hours did you spend on the following tasks during your most recent complete calendar week, in your job at this school’ with separate figures to be provided for 10 separate tasks. Analysis based upon both primary and lower-secondary teachers. Source: TALIS 2018 database; questions 16, 17 and 18.

15. The online data tables provide a full set of alternative results for England using this second derived ‘total working hours’ measure (see online Tables

³⁰ A possible explanation is that there may have been some overlap between the different categories within the question teachers were asked (e.g. between planning and marking). This could have led some teachers to double-count the time they spent upon some tasks.

OT_3_1_1b_Q1718, OT_3_1_2b_Q1718 and OT_3_1_3b_Q1718). The main difference is that teachers' reported hours are slightly higher when this alternative measure is used. For instance, the average hours for full-time primary teachers changes from around 52 to around 56 hours per week, with the equivalent figures for lower-secondary teachers in England increasing from around 49 to around 53 hours per week.

16. Full-time lower-secondary teachers in England reported working longer hours, on average, than those in other OECD countries. The average in England was approximately 49 hours per week, compared to an average of around 41 hours across the OECD. The average reported working hours of lower-secondary teachers in England was similar to some of the high-performing PISA countries/economies, such as Singapore (46.2 hours), Shanghai (45.5 hours) and Alberta (47.9 hours), but above others (e.g. 34.2 hours in South Korea and 34.1 hours in Finland). Note that in most countries, average reported hours tend to be higher when the alternative measured (total time summed across different tasks) is used – with the difference more striking in some countries (e.g. South Korea) than others (e.g. Japan). These results can be found in Table 3.1.3.

Table 3.1.3. International comparison of the reported average number of hours worked by full-time lower-secondary teachers per week.

Country	Total hours (single question)	Total hours (multiple questions)
Japan	58.9	58.5
England	49.3	53.1
Alberta	47.9	53.9
Singapore	46.2	55.2
Shanghai (China)	45.5	57.9
OECD	40.8	47.0
Estonia	39.4	45.1
Chinese Taipei	36.1	48.3
South Korea	34.2	47.1
Finland	34.1	37.1

Notes: Full-time teachers. Source: TALIS 2018 database; questions 16, 17 and 18.

17. Primary teachers in England reported working more hours (on average) than those in most other countries, as illustrated by Table 3.1.4. Of the 12 countries with comparable data, average reported working hours of full-time primary teachers were only longer in Japan (56 hours). The 52.1 hours reported by primary teachers in England was longer than in several other OECD nations, including Sweden (43.7 hours), France (42.5 hours), Denmark (39.4 hours), Spain (36.2 hours) and South Korea (32.5 hours).

Table 3.1.4. International comparison of the reported average number of hours worked by full-time primary teachers per week.

Country	Total hours (single question)	Total hours (multiple questions)
Japan	56.0	55.3
England	52.1	56.0
Vietnam	44.4	52.1
Flemish Belgium	43.9	46.8
Sweden	43.7	44.5
France	42.5	44.5
Denmark	39.4	41.4
UAE	39.4	54.2
Chinese Taipei	39.0	50.0
Buenos Aires	38.4	47.3
Spain	36.2	45.6
South Korea	32.5	46.3
Turkey	32.0	42.8

Notes: Figures are for full-time teachers. Source: TALIS 2018 database; questions 16, 17 and 18.

Key points

- Full-time primary school teachers in England reported working, on average, 52.1 hours per week in 2018, compared to 49.3 hours for their lower-secondary school counterparts. The figure for full-time lower-secondary teachers in England was broadly stable from 2013 (when the average was 48.2 hours per week).
- Both primary and lower-secondary teachers in England reported working longer hours than teachers in most other countries that participated in TALIS. For lower-secondary, the average hours of work amongst full-time teachers in England was 49.3, above the OECD average of 40.8.

3.2 How much time did teachers spend on teaching and non-teaching activities?

18. To capture the amount of time teachers spent upon different tasks, respondents to the TALIS questionnaire were asked 2 further questions. The first focused upon the amount of time that they spent teaching:

'Of this total, how many 60-minute hours did you spend on teaching at this school during your most recent complete calendar week?' (Please only count actual face-to-face teaching time).

19. While the second asked a similar question about the time spent upon 10 other work-related activities (planning and preparation, team-working, marking, pupil guidance/discipline, management, administration, CPD, talking to parents/carers, extracurricular activities and other):

'Approximately how many 60-minute hours did you spend on the following tasks during your most recent complete calendar week, in your job at this school?' (Include tasks that took place during weekends, evenings and other out of class hours. Exclude all time spent teaching, as this was recorded in the previous question.)

20. Responses to the first question are used to measure the time teachers spent teaching. The sum of the time spent upon the 10 activities asked about in the second question measure time allocated to non-teaching tasks.
21. Full-time primary teachers in England reported spending, on average, 24.1 hours teaching per week. This was similar to the number of teaching hours reported by full-time primary teachers in some other countries (e.g. France, Spain, Japan) but above others such as Sweden (20.1 hours), South Korea (20.3 hours) and Denmark (21.1 hours). The average amount of teaching time reported by full-time lower-secondary teachers in England was 20.5 hours per week; similar to the OECD average (21.5 hours).
22. In 2018, teachers in England reported spending less time teaching than they did upon associated non-teaching tasks. Full-time primary teachers spent, on average, 24 hours teaching per week, compared to around 32 hours on other activities. In other words, for every 45 minutes spent teaching, primary teachers spent an hour doing something else. This ratio was slightly lower for full-time lower-secondary teachers, who did an hour of non-teaching activity for every 40 minutes they spent teaching. These results are presented in Table 3.2.1.

Table 3.2.1. Average hours per week teachers in England reported spending upon selected tasks.

Task	Full-time		Part-time	
	Primary	Lower-secondary	Primary	Lower-secondary
Teaching	24.1	20.5	16.0	16.4
Planning/preparation	7.7	7.5	6.1	7.0
Teamworking	3.6	3.2	2.8	2.0
Marking	6.1	6.3	3.8	5.7
Pupil guidance/discipline	2.1	2.7	1.3	1.4
Management	2.6	2.3	1.4	0.6
Administration	3.8	4.0	3.1	2.5
Professional development	1.4	1.1	0.8	0.7
Talking to parents	1.6	1.6	1.3	1.1
Extracurricular activities	0.9	1.7	0.5	1.0
Other	2.1	2.3	1.4	1.3
Total non-teaching tasks	31.9	32.7	22.4	23.3
Ratio teaching: non-teaching	0.75	0.63	0.71	0.71

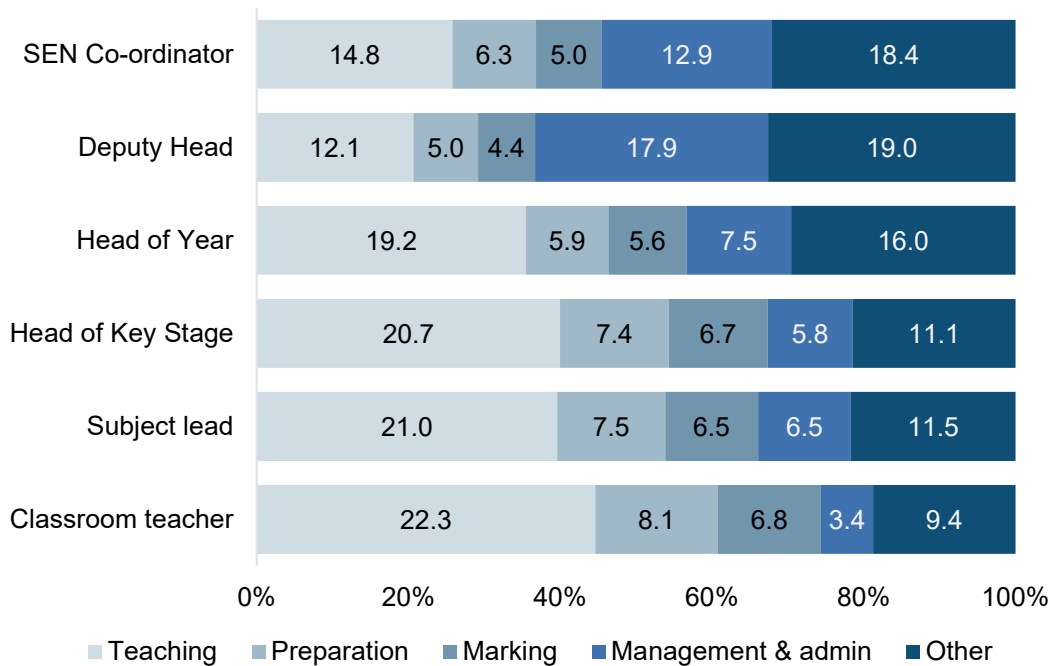
Notes: Figures refer to the average number of hours teachers in England worked on each task per week. The 'total non-teaching tasks' includes all tasks except for teaching. Any teacher where total reported working hours across all tasks exceeds 120 hours has been excluded. Source: TALIS 2018 database; questions 17 and 18.

23. Lesson planning/preparation (around 7.5 hours per week), marking (around 6 hours per week) and administration (around 4 hours per week) were the most time-consuming non-teaching tasks that primary and lower-secondary teachers in England reported doing. Yet there were several other smaller tasks that, when added together, also made a significant contribution to teachers' workloads. This included liaising with parents/carers (on average, over 90 minutes per week), pupil guidance/discipline (more than 2 hours per week) and management responsibilities (around 2.5 hours, on average, per week). It is also notable that part-time lower-secondary teachers reported almost as much time on lesson planning and marking as their full-time counterparts.
24. Table 3.2.1 suggests that the reason why primary teachers in England had longer total working hours than their lower-secondary school counterparts (as discussed in section 3.1) was that they have more face-to-face teaching time with their pupils. In particular, Table 3.2.1 highlights how the average full-time primary school teacher reported conducting 24 hours of face-to-face teaching per week, compared to just under 21 hours for lower-secondary teachers. On the

other hand, primary and lower-secondary teachers allocated similar amounts of time to each of the 10 other tasks (e.g. planning, marking, administration, talking to parents).

25. Teachers in England reported spending less than half of their time at work teaching pupils; this held true regardless of their job role. For instance, although regular classroom teachers had fewer managerial and administrative responsibilities than other groups, they tended to report spending longer upon planning/preparation and, to a certain extent, marking. These results are presented in Figure 3.2.1 for lower-secondary teachers, with similar results for primary teachers presented in the online data tables (see online Figure OF_3_2_1_Primary).

Figure 3.2.1. Time allocation of full-time lower-secondary teachers in England by role.



Notes: Figures inside bars refers to average number of hours spent upon the task each week. Based upon full-time teachers only. Source: TALIS 2018 database; questions 17, 18 and 62.

26. Between 2013 and 2018, there was no change in the total amount of time full-time lower-secondary teachers in England reported spending upon non-teaching tasks, remaining steady at (on average) around 32 hours per week. Small declines in time spent upon some tasks (e.g. time spent upon planning and preparation declining from 8.0 to 7.5 hours per week amongst full-time lower-secondary teachers) were offset by increases in others (e.g. a small increase from 1.8 to 2.7 hours per week spent upon pupil counselling and behaviour guidance). Such small changes for any specific activity should not be over-

interpreted, with the key finding being that the total time lower-secondary teachers reported spending upon non-teaching tasks remained broadly stable over this 5-year period (as has the ratio between the time allocated to teaching versus non-teaching activities). Table 3.2.2 presents these findings.

27. On the other hand, for part-time lower-secondary teachers, there was an increase in reported teaching hours (14.5 to 16.4 hours per week) and time spent upon non-teaching tasks (19.9 to 23.2 hours per week). As noted in the previous sub-section, this change could be partially due to part-time teachers working more contracted hours per week in 2018 than in 2013.

Table 3.2.2. Time lower-secondary teachers in England spent upon selected tasks. Change between 2013 and 2018.

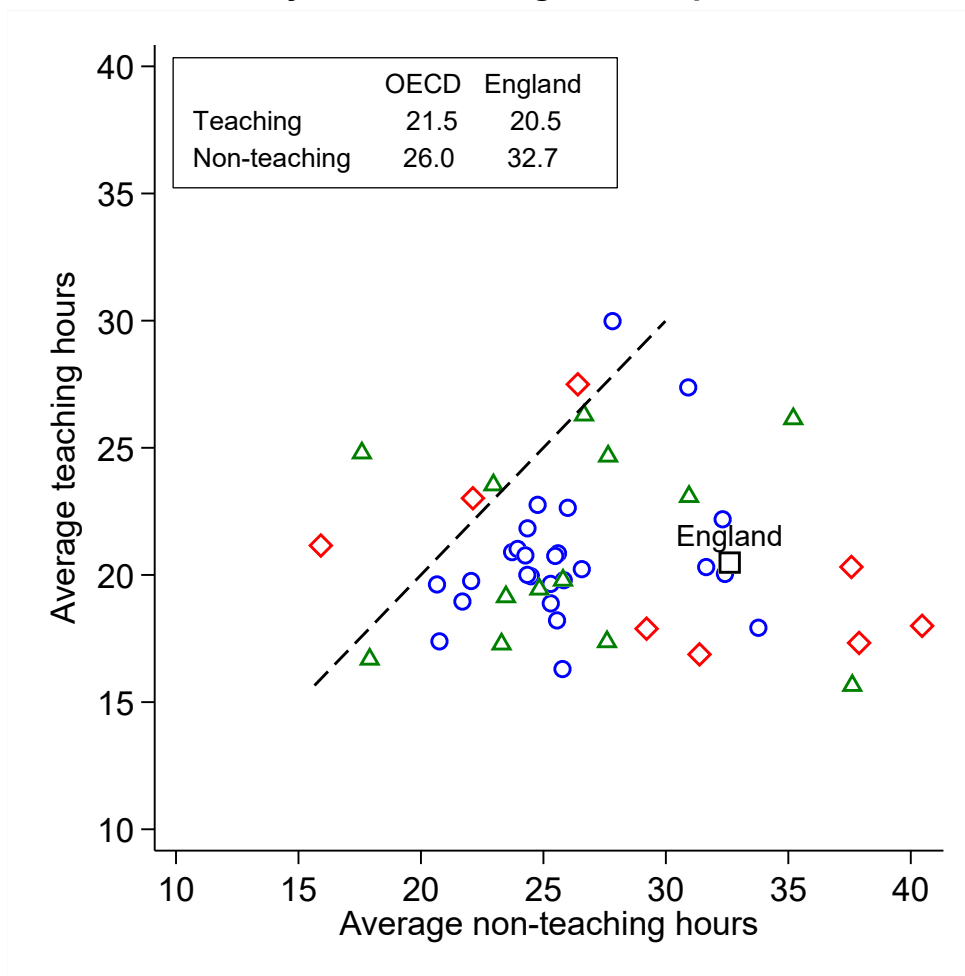
Task	Full-time		Part-time	
	2013	2018	2013	2018
Teaching	20.3	20.5	14.5	16.4
Planning/preparation	8.0	7.5	6.1	7.0
Teamworking	3.5	3.2	2.1	2.0
Marking	6.3	6.3	4.7	5.7
Pupil guidance/discipline	1.8	2.7	0.8	1.4
Management	2.4	2.3	0.5	0.6
Administration	4.2	4.0	2.4	2.5
Talking to parents	1.6	1.6	1.1	1.1
Extracurricular activities	2.2	1.7	1.1	1.0
Other	2.4	3.4	1.1	2.0
Total non-teaching tasks	32.5	32.7	19.9	23.2
Ratio teaching:non-teaching	0.62	0.63	0.73	0.71

Notes: Figures refer to the average number of hours teachers in England spent on each task per week. The 'total non-teaching tasks' includes all tasks except for teaching. A separate category for CPD was not included in the TALIS 2013 survey. In this table, the 'other' figure for 2018 includes CPD and hence takes a higher value than in Table 3.2.1. Source: TALIS 2018 database; questions 17 and 18.

28. Figure 3.2.2 compares England to other countries in terms of the number of hours full-time lower-secondary teachers spent upon teaching and non-teaching tasks. There are several points to note. First, most countries sit below the dashed 45-degree line; like England, in most countries, face-to-face teaching made up less than half of lower-secondary teachers' jobs. Second, whereas most of the high-performing countries had similar average teaching hours to England (and to each other) they differed in terms of time spent upon non-teaching tasks. Third, England was around the international average for time lower-secondary teachers spent upon teaching. However, cross-referencing with

Table 3.2.3 (panel (b)) demonstrates England was above the OECD average for time lower-secondary teachers reported spending upon non-teaching tasks. Note, in particular, how the average full-time lower-secondary teacher in England reported spending around 32.7 hours a week upon non-teaching tasks, compared to an OECD average of around 26 hours. In other words, lower-secondary teachers in England reported spending 5 hours more per week on tasks such as lesson preparation, marking, administration and management than the average lower-secondary teacher across OECD countries.

Figure 3.2.2. Time spent upon teaching and non-teaching tasks reported by full-time lower-secondary teachers in England compared to other countries.



Notes: The dashed line illustrates the line of equality. This is where the average amount of time spent upon teaching was equal to the amount of time spent upon non-teaching tasks. Red diamonds = high-performing countries, green triangles = low-performing countries, blue circles = countries with similar performance to England. Sample includes both full-time and part-time teachers. Source: TALIS 2018 database; questions 17 and 18.

29. Table 3.2.3 breaks down this time into the different tasks that teachers completed as part of their job. An area that stood out for lower-secondary teachers in England was marking; this was a bigger component of workload in

England than in many other countries. While the average full-time lower-secondary teacher across the OECD reported spending 4.3 hours marking per week, the figure in England was around two hours higher (6.3 hours per week). Similarly, the amount of time lower-secondary teachers reported spending marking in England was greater than in most of the high-performing countries, with the exceptions of Japan, Singapore and Shanghai (where average marking time exceeded 7 hours per week).

30. The other areas of workload where England particularly stood out from other countries in TALIS was time spent upon administration and lesson planning/preparation. The average lower-secondary teacher in England reported spending over an hour more on administrative duties than the average lower-secondary teacher across OECD countries (4.0 versus 2.6 hours), although there were some high-performing countries where the administrative burden was higher (e.g. 5.9 hours in Japan). Similarly, there was, an hour difference between the average time teachers in England reported spending upon lesson planning per week relative to the OECD average (7.5 versus 6.5 hours). A modest difference was also observed for school management; full-time lower-secondary teachers in England reported spending around an hour more upon this task per week than the average teacher from across the OECD.
31. The only area in which England was below the OECD average was for CPD. In England, full-time lower-secondary teachers reported an average of 1.1 hour per week spent upon CPD activities, compared to an OECD average of 1.6 hours.
32. Similar results emerged with respect to international comparisons of primary school teachers, albeit with fewer comparators available (Table 3.2.3 panel (a)). The average amount of time spent upon marking by primary teachers in England stood out as high relative to other countries; only Chinese Taipei was similar to England in terms of the amount of time primary teachers devoted to this task. A similar result was found for administration, although reported time spent upon such matters was larger in the 3 high-performing East Asian nations than in England. Lesson preparation, working with colleagues and management responsibilities were also key reasons why the amount of time spent upon non-teaching activities was higher in primary schools in England than elsewhere.

Table 3.2.3. Average number of reported hours spent upon different tasks across selected countries (full-time teachers).

(a) Primary

Country	Total non-teaching tasks	Planning/Preparation	Teamworking	Marking	Pupil guidance/discipline	Management	Administration	Professional development	Talking to parents	Extra curricular activities	Other
Chinese Taipei	33.7	5.7	2.8	6.2	2.9	3.9	4.5	2.4	1.5	2.1	1.8
Japan	32.0	8.7	4.2	5.0	1.3	3.3	5.3	0.6	1.2	0.6	2.0
England	31.9	7.7	3.6	6.1	2.1	2.6	3.8	1.4	1.6	0.9	2.1
Vietnam	30.5	8.6	3.1	4.0	2.7	1.6	1.7	2.8	1.8	2.3	1.9
UAE	30.4	6.2	3.2	4.6	3.1	2.2	2.8	2.4	2.2	1.8	2.0
South Korea	26.0	5.8	3.0	2.4	2.7	1.7	4.2	2.4	1.3	1.2	1.3
Buenos Aires	24.7	5.8	2.5	5.2	2.2	1.1	1.6	2.6	1.4	1.1	1.5
Sweden	24.4	7.4	3.7	2.9	1.8	1.0	2.8	1.3	1.6	0.4	1.7
Spain	22.2	5.3	2.7	3.7	1.9	1.7	1.6	2.0	1.4	0.7	1.3
Flemish Belgium	22.1	5.9	2.2	4.8	1.2	1.2	2.6	0.8	1.2	0.8	1.4
Denmark	20.3	7.0	3.3	1.7	1.0	0.5	1.7	0.9	1.8	0.5	1.9
France	19.9	7.4	2.3	4.2	0.6	0.6	0.9	0.9	1.1	0.6	1.2
Turkey	16.6	3.2	1.7	2.5	1.6	0.5	1.0	1.4	1.7	1.4	1.8

(b) Lower-secondary

Country	Total non-teaching tasks	Planning/Preparation	Teamworking	Marking	Pupil guidance/discipline	Management	Administration	Professional development	Talking to parents	Extra curricular activities	Other
Japan	40.5	8.6	3.7	4.5	2.4	3.0	5.9	0.6	1.3	7.9	2.9
Singapore	37.9	7.0	2.9	7.3	2.3	1.4	3.7	1.7	1.2	2.7	7.8
Shanghai (China)	37.6	8.0	3.7	7.4	4.8	2.6	2.3	2.9	1.9	1.7	2.4
England	32.7	7.5	3.2	6.3	2.7	2.3	4.0	1.1	1.6	1.7	2.3
Chinese Taipei	31.4	6.7	2.8	4.1	3.3	3.1	3.9	2.2	1.6	2.1	1.7
South Korea	29.2	6.1	2.4	2.8	3.6	1.6	5.3	2.4	1.5	1.9	1.7
Alberta	26.4	7.0	2.5	4.9	2.2	1.5	2.3	1.4	1.3	2.7	0.7
OECD	26.0	6.5	2.7	4.3	2.1	1.4	2.6	1.6	1.4	1.7	1.9
Estonia	22.1	6.3	1.8	3.8	2.0	0.5	1.8	1.7	1.2	1.5	1.4
Finland	15.9	4.9	2.1	3.0	1.1	0.3	1.1	0.8	1.2	0.4	0.9

Notes: Shading to be read vertically, with darker shading indicating higher values compared to other countries in the column. Source: TALIS 2018 database; questions 17 and 18.

Key points

- Full-time primary teachers in England reported spending, on average, 24 hours per week upon teaching and around 32 hours for non-teaching tasks (e.g. marking, preparation, administration, management). The equivalent figures for lower-secondary teachers were 20.5 hours (teaching) and 32.7 hours (non-teaching tasks). The time full-time lower-secondary teachers in England spent upon non-teaching tasks was very similar to 2013 (32.5 hours).

3.3 What tasks did teachers feel they spent too much time on?

33. Within England, an additional question was included in the TALIS survey – replicating a question asked in Teacher Workload Survey 2016³¹. This asked teachers whether they felt they spent too much or too little time working on the 10 tasks covered in the previous sub-section. This was phrased as follows:

‘Across the whole school year, is the amount of time you spend on the following non-teaching activities too little, too much or about right?’

Primary and lower-secondary teachers’ responses to these questions can be found in Table 3.3.1.

34. Most primary and lower-secondary teachers in England felt that they spent about the right amount of time upon most tasks. For instance, 73% of primary teachers indicated that they spent about the right amount of time upon pupil guidance/behaviour, 75% upon management and 83% upon talking to parents. Lower-secondary teachers were also most likely to tick the ‘about right’ category for most of the tasks, including management (64%) and extracurricular activities (59%).
35. There were, however, a few areas where some teachers expressed some dissatisfaction. For instance, 58% of primary and 65% of lower-secondary teachers indicated that they had spent either ‘too much’ or ‘far too much’ time marking, while 64% (primary) and 72% (lower-secondary) felt the same about the amount of time spent on administration. Lesson planning and preparation

³¹ For further information please see Higon et al. (2017). Though caution should be taken in comparing results between TWS and TALIS as, due to differences in methodology, results are not directly comparable.

was the other area where some teachers felt dissatisfied, with 56% of primary and 41% of lower-secondary teachers reporting that they spent ‘too much’ or ‘far too much’ time upon these tasks.

Table 3.3.1. Views of teachers in England with respect to the amount of time they spent upon selected tasks.

(a) Primary

	1. Far too little	2. Too little	3. About right	4. Too much	5. Far too much	Average
Marking	0%	1%	41%	39%	19%	3.74
Administration	0%	1%	35%	47%	17%	3.79
Planning/preparation	1%	3%	40%	42%	14%	3.64
Other	1%	2%	66%	25%	6%	3.35
Pupil guidance/discipline	1%	4%	73%	19%	3%	3.20
Talking to parents	0%	4%	83%	10%	2%	3.10
Teamworking	1%	17%	73%	7%	1%	2.89
Extracurricular activities	3%	13%	75%	8%	1%	2.90
Management	3%	17%	75%	5%	1%	2.85
CPD	6%	29%	61%	3%	0%	2.64

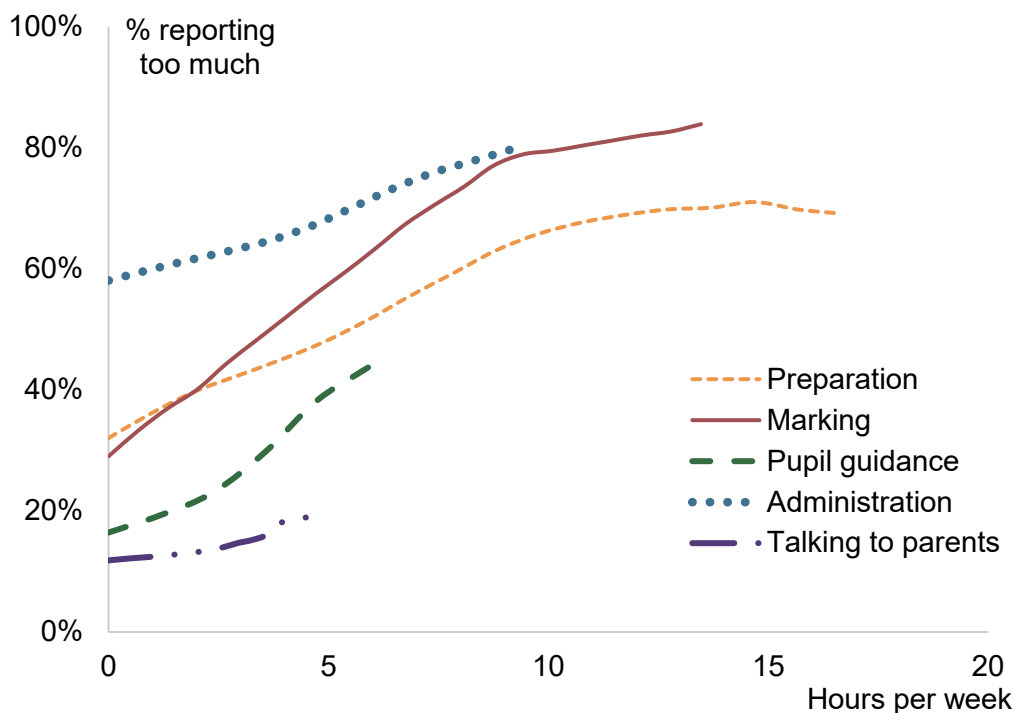
(b) Lower-secondary

	1. Far too little	2. Too little	3. About right	4. Too much	5. Far too much	Average
Marking	1%	5%	29%	40%	25%	3.83
Administration	0%	2%	25%	51%	22%	3.91
Planning/preparation	2%	13%	44%	31%	10%	3.34
Other	1%	4%	66%	23%	6%	3.29
Pupil guidance/discipline	1%	7%	64%	24%	5%	3.24
Talking to parents	1%	11%	74%	13%	3%	3.06
Extracurricular activities	8%	23%	59%	8%	2%	2.71
CPD	9%	36%	49%	5%	1%	2.52
Management	7%	23%	64%	5%	1%	2.71
Teamworking	4%	31%	59%	5%	1%	2.67

Notes: The ‘average’ column treats each question as a 5-point ordinal variable, with a value of 1 assigned to the lowest category (‘far too little’) and 5 to the highest category (‘far too much’). The average (mean) has then been calculated along this 5-point scale. Source: TALIS 2018 database; question 60.

36. At the other end of the spectrum is teamworking, management, CPD and extracurricular activities. Although most respondents felt they spent about the right amount of time on these activities, several teachers also indicated they felt they spent 'too little' or 'far too little' time upon such tasks. For instance, almost half (45%) of lower-secondary teachers indicated that they spent too little or far too little time upon CPD.
37. Despite primary and lower-secondary teachers having reported similar amounts of time on marking and administration (recall Table 3.2.1), lower-secondary teachers were more likely to say that they spent too much time upon such tasks relative to their primary-school counterparts. Take, for example, administration. As Table 3.2.1 illustrates, primary and lower-secondary teachers spent, on average, similar amounts of time upon this activity. Yet Table 3.3.1 demonstrates how lower-secondary teachers (73%) were more likely to say they spent 'too much' or 'far too much' time on administration than primary teachers (64%).
38. With each additional hour teachers spent upon marking, there was a sharp increase in the probability that they reported spending too much time upon this task. This is illustrated for primary teachers in Figure 3.3.1, where the amount of time spent on each task each week (horizontal axis) is plotted against the proportion of teachers who reported that they spent 'too much' or 'far too much' time upon that activity. This demonstrates how around 30% of teachers said marking took up too much of their time, even if they spent only 1 hour per week on this activity. A sharp increase can then be observed up to around 55% for those who reported marking for 5 hours per week, and up to approximately 80% once 9-hours per week was reached. Equivalent results for lower-secondary teachers are provided in the online data tables (see online Figure OF_3_3_1_Secondary).

Figure 3.3.1. The hours primary teachers in England reported spending upon selected tasks compared to whether they felt the task took up too much time.



Notes: Estimates based upon local polynomial smoothing. The vertical axis records the proportion of teachers who report spending 'too much' or 'far too much' time on each task. Values above the 95th percentile for working hours excluded due to estimates becoming unstable. Source: TALIS 2018 database; questions 18 and 60.

39. Table 3.3.2 examines variation in lower-secondary teachers' responses by job role. Those teachers with management responsibilities (head of year and deputy head) were less likely to say they spent too long on planning and preparation than other groups. On the other hand, they were more likely to report pupil guidance/discipline as a workload issue. Those teachers without any leadership/management duties were less likely to report management and administration as an issue than others. On the other hand, there was relatively little variation by job role in how teachers responded to the questions about teamworking, extracurricular activities and CPD. Similar findings emerged for primary teachers, as evidenced within the online data tables (see online Table OT_3_3_2_Primary).

Table 3.3.2. The percentage of lower-secondary teachers in England who said they spent too long on selected tasks by job role.

	Class teacher	Subject lead	Head of key stage	Head of year	Deputy head
Planning	45%	40%	46%	30%	22%
Teamwork	4%	6%	10%	6%	8%
Marking	68%	64%	73%	60%	43%
Pupil guidance / discipline	24%	28%	33%	40%	41%
Management	2%	8%	8%	9%	19%
Administration	65%	80%	84%	80%	70%
CPD	7%	4%	5%	4%	2%
Talking to parents	13%	16%	19%	26%	15%
Extracurricular	10%	11%	8%	8%	5%
Other	28%	33%	36%	21%	26%

Notes: Figures refer to the percentage of teachers who selected 'too much' or 'far too much'. Job role based upon self-reported information. Source: TALIS 2018 database; questions 60 and 62.

Key points

- In 2018, most primary and lower-secondary teachers in England felt that they spent about the right amount of time upon most tasks. Important exceptions included marking, which 58% of primary and 65% of lower-secondary teachers felt they spent too much time upon, and administration, which 64% of primary and 72% of lower-secondary teachers felt they spent too much time upon. On the other hand, 35% of primary and 45% of lower-secondary teachers in England thought they spent too little time upon CPD.

3.4 Did teachers believe that their workload was unmanageable?

40. Within the TALIS 2018 survey, teachers in England were asked to indicate on a 4-point scale whether they felt that their workload was unmanageable. This question was asked only in England, not in other participating countries, and replicates a question from the 2016 Teacher Workload Survey.
41. Around half of primary (53%) and 57% of lower-secondary teachers in England believed that their workload was unmanageable, as can be seen in Table 3.4.1. Approximately a sixth of lower-secondary teachers strongly agreed with this statement.

Table 3.4.1. Did primary and lower-secondary teachers in England feel that their workload was unmanageable?

		1. Strongly disagree	2. Disagree	3. Agree	4. Strongly agree	Average
My workload is unmanageable	Primary	4%	43%	40%	12%	2.61
	L. Secondary	3%	40%	41%	16%	2.71

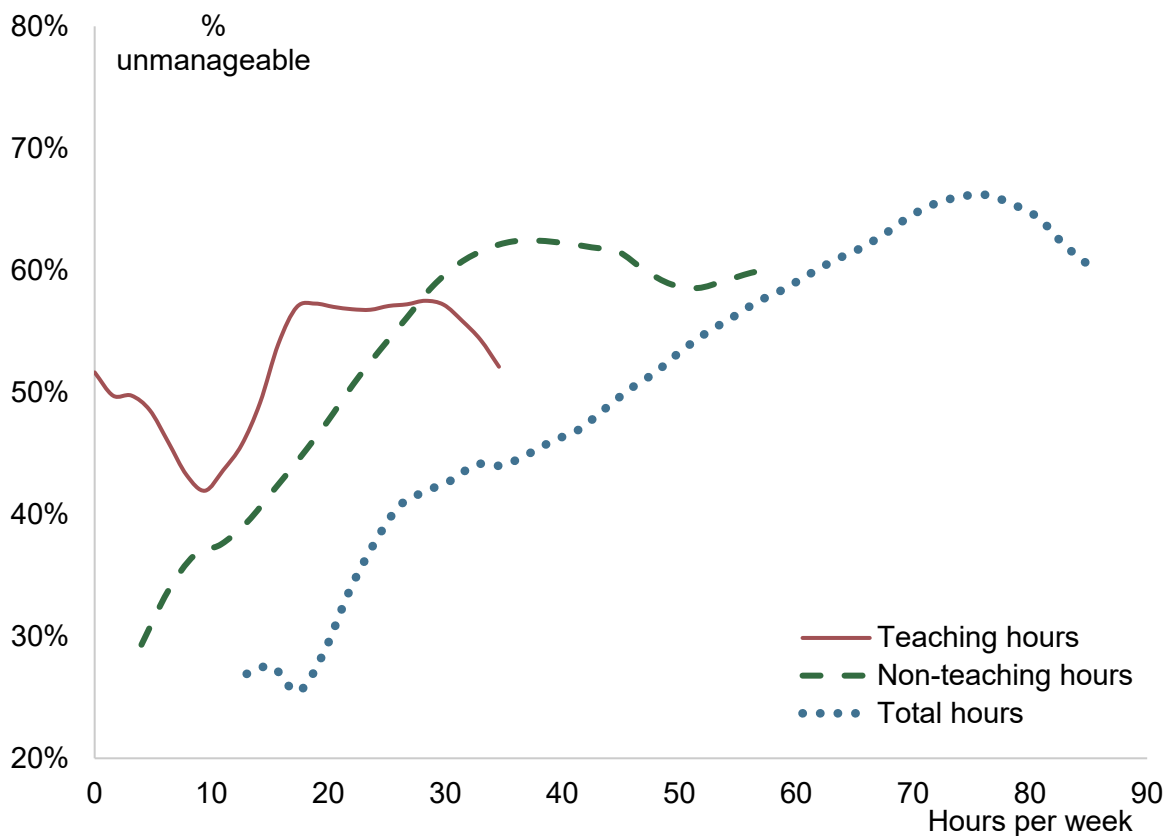
Notes: The 'average' column treats the question as a 4-point ordinal variable, with a value of 1 assigned to the lowest category ('strongly disagree') and 4 to the highest category ('strongly agree'). The average (mean) has then been calculated along this 4-point scale. Source: TALIS 2018 database; question 59e.

42. The online data tables (see online Table OT_3_4a) suggest that there was relatively little variation in teachers' responses to this question according to their gender, work schedule (full versus part-time) or number of years of teaching experience. However, within primary schools, classroom teachers were less likely to report their workload as unmanageable than their peers with managerial responsibilities; particularly those who were the head of a key stage. Within primary schools, just a quarter of teachers who worked in the independent sector agreed or strongly agreed that their workload was unmanageable (25%), compared to around half of those in the state sector (e.g. 55% in sponsored academies and 58% in academy converters). However, there was relatively little variation within the state school group itself, with similar proportions of teachers saying their workload was unmanageable regardless of the proportion of FSM pupils in the school or level of academic achievement. A possible exception was that teachers who worked within lower-secondary schools rated as 'inadequate' by Ofsted were around 70% likely to report their workload as unmanageable, compared to around 55% in the 'outstanding' group. However, given the small

sample size in the ‘inadequate’ category (see Appendix C), this result should be treated with caution.

43. There was a strong relationship between hours of work and whether teachers thought that their workload was unmanageable. This is demonstrated for primary school teachers in Figure 3.4.1, where there is a clear positive gradient to the total and non-teaching hour curves. For instance, around 40% of teachers who worked around 30 hours per week reported that their workload was unmanageable, compared to almost 60% of those who worked more than 60 hours each week. A similar result emerged for lower-secondary teachers (see Figure OF_3_4_1_Secondary in the online data tables). Together, this suggests that working hours (and particularly time spent upon non-teaching tasks) is linked to whether teachers view their workload as manageable.

Figure 3.4.1. The association between working hours and whether primary teachers in England felt that their workload was manageable.



Notes: The horizontal axis presents the number of hours worked per week, with the vertical axis providing the percentage of teachers who reported that their workload was unmanageable. Source: TALIS 2018 database; questions 17, 18 and 59e.

44. In TALIS 2013, 38% of lower-secondary teachers agreed and 13% strongly agreed that their workload was unmanageable. These percentages increased in 2018, to 41% and 16% respectively, as can be seen in Table 3.4.2. The increase in the average score along the four-point scale (from 2.61 to 2.71) is statistically significant at the 5% level.

Table 3.4.2. Did perceptions of workload amongst lower-secondary teachers in England change between 2013 and 2018?

	Survey Year	1. Strongly disagree	2. Disagree	3. Agree	4. Strongly agree	Average score
My workload is unmanageable	2013	3%	45%	38%	13%	2.61
	2018	3%	40%	41%	16%	2.71

Notes: The 'average' column treats the question as a 4-point ordinal variable, with a value of 1 assigned to the lowest category ('strongly disagree') and 4 to the highest category ('strongly agree'). The average (mean) has then been calculated along this 4-point scale. Source: TALIS 2013 and 2018 databases for England; questions 47h (2013) and 59e (2018).

Key points

- 53% of primary and 57% of lower-secondary teachers in England felt that their workload was unmanageable. There was a slight increase in the percentage of lower-secondary teachers who believed that their workload was unmanageable compared to 2013 (51%).

3.5 How did headteachers spend their working week?

45. Section 3.1 covered the issue of teacher workload, including the responses teachers gave to a single question that captured the total number of hours they worked per week. A national question was included in the TALIS survey for headteachers in England which attempted to capture similar information. Specifically, headteachers were asked:

'In your most recent full working week, approximately how many hours did you spend in total on school management, staff supervision, interacting with other teachers, teaching and on other tasks related to your job at this school?' (Please include tasks that took place during weekends, evenings or other out-of-school hours.)

46. The distribution of responses to this question is provided in Table 3.5.1.

47. Primary school headteachers in England reported working, on average, 57 hours per week. The figure reported by lower-secondary headteachers was slightly higher, at 62 hours. This is longer than the equivalent figures for teachers; for instance, the average full-time lower-secondary teacher in England reported working around 50 hours per week (see Section 3.1 for further details).
48. There was a difference of around 25 hours between the longest and shortest working weeks of headteachers. In reference to primary schools, 10% of headteachers reported working 48 hours or less per week, while at the other extreme 10% suggested they worked for 70 hours or more. It is also worth noting that, even amongst lower-secondary headteachers with the shortest working weeks, they still reported working around 10 hours a day (assuming a 5-day working week).

Table 3.5.1. Working hours amongst headteachers in England.

	Primary	Lower-secondary
10th percentile	48	51
25th percentile	52	59
50th percentile	60	62
75th percentile	65	70
90th percentile	70	75
Mean	57.3	62.4
P90-P10	22.5	24.5

Note: Sample includes both part-time and full-time headteachers, as the number of part-time headteachers was too small to enable a separate analysis. The 'P90-P10' row refers to the difference between the 90th and 10th percentiles. Any headteacher reporting working more than 96 hours per week was excluded from analysis. Source: TALIS 2018 database; question 51.

49. As shown in Table 3.5.2, administration (e.g. regulation, reports, budgets) and leadership (e.g. strategic planning, school management plans) tasks were the areas where headteachers in England reported spending most of their time. When added together, these accounted for around half of the time headteachers spent working each week. This held true within both primary and lower-secondary schools. The other substantial component of headteachers workload was curriculum and teaching-related activities; these accounted for 19% of primary and 16% of lower-secondary headteachers' time. Interactions with parents/carers and the local community each accounted for around 10% of headteachers' time, or less.

Table 3.5.2. Time allocation of primary and lower-secondary headteachers in England.

	Primary		Lower-secondary	
	%	SE	%	SE
Administrative tasks and meetings	27%	1.3%	25%	1.1%
Leadership tasks and meetings	26%	0.9%	27%	1.2%
Curriculum and teaching-related tasks and meetings	19%	0.9%	16%	0.8%
Pupil interactions	13%	0.6%	14%	0.7%
Parent or guardian interactions	10%	0.5%	10%	0.5%
Interactions with local and regional community, business and industry	4%	0.2%	5%	0.3%
Other	2%	0.4%	2%	0.3%

Notes: SE stands for standard error and provides a measure of uncertainty in the estimate due to sampling variation. Source: TALIS 2018 database; question 21.

50. There was little change in how lower-secondary headteachers in England reported spending their working week between 2013 and 2018. Table 3.5.3 illustrates how the proportion of time allocated to interaction with pupils, parents/carers and the local community was largely unchanged over this 5-year period. The proportion of time spent upon curriculum and teaching meetings may, however, have slightly declined (21% of headteacher time in 2013 compared to 16% in 2018). Note that although the figure for administration was much lower in 2018 than in 2013, this is likely to be due to a new category having been added to the questionnaire (about leadership tasks). The change in the result for this category is hence particularly difficult to interpret.

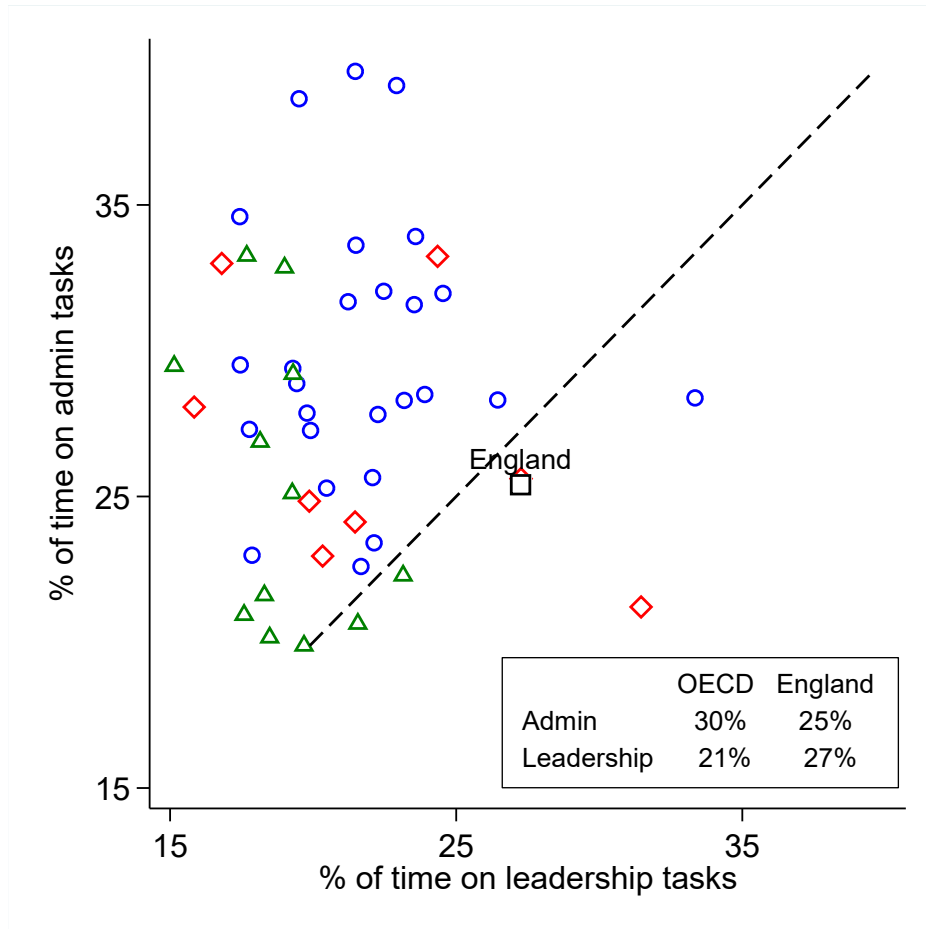
Table 3.5.3. Change to how lower-secondary headteachers in England allocated their time between 2013 and 2018.

	2013		2018	
	Mean	SE	Mean	SE
Administrative tasks and meetings	43%	1.2%	25%	1.1%
Leadership tasks and meetings	N/A	N/A	27%	1.2%
Curriculum and teaching-related tasks and meetings	21%	0.7%	16%	0.8%
Pupil interactions	16%	0.7%	14%	0.7%
Parent or guardian interactions	10%	0.5%	10%	0.5%
Interactions with local and regional community, business and industry	6%	0.5%	5%	0.3%
Other	4%	0.8%	2%	0.3%

Note: Figures refer to the percentage of time headteachers in England allocated to different tasks. Leadership tasks and meetings was a new category added in 2018, (N/A is hence presented for this category for 2013). SE refers to the standard error, which is a measure of uncertainty in the estimate due to sampling variation. Source: TALIS 2013 (question 19) and 2018 (question 21) databases.

51. Figure 3.5.1 compares the proportion of time lower-secondary headteachers spent upon administrative tasks (vertical axis) to the proportion of time spent upon leadership tasks (horizontal axis) across countries. In most countries, lower-secondary headteachers spent more time on the former than the latter. That is, most data points in Figure 3.5.1 sit above the dashed 45-degree line. England was, however, an exception – and it thus sits slightly below the 45-degree line. The implication is that lower-secondary headteachers in England spent a slightly smaller proportion of their time on administrative duties (25% versus 30%) and slightly more on leadership tasks (27% versus 21%) than the average across OECD countries. Indeed, Figure 3.5.1 suggests that lower-secondary headteachers in England spent a greater proportion of their time upon leadership tasks than headteachers in almost every other country. The online data tables provide the equivalent cross-national data for primary headteachers (see online data Table OF_3_5_1_Primary for further details).

Figure 3.5.1. Percentage of time lower-secondary headteachers allocated to administration versus leadership duties. Cross-national comparison.



Notes: The dashed line illustrates the line of equality. This is where the percentage of time spent upon leadership tasks was equal to the percentage of time spent upon administrative tasks. Red diamonds = high-performing countries, green triangles = low-performing countries, blue circles = countries with similar performance to England. Source: TALIS 2018 database; questions 21a and 21b.

52. The online data tables provide further details on the breakdown of headteachers time for both primary schools and lower-secondary schools (see online Tables OF_3_5_1_Primary and OF_3_5_1_Secondary). In general, England was not substantively different from international averages in terms of the proportion of time headteachers spent upon tasks such as pupil and parent/carer interactions and teaching/curriculum related matters.

53. Approximately half (47%) of primary school headteachers in England thought that their workload was manageable – see Table 3.5.4. The figure was slightly higher for lower-secondary school headteachers (57%). However, the difference between primary and lower-secondary headteachers was not statistically significant, meaning sampling variation remains one plausible explanation for this result.

Table 3.5.4. To what extent did headteachers in England believe that their workload was unmanageable?

		1. Strongly disagree	2. Disagree	3. Agree	4. Strongly agree	Average
My workload is unmanageable	Primary	2%	45%	44%	9%	2.60
	L. Secondary	7%	50%	35%	8%	2.44

Notes: The 'average' column treats the question as a 4-point ordinal variable, with a value of 1 assigned to the lowest category ('strongly disagree') and 4 to the highest category ('strongly agree'). The average (mean) has then been calculated along this 4-point scale. Source: TALIS 2018 database; question 46e.

54. In 2013, 30% of lower-secondary headteachers' agreed that their workload was unmanageable, while a further 6% strongly agreed. In 2018, these figures increased to 35% and 8% respectively, as can be seen in Table 3.5.5. However, the difference between the 2013 and 2018 results was not statistically significant, meaning sampling variation remains one plausible explanation for this result.

Table 3.5.5. The perceptions of workload amongst lower-secondary headteachers in England. Change between 2013 and 2018.

		1. Strongly disagree	2. Disagree	3. Agree	4. Strongly agree	Average
My workload is unmanageable	2013	7%	57%	30%	6%	2.36
	2018	7%	50%	35%	8%	2.44

Notes: The 'average' column treats the question as a 4-point ordinal variable, with a value of 1 assigned to the lowest category ('strongly disagree') and 4 to the highest category ('strongly agree'). The average (mean) has then been calculated along this 4-point scale. Source: TALIS 2013 (question 40h) 2018 (question 46e) databases for England.

Key points

- Primary headteachers in England worked, on average, approximately 57 hours per week in 2018. The equivalent figure for lower-secondary headteachers was around 62 hours per week. In total, 53% of primary and 43% of lower-secondary headteachers in England felt that their workload was unmanageable.

3.6 How did teachers and headteachers view flexible working?

55. This chapter concludes with a discussion of how teachers and headteachers responded to a series of national (i.e. England only) questions about flexible working. A comparison between primary and lower-secondary teachers can be found in Table 3.6.1.
56. Most teachers felt that their school management team (SMT) were supportive of individuals who required flexible working arrangements; 80% of primary teachers and 75% of lower-secondary teachers agreed or strongly agreed that '*the school management team are supportive of part-time and flexible working for teachers who require it*'. Only a small minority, around one-in-twenty teachers, strongly disagreed with this statement.
57. Similarly, most primary (66%) and lower-secondary (63%) teachers in England suggested that they would be comfortable requesting part-time or flexible working if they needed to.
58. However, most teachers in England also thought that working part-time reduces career progression opportunities³². Within primary schools, 44% of teachers agreed and 15% strongly agreed. The figures were slightly higher amongst lower-secondary teachers, where around two-thirds of teachers either agreed or strongly agreed that part-time working has a negative impact upon career opportunities.

³² These results are for the sample that includes all teachers, including both those who work full-time and those who work part-time.

Table 3.6.1. The attitude of primary and lower-secondary teachers in England towards flexible working.

		1. Strongly disagree	2. Disagree	3. Agree	4. Strongly agree	Average
Working part-time reduces opportunities for career progression	Primary	4%	36%	44%	15%	2.70
	L. Secondary	4%	28%	48%	20%	2.84
The school management team are supportive of part-time and flexible working for teachers who require it	Primary	5%	15%	62%	18%	2.94
	L. Secondary	6%	19%	63%	12%	2.82
I would feel comfortable requesting part-time or flexible working arrangements if I needed to	Primary	8%	26%	53%	13%	2.71
	L. Secondary	10%	27%	52%	11%	2.64

Notes: The 'average' column treats the question as a 4-point ordinal variable, with a value of 1 assigned to the lowest category ('strongly disagree') and 4 to the highest category ('strongly agree'). The average (mean) has then been calculated along this 4-point scale. Source: TALIS 2018 database; question 65.

59. The online data tables illustrate variation in how teachers responded to these questions by a selection of background characteristics (see online Tables OT_3_6a to OT_3_6c). With respect to the final question about flexible working, men felt slightly less comfortable requesting such a work pattern than women; 58% of male lower-secondary teachers agreed or strongly agreed, compared to 65% of female lower-secondary teachers. Similarly, individuals who already worked part-time were more willing to request flexible working than those who were working full-time; the difference was substantial, standing at almost 20 percentage points. There was also some relationship with teaching experience. Teachers who had worked in the profession for five years or less felt less comfortable requesting flexible working than their more experienced peers. For instance, 61% of primary teachers with 5 years of experience or less agreed or strongly agreed that they were comfortable making such a request, compared to 74% of those who had been a teacher for more than 20 years. This could have been due to differences in age between these teachers, rather than due to differences in their years of experience *per se*.
60. At the school level, lower-secondary teachers who worked in 'outstanding' schools were more likely to agree that they would feel comfortable requesting flexible working than those who worked in 'inadequate' schools. There was a similar difference by school intake; teachers who worked in schools with few FSM pupils were more willing to ask for flexible working than teachers who

worked in schools with a large share of disadvantaged pupils. On the other hand, there was relatively little variation by school achievement or region.

61. Headteachers were also asked a range of questions about flexible working, with their responses presented in Table 3.6.2.
62. Most headteachers in England felt that the school management team supported flexible and part-time working. Levels of agreement were high amongst both primary (69% agreed and 19% strongly agreed) and lower-secondary (70% agreed and 23% strongly agreed) headteachers.
63. Most headteachers also appreciated the benefits that offering flexible working could bring to their school. In particular, 85% of primary and 95% of lower-secondary headteachers recognised that offering flexible working patterns could help them to attract and retain high-quality teachers. At the same time, many headteachers also highlighted the organisational difficulties with the appointment of part-time teachers. For instance, 72% of primary and 86% of lower-secondary headteachers agreed that the use of part-time teachers created challenges with co-ordination and continuity of teaching. Many headteachers hence felt a trade-off between offering flexible working conditions to attract teachers, while having to manage the logistical challenges that this may create.
64. Almost half of primary headteachers (44%) indicated that they would feel comfortable requesting part-time or flexible working arrangements themselves, as illustrated by the final row of Table 3.6.2. The figures for lower-secondary headteachers was somewhat lower (33%).

Table 3.6.2. The attitude of primary and lower-secondary headteachers in England towards flexible working.

		1. Strongly disagree	2. Disagree	3. Agree	4. Strongly agree	Average
The school management team are supportive of part-time and flexible working for teachers who require it	Primary	2%	10%	69%	19%	3.05
	L. Secondary	0%	7%	70%	23%	3.15
Use of part-time teachers creates difficulties with co-ordination and continuity of teaching	Primary	3%	25%	47%	25%	2.94
	L. Secondary	0%	14%	57%	29%	3.14
Offering part-time and flexible working arrangements can help to attract and retain effective teachers	Primary	3%	12%	72%	13%	2.96
	L. Secondary	1%	4%	77%	18%	3.12
I would feel comfortable requesting part-time or flexible working arrangements if I needed to	Primary	15%	41%	40%	4%	2.33
	L. Secondary	32%	35%	25%	8%	2.08

Notes: The 'average' column treats the question as a 4-point ordinal variable, with a value of 1 assigned to the lowest category ('strongly disagree') and 4 to the highest category ('strongly agree'). The average (mean) has then been calculated along this 4-point scale. Source: TALIS 2018 database; question 54.

65. Headteachers were more positive about the attitude of the school management team (SMT) towards flexible working than the teachers they employed. Table 3.6.3 illustrates that just 7% of lower-secondary headteachers suggested the SMT were not supportive of flexible working compared to 25% of lower-secondary teachers. Equivalent results for primary schools can be found in the online data tables (online Table OT_3_6_3_Primary). Although there was also a gap at primary-level, the magnitude of the difference in attitudes between teachers and headteachers was not quite as stark.
66. Conversely, teachers felt more comfortable requesting flexible working than headteachers. Almost two-thirds of lower-secondary teachers agreed or strongly agreed that they would feel comfortable making such arrangements, compared to just over one-third of lower-secondary headteachers. Similar results emerged within primary schools, as evidenced in the online data tables (see online Table OT_3_6_3_Primary).

Table 3.6.3. Attitudes towards flexible working. A comparison of the views of lower-secondary teachers and headteachers in England.

		1. Strongly disagree	2. Disagree	3. Agree	4. Strongly agree	Average
The school management team are supportive of part-time and flexible working for teachers who require it	Teacher	6%	19%	63%	12%	2.82
	Headteacher	0%	7%	70%	23%	3.15
I would feel comfortable requesting part-time or flexible working arrangements if I needed to	Teacher	10%	27%	52%	11%	2.64
	Headteacher	32%	35%	25%	8%	2.08

Notes: The 'average' column treats the question as a 4-point ordinal variable, with a value of 1 assigned to the lowest category ('strongly disagree') and 4 to the highest category ('strongly agree'). The average (mean) has then been calculated along this 4-point scale. Equivalent results for primary teachers provided in the online data tables. Source: TALIS 2018 database; question 65 (teacher questionnaire) and question 54 (headteacher questionnaire).

Key points

- Most headteachers felt that school management were supportive of flexible working; 88% of primary and 93% of lower-secondary headteachers agreed or strongly agreed. Most primary (80%) and lower-secondary (75%) teachers in England also felt that their senior management team supported flexible working arrangements.

Chapter 4: The views of teachers in England

- In 2018, around half of primary (49%) and lower-secondary (54%) teachers in England were satisfied with the salary that they received for their work. Similarly, 47% of primary and 48% of lower-secondary teachers in England believed that their pay was fair given their level of performance. It is important to note that the TALIS 2018 survey was conducted before it was announced that the main pay range would be uplifted by up to 3.5%.
- Lower-secondary teachers in England were somewhat more likely to indicate that they were satisfied with their salary than lower-secondary teachers in other OECD countries (54% versus 39%).
- In 2013, 53% of lower-secondary teachers in England thought that their pay was fair given their performance. This fell to 48% in 2018. The percentage of lower-secondary teachers who thought that teaching was underpaid relative to other professions increased from 73% in 2013 to 87% in 2018.
- In England, 29% of lower-secondary and 34% of primary teachers felt their profession was valued by society. This is consistent with the OECD average for lower-secondary (26%) and TALIS average for primary (36%). The percentage of lower-secondary teachers in England who felt their profession was valued by society fell from 35% in 2013 to 29% in 2018.
- Lower-secondary teachers in England had lower levels of job satisfaction than primary teachers. For instance, 76% of primary teachers in England said they would choose to become a teacher again, compared to 69% of lower-secondary teachers. Primary teachers were also less likely than lower-secondary teachers in England to wonder whether they would have been better choosing another profession (41% for primary compared to 52% for lower-secondary).
- Job satisfaction amongst lower-secondary teachers in England was below the OECD average. Across the OECD, 9% of lower-secondary teachers regretted their decision to become a teacher compared to 13% in England. Most lower-secondary teachers in England said that all in all, they were satisfied in their job (77%), though this was below the OECD average (90%).

4.1 Did teachers believe that their pay was fair?

1. As part of the TALIS questionnaire in England, teachers were asked whether they strongly agreed, agreed, disagreed or strongly disagreed with the following statements about their pay:

‘I am satisfied with the salary I receive for my work’

‘Teachers are underpaid compared to other qualified professionals with similar levels of responsibility’

‘My own pay is fair given my performance’

2. While question (a) was asked across all countries participating in TALIS 2018, (b) and (c) were asked as part of separate questions only in England. This part of the chapter explores the responses teachers gave to these statements.
3. It is important to interpret findings within this sub-section in the context of reforms to teachers’ pay in England. First, pay reforms were introduced in September 2013 and implemented in maintained schools from September 2014. This made several changes to teachers’ pay, including linking pay to performance instead of length of service, giving schools more freedom to set starting salaries and setting new criteria for progression to the upper pay ranges. Second, since the last TALIS survey in 2013, public sector pay (including the pay of teachers) was capped at 1%. In September 2017, 6 months before the TALIS 2018 survey was conducted, it was announced that the pay cap would be lifted. The announcement that the main pay range would be uplifted by 3.5%, the upper pay range by 2% and the leadership pay range by 1.5% was made in the summer of 2018, shortly after the TALIS 2018 data were collected. The views expressed by teachers in the TALIS 2018 survey therefore may not necessarily reflect teachers’ views at present.
4. In 2018, around half of teachers in England were satisfied with the salary that they received; 49% of primary school teachers and 54% of lower-secondary teachers agreed or strongly agreed with the statement ‘I am satisfied with the salary I receive for my work’ (Table 4.1.1).

Table 4.1.1. The views of primary and lower-secondary teachers in England towards pay.

		1. Strongly disagree	2. Disagree	3. Agree	4. Strongly agree	Average
I am satisfied with the salary I receive for my work	Primary	13%	38%	45%	4%	2.41
	L. Secondary	12%	34%	48%	6%	2.48
Teachers are underpaid compared to other qualified professionals with similar levels of responsibility	Primary	2%	9%	45%	43%	3.30
	L. Secondary	1%	12%	45%	42%	3.27
My own pay is fair given my performance	Primary	11%	42%	43%	4%	2.41
	L. Secondary	11%	41%	45%	3%	2.40

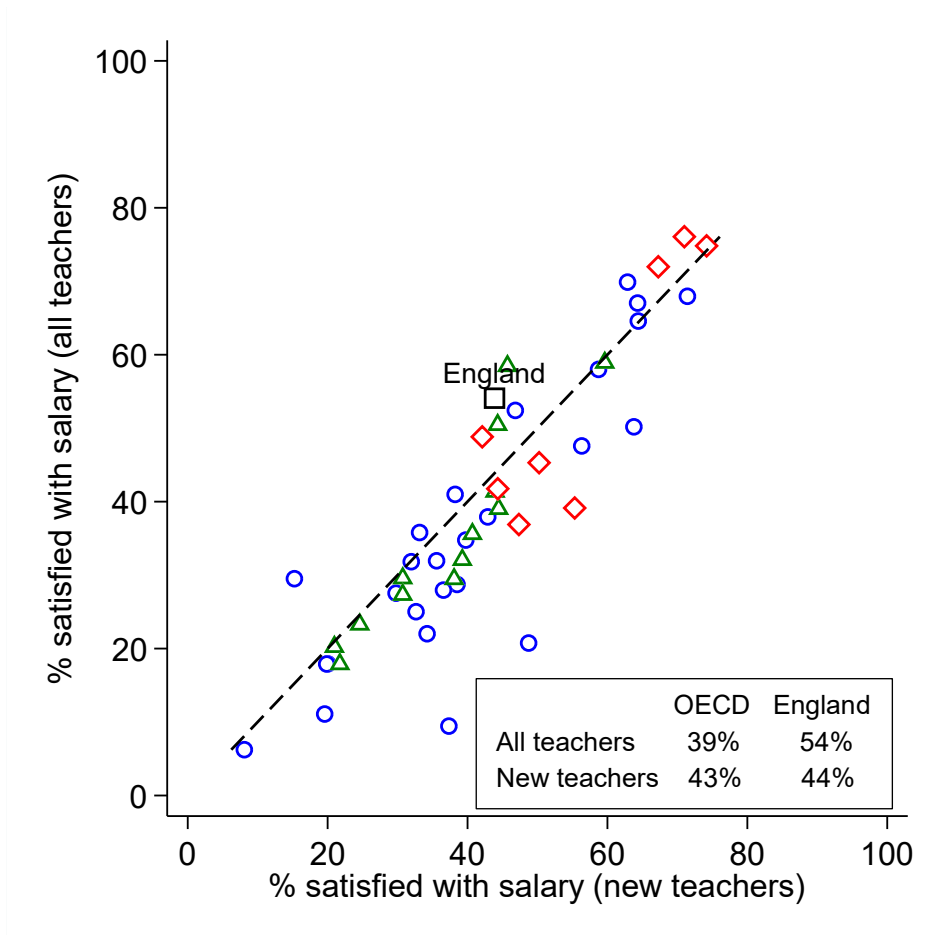
Notes: The 'average' column treats the question as a 4-point ordinal variable, with a value of 1 assigned to the lowest category ('strongly disagree') and 4 to the highest category ('strongly agree'). The average (mean) has then been calculated along this 4-point scale. Source: TALIS 2018 database; question 54a and 59.

5. However, most teachers in England also felt that they were underpaid relative to other qualified professionals with similar levels of responsibility. A total of 89% of primary teachers, and 87% of lower-secondary teachers, either agreed or strongly agreed with this statement. These results are presented in the second row of Table 4.1.1.
6. Around half of teachers in England thought that their pay was fair given how they feel they performed in their job. This was true of both primary school teachers (47% agreed or strongly agreed) and their lower-secondary counterparts (48% agreement).
7. To provide context to the results in Table 4.1.1, Figure 4.1.1 illustrates cross-national variation in the percentage of lower-secondary teachers who agreed or strongly agreed with the statement '*I am satisfied with the salary I receive for my work*'. The overall figure including all lower-secondary teachers is presented along the vertical axis, with values for 'new teachers' (those with five years of teaching experience or less) plotted along the horizontal axis.
8. Lower-secondary teachers in England were somewhat more likely to indicate that they were satisfied with their salary than lower-secondary teachers in other OECD countries (54% versus 39%). There were 3 high-performing countries where the percentage was higher than in England (around 76% in Alberta, 72% in Singapore and 75% in Chinese Taipei), while there were 5 where it was similar or somewhat lower (e.g. around 40% in Estonia, Japan and Shanghai).

For teachers with 5 years of experience or less, England was around the OECD average in terms of satisfaction with pay (44% in England versus 43% across the OECD). This suggests that, when viewed in an international comparative perspective, lower-secondary teachers in England were reasonably satisfied with their pay.

- The equivalent cross-national results for primary teachers are presented in the online data tables (see online Table OF_4_1_1_Primary). England was around the international average in terms of how satisfied primary teachers were with their pay. England (49%) was similar to South Korea (50%), Spain (48%) and Japan (46%), but below the levels observed in countries such as Denmark (67%) and Chinese Taipei (80%) and above countries such as Sweden (31%) and France (19%).

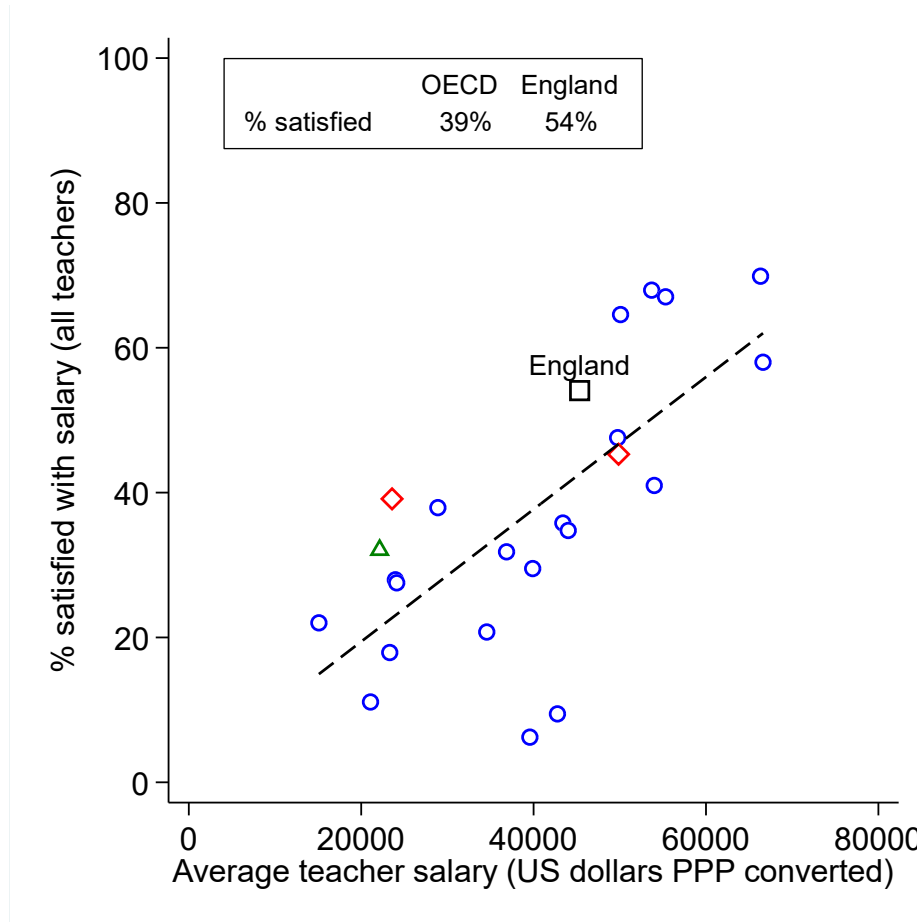
Figure 4.1.1. International comparisons of the satisfaction of lower-secondary teachers with pay.



Note: Figures refer to percentage of teachers who agreed or strongly agreed with the statement '*I am satisfied with the salary I receive for my work*'. New teachers refer to those with five years of teaching experience or less. Red diamonds = high-performing countries, green triangles = low-performing countries, blue circles = countries with similar performance to England. Source: TALIS 2018 database; question 54a.

10. Did countries with higher levels of teacher pay have a higher proportion of teachers who were satisfied with their pay in the TALIS 2018 survey? The answer is presented in Figure 4.1.2, where average lower-secondary teacher salaries (horizontal axis) are plotted against the percentage of lower-secondary school teachers who said they were satisfied with their pay (vertical axis). The Ordinary Least Squares line-of-best-fit (i.e. the dashed line) has an upward gradient; meaning there is a clear positive association between average salary and satisfaction with pay. England sits slightly above this dashed line. This suggests that lower-secondary teachers in England were somewhat more satisfied with their pay than one would predict given the average teacher salary. Again, Figure 4.1.2 highlights how the salary of lower-secondary teachers in England was quite favourable compared to many other countries, where there is data available.

Figure 4.1.2. Cross-national comparison of average lower-secondary teacher pay to the percentage of lower-secondary teachers satisfied with their salary.



Notes: Dashed line illustrates the ordinary least squares line-of-best-fit. A steeper line illustrates a stronger cross-country relationship between the average teacher salary and the percentage of teachers who said they were satisfied with their pay. Correlation = 0.71. Analysis is restricted to countries with average teacher salary data available. Red diamonds = high-performing countries, green triangles = low-performing countries, blue circles = countries with similar performance to England. Source: TALIS 2018 database (question 54a) and https://stats.oecd.org/viewhtml.aspx?datasetcode=EAG_TS_ACT&lang=en

11. There was little difference in the satisfaction of teachers with their pay by gender or by whether they worked full or part-time. Likewise, there was relatively little variation by job role, although satisfaction among deputy heads was notably higher than other groups. On the other hand, those teachers who had recently entered the profession (i.e. those who had 5 years of teaching experience or less) were less likely to be satisfied with their pay than more experienced groups. Specifically, only 38% of new primary teachers and 44% of new lower-secondary teachers indicated they were satisfied with their salary. This is compared to over half of those who had been working in the profession for more than 5 years. These results refer to how teachers' responded to the question '*I am satisfied with the salary I receive for my work*' as presented in the online data tables (see online Table OT_4_1a). Variation in responses to the other questions by teacher and school characteristics can also be found online (online Tables OT_4_1a and OT_4_1c).
12. There was some variation in how teachers responded to the question by school characteristics. For lower-secondary teachers, those who worked in 'good' schools or those that 'required improvement' were slightly more satisfied with their pay than their peers who worked in 'outstanding' or 'inadequate' schools. There was a difference of around 10 percentage points depending upon the proportion of disadvantaged pupils within the school; 45% of lower-secondary teachers in low FSM schools agreed or strongly agreed that they were satisfied with the salary they received for their work, compared to 55% in high FSM schools. Teachers in independent schools were also slightly more satisfied with their pay than their state school counterparts. For instance, 62% of independent lower-secondary school teachers expressed satisfaction with their pay compared to 52% of those in sponsored academies and academy converters. Finally, teachers in lower-secondary schools with higher levels of achievement tended to be less content with their pay than those who worked in lower-achieving schools (the difference between the top and bottom quartile was again around 10 percentage points), while regional variation was modest – albeit with teachers in the North East providing slightly more positive responses than other groups.
13. Individuals who reported teaching to be their first-choice career were more satisfied with their pay than those who wanted to first work in a different profession; there was a difference of around 8 percentage points for both primary and lower-secondary teachers, as can be seen in Table 4.1.2. In contrast, those who entered teaching for the reliable income were no more or less likely to report being satisfied with their pay than individuals for whom it was not an important factor in their career choice; though it should be noted that less than 100 teachers were within the 'strongly disagree' category - and thus these results should be interpreted with caution. See the online tables (OT_4_1_2a

and OT_4_1_2c) for equivalent results for the other questions teachers were asked about their pay.

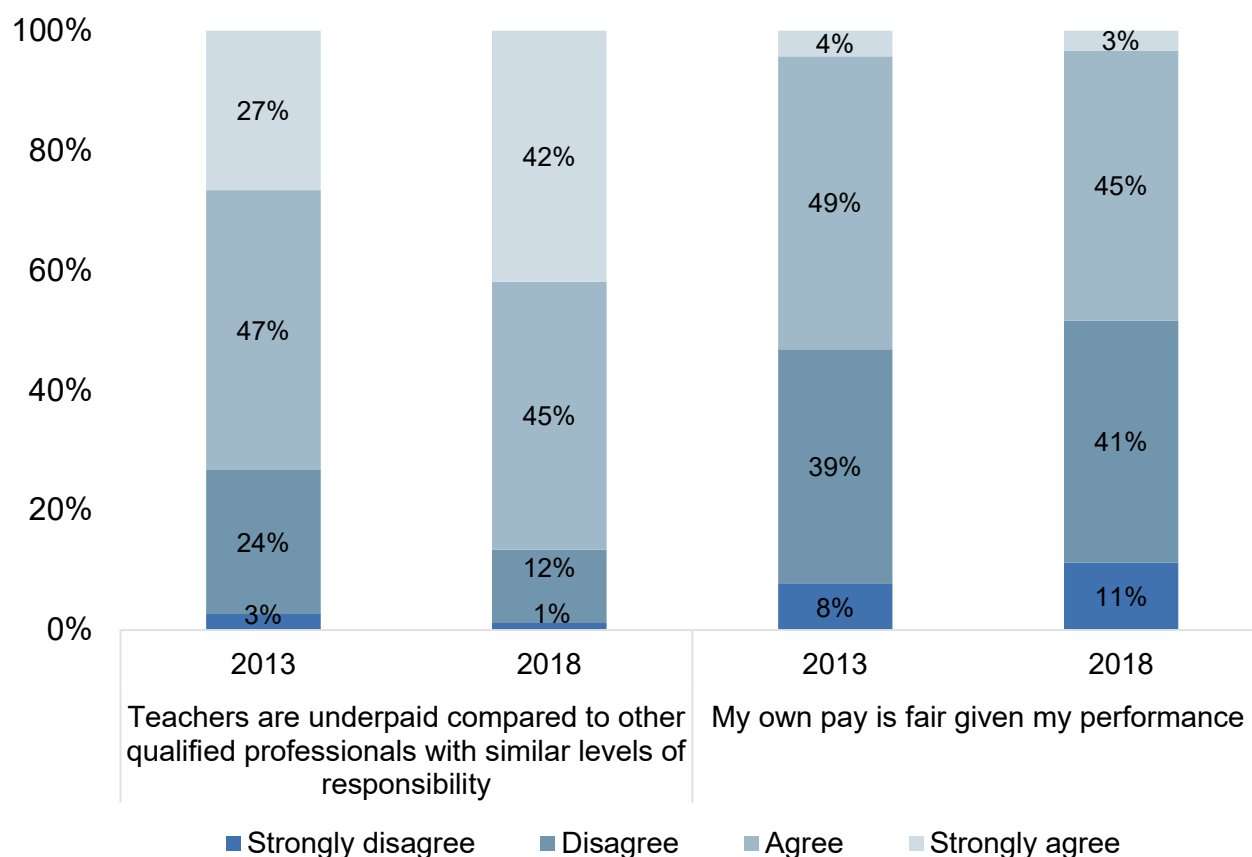
Table 4.1.2. Satisfaction with pay by motivation for entering teaching. Results for teachers in England.

	Primary		Lower-secondary	
	% Agree	Standard error	% Agree	Standard error
Teaching first choice career				
Teaching not first choice	43%	2%	48%	2%
Teaching first choice	52%	1%	58%	2%
Reliable income important				
Strongly disagree	58%	7%	41%	6%
Disagree	50%	3%	51%	4%
Agree	49%	2%	54%	2%
Strongly agree	49%	2%	56%	2%

Note: Figures refer to percent of teachers in England who agreed or strongly agreed with the statement '*I am satisfied with the salary I receive for my work*'. Results in the 'strongly disagree' row should be treated with caution as they are based upon less than 100 observations. Standard error provides a measure of uncertainty in the estimates due to sampling variation. Source: TALIS 2018 database; questions 7b, 8 and 54a.

14. In 2013, 53% of lower-secondary teachers believed that their pay was fair, given their performance. This decreased slightly in 2018 to 48%. There was also an increase in the number of lower-secondary teachers who felt that teachers were underpaid compared to other similarly qualified professionals, up from 73% in 2013 to 87% in 2018. These results are presented in Figure 4.1.3.

Figure 4.1.3. The views of lower-secondary teachers in England towards pay in 2013 and 2018.



Source: TALIS 2013 (question 47) and 2018 (question 59) databases for England.

15. Table 4.1.3 illustrates how responses to the statement ‘*teachers are underpaid compared to other qualified professionals with similar levels of responsibility*’ changed between 2013 and 2018 by school and teacher characteristics, for lower-secondary teachers. There was a decline in satisfaction with pay amongst most groups, with little evidence that this differed between men and women or between teachers with different amounts of experience. The decline was slightly larger for those who worked part-time and those who worked less than 30 hours per week. For instance, in 2013 68% of teachers who worked under 30 hours per week believed that teachers were underpaid relative to similarly qualified professionals, compared to 89% in 2018. The equivalent increase amongst teachers who worked 60 hours a week or more was from 78% to 90%. There was relatively little evidence that the decline in satisfaction with pay was related to the proportion of disadvantaged pupils in the school or Ofsted grade. The only possible exception was with respect to ‘inadequate’ schools, where the proportion of teachers who thought teachers were underpaid had risen since 2013. This finding is, however, based upon a small sample size (see Annex C)

and surrounded by wide confidence intervals and should be treated with caution. See online Table OT_4_1_3b for alternative results based upon the question 'my own pay is fair, given my performance'.

Table 4.1.3. Change in lower-secondary teachers' views of whether teachers were underpaid relative to other professionals. Results for England by school and teacher characteristics.

	2013		2018		Change	
	% agree	SE	% agree	SE	% agree	SE
Gender						
Female	73%	2%	86%	1%	13%	2%
Male	74%	2%	88%	1%	14%	2%
Work-Schedule						
Full-time	74%	1%	86%	1%	13%	2%
Part-time	70%	3%	87%	2%	18%	4%
Experience						
0 to 5 years	77%	2%	91%	1%	14%	2%
6 to 10 years	70%	2%	86%	2%	16%	3%
11 to 20 years	71%	2%	83%	1%	13%	2%
Over 20 years	78%	3%	89%	2%	11%	3%
Working hours						
Under 30 hours	68%	3%	89%	2%	21%	3%
30-49 hours	72%	2%	86%	2%	15%	2%
50-59 hours	75%	2%	84%	1%	9%	3%
60+ hours	78%	2%	90%	2%	12%	3%
School Ofsted						
Inadequate	65%	2%	85%	4%	21%	4%
Requires Improvement	74%	2%	84%	3%	10%	3%
Good	72%	2%	86%	1%	13%	2%
Outstanding	75%	2%	89%	2%	14%	3%
School FSM %						
Low FSM	77%	2%	90%	1%	13%	2%
Second FSM quartile	74%	2%	86%	2%	12%	3%
Third FSM quartile	70%	2%	86%	2%	16%	3%
High FSM	69%	2%	84%	2%	14%	3%

Note: Figures refer to percent of lower-secondary teachers who agree or strongly agree with the statement 'teachers are underpaid compared to other qualified professionals with similar levels of responsibility'. The SE column refers to the standard error and provides a measure of uncertainty in the estimate due to sampling variation. TALIS 2013 (question 47f) and 2018 (question 59c) databases for England.

Key points

- Around half of primary (49%) and lower-secondary (54%) teachers in England were satisfied with the salary that they received for their work in 2018. Similarly, 47% of primary and 48% of lower-secondary teachers in England believed that their pay was fair, given their level of performance.
- In 2013, 53% of lower-secondary teachers thought that their pay was fair, given their performance. This fell slightly to 48% in 2018. At the same time, the percentage of lower-secondary teachers who believed teachers were underpaid relative to other professionals increased from 73% to 87%.
- Lower-secondary teachers in England were nevertheless somewhat more likely to indicate that they were satisfied with their salary than lower-secondary teachers in other OECD countries (54% versus 39%).

4.2 Did teachers believe that their profession was valued by society?

16. TALIS 2013 asked teachers the following question: *'I think that the teaching profession is valued in society'* with responses provided on a 4-point scale (strongly agree to strongly disagree). In 2018, this was accompanied by the following statements with the same response options: *'teachers' views are valued by policymakers in this country/region'* and *'teachers are valued by the media in this country/region'*.
17. In 2018, 29% of lower-secondary teachers in England agreed that teachers were valued by society, 16% that teachers were valued by the media and around a tenth that teachers' views were valued by policymakers, as highlighted by Table 4.2.1.

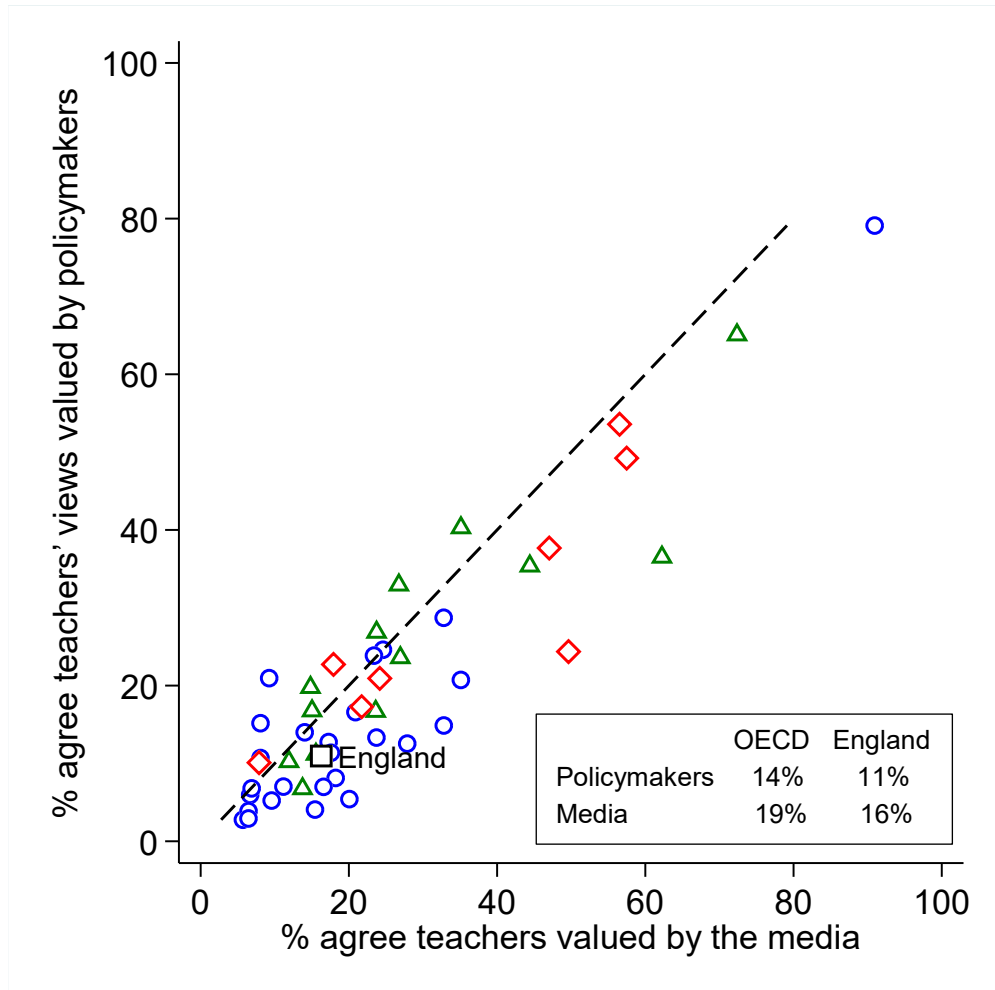
Table 4.2.1. Did primary and lower-secondary teachers in England believe that the teaching profession was valued by society?

		1. Strongly disagree	2. Disagree	3. Agree	4. Strongly agree	Average
I think that the teaching profession is valued in society	Primary	21%	45%	28%	5%	2.18
	L. Secondary	28%	43%	26%	3%	2.04
Teachers' views are valued by policymakers in this country/region	Primary	38%	50%	11%	1%	1.75
	L. Secondary	41%	48%	11%	0%	1.70
Teachers are valued by the media in this country/region.	Primary	35%	46%	18%	1%	1.85
	L. Secondary	37%	46%	16%	0%	1.79

Notes: The 'average' column treats the question as a 4-point ordinal variable, with a value of 1 assigned to the lowest category ('strongly disagree') and 4 to the highest category ('strongly agree'). The average (mean) has then been calculated along this 4-point scale. Source: TALIS 2018 database; questions 53h and 54.

18. Primary school teachers tended to be slightly more positive in their responses than their lower-secondary counterparts. For instance, 34% of primary teachers agreed or strongly agreed that the teaching profession is valued by society, compared to 29% of lower-secondary teachers. Similarly, 19% of primary teachers believed they were valued by the media, compared to 16% of their lower-secondary peers.
19. In the majority of countries, most lower-secondary teachers did not feel that their profession was valued by policymakers, the media and wider society. Figure 4.2.1 illustrates this result by comparing the percentage of lower-secondary teachers who agreed or strongly agreed that their views are valued by policymakers (vertical axis) and by the media (horizontal axis). England does not stand out from other countries, sitting within a cluster of nations in the bottom left corner of this graph. However, it is notable how responses to these questions tended to be much more favourable than in England in at least four of the high-performing jurisdictions (Singapore, Alberta, Shanghai and Finland). England also did not stand out from other participating countries in terms of how primary teachers responded to these questions (see online Table OF_4_2_1_Primary for further details).

Figure 4.2.1. Cross-national comparison of whether lower-secondary teachers felt their profession was valued by policymakers and the media.



Notes: The dashed line illustrates the line of equality. This is where the percent of teachers who believed their profession was valued by policymakers is equal to the percent who believed their profession was valued by the media. Red diamonds = high-performing countries, green triangles = low-performing countries, blue circles = countries with similar performance to England. OECD average = 19% for views valued by media and 14% for valued by policymakers. England = 16% for views valued by media and 11% for valued by policymakers. Source: TALIS 2018 database; questions 54c and 54e.

20. The online data tables (online Tables OT_4_2a to OT_4_2c) illustrate how responses to these questions varied by school and teacher characteristics. There was relatively little variation in teachers' views by background characteristics such as gender, work-schedule or job role. On the other hand, more experienced teachers tended to feel less valued by policymakers, the media and by society, though differences compared to less experienced teachers were relatively modest. For instance, 8% of primary teachers with more than 20 years of experience agreed that their views were valued by

policymakers, compared to 16% of those who had been teaching for 5 years or less. Similar results held for school-level characteristics, with little evidence of clear and consistent differences by Ofsted rating, percentage of FSM pupils, region or levels of achievement. The only potential exception is that teachers who worked in independent schools tended to provide more positive responses than those who worked within state schools. Some caution is required when interpreting this result, however, given the low response rate amongst independent school teachers and the relatively small sample size.

21. In 2013, 35% of lower-secondary teachers in England agreed or strongly agreed that the teaching profession was valued by society in 2013. This declined somewhat to 29% in 2018, as presented in Table 4.2.2. This change was statistically significant and hence unlikely to be due to sampling variation.

Table 4.2.2. Did lower-secondary teachers in England change their views as to whether the teaching profession was valued by society between 2013 and 2018?

	2013	2018
1. Strongly disagree	21%	28%
1. Disagree	44%	43%
2. Agree	30%	26%
3. Strongly agree	5%	3%
Average score	2.20	2.04

Notes: Figures based upon lower-secondary teachers' responses to the question '*I think that the teaching profession is valued in society*'. The 'average' row treats the question as a 4-point ordinal variable, with a value of 1 assigned to the lowest category ('strongly disagree') and 4 to the highest category ('strongly agree'). The average (mean) has then been calculated along this 4-point scale.

Source: TALIS 2013 (question 46h) and 2018 (question 53h) databases for England.

22. Table 4.2.3 illustrates whether the decline in teachers' views as to whether their profession is valued by society differed between groups. There was a notable fall in the proportion of full-time teachers who believed that their profession was valued by society; while 36% agreed in 2013 this fell to 29% in 2018. On the other hand, there was comparatively little change for those who worked part-time (31% agreed in 2013 compared to 29% in 2018), and amongst the most experienced teachers (those who had worked in the profession for more than 20 years). The decline was hence concentrated amongst more junior teachers, particularly those with between 6 and 10 years of teaching experience.

Table 4.2.3. Change in lower-secondary school teachers' views on the value society places upon teachers. Results for England by school and teacher characteristics.

	2013		2018		Change	
	% agree	SE	% agree	SE	% agree	SE
Gender						
Female	33%	2%	28%	1%	-5%	2%
Male	40%	2%	31%	2%	-9%	3%
Work-Schedule						
Full-time	36%	2%	29%	1%	-7%	2%
Part-time	31%	3%	29%	3%	-1%	4%
Experience						
0 to 5 years	40%	2%	34%	2%	-7%	3%
6 to 10 years	40%	2%	30%	2%	-10%	3%
11 to 20 years	31%	2%	26%	2%	-5%	3%
Over 20 years	29%	3%	27%	3%	-1%	5%
Working hours						
Under 30 hours	42%	3%	33%	3%	-9%	4%
30-49 hours	35%	2%	29%	2%	-7%	2%
50-59 hours	33%	2%	29%	2%	-3%	3%
60+ hours	34%	4%	26%	2%	-8%	4%
School Ofsted						
Inadequate	20%	4%	23%	3%	3%	5%
Requires Improvement	29%	2%	20%	2%	-9%	3%
Good	38%	2%	29%	2%	-9%	3%
Outstanding	37%	2%	27%	3%	-10%	3%
School FSM %						
Low FSM	34%	2%	29%	2%	-5%	3%
Second FSM quartile	35%	2%	24%	2%	-11%	3%
Third FSM quartile	32%	2%	22%	2%	-9%	3%
High FSM	37%	2%	31%	3%	-6%	3%

Notes: 'SE' refers to the standard error; a measure of uncertainty in estimates due to sampling variation. Source: TALIS 2013 (question 46h) and 2018 (question 53h) databases for England.

23. To conclude, Table 4.2.4 provides some correlational evidence as to whether the decline in lower-secondary teachers' perceptions of how they were valued by society may be linked to perceptions of pay. This table presents results from a set of regression models³³, each of which includes a different set of statistical

³³ Regression models relate an outcome (whether lower-secondary teachers believed that their profession was valued by society in this instance) to a series of explanatory variable. The models presented in this section illustrate how lower-secondary teachers' responses to this question changed

controls. Results from the first model, with no statistical controls, reiterate that there was a 6.9 percentage point fall in the proportion of lower-secondary school teachers who felt that the teaching profession was valued by society. The estimates from Model 2, which controls for gender, work-schedule, working hours and experience, illustrate how change in these characteristics between TALIS 2013 and 2018 only explained a small proportion of the decline in teachers' views; the estimated difference between 2013 and 2018 was stable at 5.9 percentage points even after these factors were taken into account. A substantial fall can however be observed in Model 3, where perceptions about pay have also been controlled for. Specifically, the difference between 2013 and 2018 has dropped from 5.9 to 2.9 percentage points. Although this result should be interpreted cautiously (as observational data, TALIS cannot establish cause and effect) it nevertheless suggests that the decline in teachers' views with respect to the value society places upon their role may be linked to the decline in their perceptions of relative pay.

Table 4.2.4. Linear probability model investigating the decline in lower-secondary teachers' views that society values the teaching profession between 2013 and 2018.

	Model 1		Model 2		Model 3	
	Estimate	SE	Estimate	SE	Estimate	SE
Decline between 2013 and 2018	-6.6%	1.8%	-5.6%	1.9%	-2.7%	1.9%
Controls						
Gender	No		Yes		Yes	
Full-time/ part-time	No		Yes		Yes	
Experience	No		Yes		Yes	
Weekly working hours	No		Yes		Yes	
Believe teachers underpaid	No		No		Yes	
Believe own pay is fair	No		No		Yes	

Notes: 'SE' refers to the standard error; a measure of uncertainty in estimates due to sampling variation. Source: TALIS 2013 (question 46h) and 2018 (question 53h) databases for England.

between 2013 and 2018, after accounting for differences in gender, experience, full-time/part-time working, working hours and perceptions of pay.

Key points

- In 2018, 29% of lower-secondary teachers in England felt that their profession was valued by society, compared to 34% of primary teachers. The percentage for lower-secondary teachers was higher (35%) in 2013.

4.3 Were teachers happy in their jobs?

24. The last time TALIS was conducted in 2013, a mixed picture emerged about the job satisfaction of lower-secondary teachers in England. Although most lower-secondary teachers in England reported being satisfied in their job overall, this figure was found to be comparatively low relative to other countries. The following questions from the TALIS 2013 study were repeated in 2018:

- *The advantages of being a teacher clearly outweigh the disadvantages*
- *If I could decide again, I would still choose to work as a teacher*
- *I regret that I decided to become a teacher*
- *I wonder whether it would have been better to choose another profession*
- *All in all, I am satisfied with my job*

25. Most teachers in England responded positively to the statement '*all in all, I am satisfied with my job*'; 84% of primary teachers and 77% of lower-secondary teachers agreed or strongly agreed with this statement, as illustrated by Table 4.3.1. This suggests that, in 2018, most primary and lower-secondary teachers in England were satisfied with their job.

26. Primary teachers in England generally reported higher levels of satisfaction in their job than their lower-secondary school counterparts. In total, 41% of primary teachers wondered whether they should have chosen another profession, which was 11 percentage points lower than for lower-secondary teachers (52%). Similarly, 78% of primary teachers agreed that, the advantages of being a teacher outweighed the disadvantages, compared to 72% of lower-secondary teachers. Similar findings also emerged for the other statements, with primary school teachers more likely to agree that that they would choose to work in the teaching profession again (76% versus 69%) and were less likely to express regrets about their career choice (11% versus 13%).

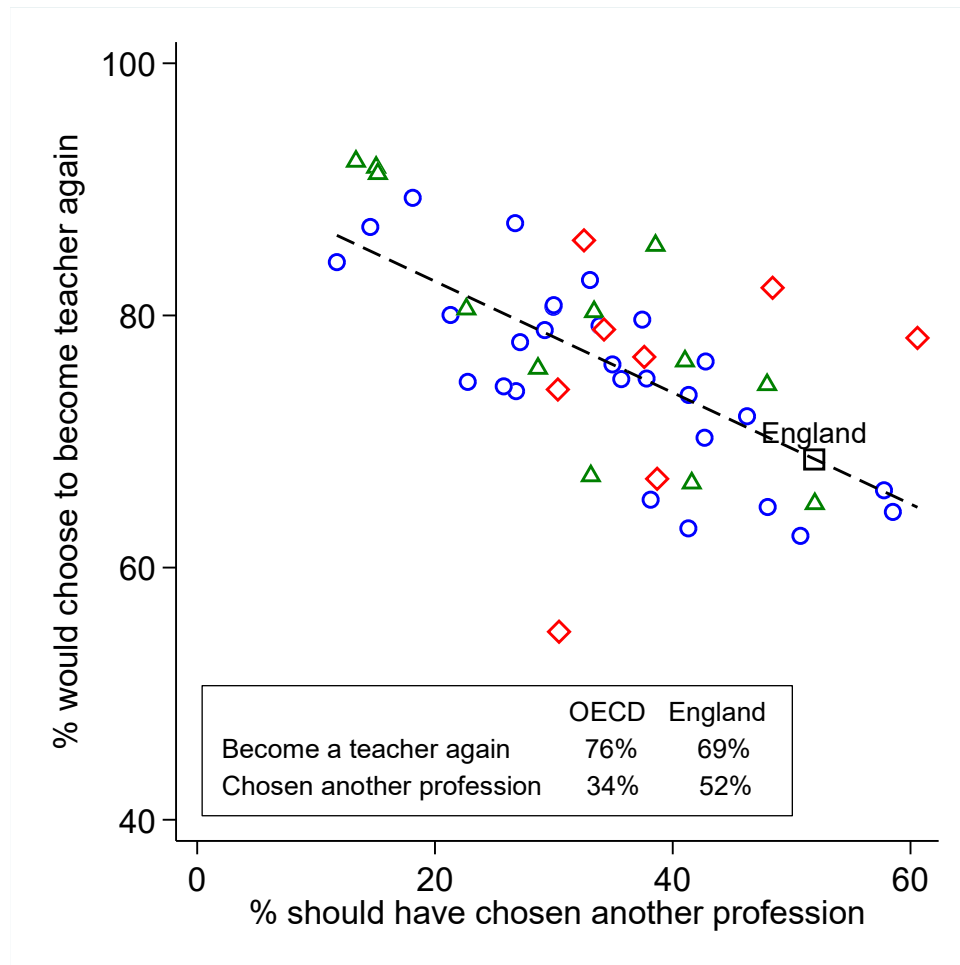
Table 4.3.1. Satisfaction with the teaching profession amongst primary and lower-secondary teachers in England.

		1. Strongly disagree	2. Disagree	3. Agree	4. Strongly agree	Average
The advantages of being a teacher clearly outweigh the disadvantages	Primary	4%	18%	59%	19%	2.93
	L. Secondary	5%	23%	56%	16%	2.83
If I could decide again, I would still choose to work as a teacher	Primary	5%	19%	52%	24%	2.94
	L. Secondary	9%	23%	48%	21%	2.81
I regret that I decided to become a teacher	Primary	46%	44%	8%	2%	1.67
	L. Secondary	39%	48%	10%	3%	1.76
I wonder whether it would have been better to choose another profession	Primary	25%	34%	33%	8%	2.23
	L. Secondary	19%	29%	40%	12%	2.45
All in all, I am satisfied with my job	Primary	2%	14%	63%	20%	3.01
	L. Secondary	3%	19%	62%	16%	2.90

Notes: The 'average' column treats the question as a 4-point ordinal variable, with a value of 1 assigned to the lowest category ('strongly disagree') and 4 to the highest category ('strongly agree'). The average (mean) has then been calculated along this 4-point scale. Source: TALIS 2018 database; question 53.

27. In 2018, job satisfaction amongst lower-secondary teachers in England was below the OECD average. Figure 4.3.1 demonstrates this point by comparing the percentage of teachers who agreed or strongly agreed that they should have chosen another profession (horizontal axis) against the percentage who agreed or strongly agreed that they would choose to become a teacher again. England sits towards the bottom right-hand side of the cloud of data points. This highlights how a comparatively large proportion of lower-secondary teachers in England expressed some regret about becoming a teacher. For instance, across the OECD, 34% of lower-secondary teachers agreed or strongly agreed that they wondered whether it would have been better to choose another profession, compared to 52% in England. The online data tables provide similar results for the other questions capturing job satisfaction, with similar conclusions reached (see online Tables OF_4_3_1_Primary and OF_4_3_1_Secondary).

Figure 4.3.1. Cross-national comparison of aspects of lower-secondary teachers' job satisfaction.



Notes: Dashed line illustrates the ordinary least squares line-of-best-fit. A steeper line illustrates a stronger cross-country relationship between the percent of teachers who agreed or strongly agreed that they should have chosen another profession and those who agreed or strongly agreed that they would become a teacher again. Red diamonds = high-performing countries, green triangles = low-performing countries, blue circles = countries with similar performance to England. Source: TALIS 2018 database; questions 53b and 53f.

28. There was relatively little variation in job satisfaction by school and teacher background characteristics, as illustrated within the online data tables (see online Tables OT_4_3a to OT_4_3e). A possible exception was school Ofsted rating; teachers who worked in 'outstanding' schools generally provided more positive responses than their peers who worked in schools that were 'inadequate' or 'required improvement'. For a selection of questions, there was also a pattern where teachers who worked in independent schools reported higher levels of job satisfaction than those who worked in the state sector.
29. Why did primary teachers have higher levels of job satisfaction than lower-secondary teachers? This issue is investigated in Table 4.3.2, where a series of linear probability models are estimated, each adding additional controls. These illustrate how the percentage of teachers who agreed or strongly agreed with the

statement '*If I could decide again, I would still choose to work as a teacher*' differed between those working in primary and lower-secondary schools. The addition of control variables illustrates how the difference between primary and lower-secondary teachers changes once differences in primary and lower-secondary teachers' demographic characteristics (Model 2), working hours (Model 3), time spent upon non-teaching tasks (Model 4) and their views about pay (Model 5) have been accounted for. These models hence attempt to establish whether the difference observed between primary and lower-secondary teachers' job satisfaction was related to differences in their working hours and perceptions of pay.

30. The online data tables provide separate results for each of the job satisfaction statements (see online table OT_4_3_2a to OT_4_3_2e). The following discussion focuses upon results with respect to the statement '*if I could decide again, I would still choose to work as a teacher*' (online Table OT_4_3_2b).
31. Only a small part of the difference in job satisfaction between primary and lower-secondary teachers was due to differences in the demographic composition of these groups; the difference fell from 7.2 to 5.4 percentage points once gender, educational qualifications and teaching experience were controlled. Differences in working hours and views about workload were more important. For instance, once differences in part-time working, total hours and teachers' self-reported satisfaction with their work schedule were controlled, the difference between primary and lower-secondary teachers fell to 4.6 percentage points. There was a further decline, down to just a 2.3 percentage point difference, once differences in primary and lower-secondary teachers' views about the amount of time they spent performing non-teaching related tasks were controlled³⁴. Interestingly, the inclusion of teachers' views of their pay in Model 5 did little to change the results. Table 4.3.2 hence provides some correlational evidence that the difference in job satisfaction between primary and lower-secondary teachers in 2018 was potentially related to differences in their working conditions, including how they viewed the amount of time they were spending upon non-teaching tasks.

³⁴ These controls were based upon teachers' responses to the following question: *Across the whole school year, is the amount of time you spend on the following non-teaching activities too little, too much or about right?* They were then asked to respond to 10 statements, such as planning, marking, CPD and administration.

Table 4.3.2. Linear probability model examining why lower-secondary teachers had lower levels of job satisfaction than primary teachers in England.

	Controls	% point difference between primary and lower-secondary teachers	Standard error
Model 1	None	-7.2%	1.6%
Model 2	+ Demographics	-5.4%	1.9%
Model 3	+ Working hours	-4.6%	1.9%
Model 4	+ Non-teaching tasks	-2.3%	2.0%
Model 5	+ Pay	-3.0%	1.9%

Notes: Estimates refer to how much less likely lower-secondary school teachers were to agree or strongly agree with the statement '*If I could decide again, I would still choose to work as a teacher*'. Equivalent results for the other statements are provided in the online data tables. Models are nested within each other, with each including an additional set of controls. Source: TALIS 2018 database; question 53b.

32. In 2018, 77% of lower-secondary school teachers in England agreed or strongly agreed that they were satisfied with their jobs. This declined from 82% in 2013, as detailed in Table 4.3.3. The proportion of teachers who wondered whether they should have chosen a different profession increased from 35% in 2013 to 52% in 2018. Similarly, fewer lower-secondary teachers agreed that the advantages of being a teacher outweighed the disadvantages in 2018 (72%) than in 2013 (84%). Fewer lower-secondary teachers also indicated that they would still choose to work as a teacher (69% in 2018 versus 79% in 2013).

Table 4.3.3. Change in the job satisfaction of lower-secondary teachers in England between 2013 and 2018.

		1. Strongly disagree	2. Disagree	3. Agree	4. Strongly agree	Average
The advantages of being a teacher clearly outweigh the disadvantages	2013	2%	14%	52%	31%	3.13
	2018	5%	23%	56%	16%	2.83
If I could decide again, I would still choose to work as a teacher	2013	5%	16%	48%	32%	3.07
	2018	9%	23%	48%	21%	2.81
I regret that I decided to become a teacher	2013	52%	40%	6%	2%	1.58
	2018	39%	48%	10%	3%	1.76
I wonder whether it would have been better to choose another profession	2013	29%	36%	29%	5%	2.10
	2018	19%	29%	40%	12%	2.45
All in all, I am satisfied with my job	2013	3%	16%	61%	21%	3.00
	2018	3%	19%	62%	16%	2.90

Notes: The 'average' column treats the question as a 4-point ordinal variable, with a value of 1 assigned to the lowest category ('strongly disagree') and 4 to the highest category ('strongly agree'). The average (mean) has then been calculated along this 4-point scale. Source: TALIS 2013 (question 46) and 2018 (question 53) database for England.

33. The decline in job satisfaction amongst lower-secondary teachers between 2013 and 2018 occurred across the profession and was not driven by any particular group. For instance, Table 4.3.4 illustrates how men and women, those who worked part-time and full-time, those who worked different hours and those who had different amounts of teaching experience were all more likely to wonder whether they should have chosen a different profession in 2018 than in 2013. Likewise, there was consistent evidence of a decline in lower-secondary teachers' job satisfaction across those who worked in schools with different Ofsted ratings and different proportions of FSM pupils. Equivalent results for the other questions are provided in the online data tables (see online Table OT_4_3_4a to OT_4_3_4e). These also suggest that the decline in lower-secondary teachers' job satisfaction was not concentrated within a single group.

Table 4.3.4. Change in the percentage of lower-secondary teachers who wondered whether it would have been better to choose another profession. Results for England by school and teacher characteristics.

	2013		2018		Change	
	% agree	SE	% agree	SE	% agree	SE
Gender						
Female	35%	1%	50%	1%	15%	2%
Male	34%	2%	55%	2%	21%	3%
Work-Schedule						
Full-time	34%	1%	51%	1%	17%	2%
Part-time	39%	3%	54%	3%	15%	4%
Experience						
0 to 5 years	34%	2%	48%	2%	14%	3%
6 to 10 years	34%	2%	56%	2%	22%	3%
11 to 20 years	37%	2%	54%	2%	17%	3%
Over 20 years	34%	3%	46%	2%	12%	4%
Working hours						
Under 30 hours	29%	3%	47%	2%	18%	4%
30-49 hours	34%	2%	53%	2%	19%	3%
50-59 hours	34%	2%	53%	2%	19%	3%
60+ hours	39%	3%	51%	3%	12%	4%
School Ofsted						
Inadequate	49%	4%	58%	5%	9%	6%
Requires Improvement	37%	3%	58%	3%	21%	4%
Good	35%	2%	53%	2%	18%	2%
Outstanding	31%	3%	48%	3%	17%	4%
School FSM %						
Low FSM	34%	3%	52%	3%	18%	4%
Second FSM quartile	36%	2%	55%	2%	19%	3%
Third FSM quartile	41%	2%	57%	3%	16%	4%
High FSM	35%	2%	49%	3%	14%	4%

Note: Figures refer to the percentage of teachers who agreed or strongly agreed that 'I wonder whether it would have been better to choose another profession'. Equivalent results for the other job-satisfaction questions can be found in the online data tables. 'SE' refers to the standard error; a measure of uncertainty in estimates due to sampling variation. Source: TALIS 2013 (question 46) and 2018 (question 53) database for England.

Key points

- In 2018, 76% of primary teachers in England suggested that they would still choose to become a teacher, with the equivalent figure for lower-secondary teachers standing at 69%. Primary teachers were also less likely than lower-secondary teachers in England to wonder whether they would have been better choosing another profession (41% for primary compared to 52% for lower-secondary).
- Job satisfaction amongst lower-secondary teachers in England in 2018 was below the OECD average. Across the OECD, 9% of lower-secondary teachers regretted their decision to become a teacher compared to 13% in England. Around 90% of lower-secondary teachers across the OECD said that, all in all, they were satisfied in their job, compared to 77% in England.

Chapter 5: Professional development

- Most primary (98%) and lower-secondary (97%) teachers in England completed some form of CPD over the 12 months prior to the TALIS 2018 survey.
- The proportion of lower-secondary teachers involved in a CPD peer network increased between 2013 (33%) and 2018 (45%). There was also an increase (from 20% to 25%) in the proportion of lower-secondary teachers who had completed an observation visit to another school.
- 78% of primary and 56% of lower-secondary teachers in England reported receiving release from teaching duties to complete CPD. Only 25% of primary and 36% of lower-secondary teachers had their CPD paid for or reimbursed.
- Just under 40% of primary and lower-secondary teachers in England felt they had a moderate or high need for additional CPD in teaching SEN pupils, while around 30% suggested a need for CPD on supporting EAL pupils. These were amongst the highest priorities for further CPD amongst teachers in England.
- Compared to other countries, few teachers in England indicated that they had a high need for further CPD. For instance, 3% of lower-secondary teachers in England reported a high need for CPD in classroom management skills, compared to an OECD average of 14%.
- Between 2013 and 2018, there was an increase in the percentage of lower-secondary teachers who reported a moderate or high need for further CPD in pupil-assessment practices (from 22% to 29%), to improve their knowledge of the curriculum (from 14% to 23%) and to improve their knowledge and understanding of their subject (from 12% to 18%).
- Lower-secondary teachers in England were less likely to say there was no relevant CPD available than in the average OECD country (27% versus 38%). A similar result held for primary teachers in England compared to other participating countries.
- 56% of lower-secondary teachers in England saw expense as a barrier to their participation in CPD, while 64% highlighted conflicts with their work schedule. These figures were both above the OECD average (45% and 54% respectively).
- Between 2013 and 2018, there was an increase in the percentage of lower-secondary teachers in England who felt CPD was too expensive (from 43% to 56%), there was not sufficient incentive to participate in such activities (38% to 44%), that CPD conflicted with their work schedule (60% to 64%) and that they had a lack of time to complete CPD due to family responsibilities (27% to 32%).
- Headteachers in England were less likely to say that they had an urgent need for further CPD than headteachers in other countries. For instance, just 6% of lower-secondary headteachers reported a high need for CPD in human resource management, compared to an OECD average of 21%.

5.1 What CPD was undertaken by teachers in the year prior to the TALIS survey?

1. In 2018, 98% of primary and 97% of lower-secondary teachers in England reported completing some form of CPD over the previous 12 months before the TALIS survey in March-May 2018.
2. The most common form of CPD teachers in England reported completing was seminars/courses attended in person; 89% of primary teachers and 74% of lower-secondary teachers said they completed this form of CPD. In contrast, only around half of teachers said that they undertook CPD online. At the other extreme were observation visits to businesses/public organisations and formal qualification programmes, which had been completed by only a minority of primary and lower-secondary teachers in England, as illustrated by Table 5.1.1.
3. Although peer/self-observation was completed over the past year by most teachers in England, a significant minority did not have their teaching observed, at least as part of a formal arrangement within their school. For instance, 33% of primary teachers and 29% of lower-secondary teachers did *not* report that they had used peer and/or self-observation over the last 12 months.

Table 5.1.1. The CPD activities completed by teachers in England during the 12 months prior to the TALIS survey.

	Primary		Lower-secondary	
	Percent	SE	Percent	SE
Did any form of CPD in last 12 months	98%	0.3%	97%	0.4%
Courses/seminars attended in person	89%	0.7%	74%	1.0%
Reading professional literature	70%	1.3%	64%	1.2%
Peer and/or self-observation and coaching as part of a formal school arrangement	67%	1.3%	71%	1.6%
Participation in a network of teachers formed specifically for the professional development of teachers	61%	1.3%	45%	1.4%
Observation visits to other schools	48%	1.4%	25%	1.3%
Online courses/seminars	44%	1.2%	52%	1.6%
Education conferences where teachers and/or researchers present their research or discuss educational issues	40%	1.3%	34%	1.3%
Other	25%	1.1%	22%	0.8%
Formal qualification programme (e.g. a degree programme)	11%	1.0%	10%	0.7%
Observation visits to business premises, public organisations, or non-governmental organisations	6%	0.6%	6%	0.5%

Notes: 'SE' refers to the standard error; a measure of uncertainty in the estimates due to sampling variation. Source: TALIS 2018 database; question 22.

4. Primary teachers in England reported undertaking more forms of CPD than their lower-secondary counterparts. The difference was particularly pronounced with respect to observation visits to other schools, which were completed by around a quarter of lower-secondary teachers (25%) and almost half of those who taught in primary schools (48%). Primary teachers were also more likely than lower-secondary teachers to report attending course/seminars in person (89% versus 74%) and participating in a CPD network with their peers (61% versus 45%). In contrast, the only CPD activity that lower-secondary teachers were more likely to report completing than primary teachers were online courses/seminars (52% versus 44%). This is consistent with the results presented in Chapter 3, which illustrated how lower-secondary teachers were more likely to feel they spent too little time upon CPD than primary teachers.
5. The online data tables illustrate how responses to each of these questions varied by school and teacher characteristics (see online Tables OT_5_1a to OT_5_1j). For instance, online Table OT_5_1e provides results with respect to observation visits to other schools. The key finding from this online table is that teachers who worked part-time and who did not have managerial responsibilities (i.e. who were regular classroom teachers) were the least likely to complete observation visits to other schools. Specifically, around half (53%) of full-time primary teachers completed an observation visit to another school in the 12 months prior to the TALIS survey, compared to 33% of those who worked part-time (the figures for lower-secondary teachers were lower; 27% and 16% respectively). Likewise, approximately a third of primary classroom teachers reported observing another school in the 12 months prior to the survey; this was a much smaller proportion than deputy headteachers (74%) and those who led a key stage (59%).
6. There was also variation in the types of teachers who attended an education conference (see online Table OT_5_1c). Specifically, men were more likely to complete this form of CPD than women (47% versus 39% for primary teachers), while full-time teachers were more likely than part-time (42% versus 33% for primary teachers). There was also evidence that those with management responsibilities (e.g. subject leads, deputy heads) were more likely to attend education conferences than regular classroom teachers, as were those who were relatively new to the profession (at least for those who worked in lower-secondary schools). A potential interpretation of this finding is that certain groups of teachers were perhaps more engaged in research evidence than others.
7. There was considerable variation in CPD activities by teaching experience. This was particularly true within lower-secondary schools, where more experienced teachers were much less likely to undertake certain CPD activities than their less experienced counterparts. In particular, compared to teachers with more than 20 years of experience, those who had worked in a lower-secondary school for 5 years or less were more likely to say they had attended an education research

conference (42% versus 26%), completed a formal qualification (19% versus 4%), attended courses/seminars in person (83% versus 68%) or been involved in a CPD network of teachers (50% versus 38%) in the 12 months prior to the TALIS survey. On the other hand, the most experienced group were more likely to have read literature (71% versus 62% in lower-secondary schools), as presented in Table 5.1.2.

Table 5.1.2. The relationship between number of years teaching experience and the types of CPD activities completed by teachers in England in the year prior to the TALIS survey.

	Primary				Lower-secondary			
	Under 6	6-10 years	11-20 years	> 20 years	Under 6	6-10 years	11-20 years	> 20 years
Courses/seminars in person	88%	91%	88%	89%	83%	74%	70%	68%
Online courses	35%	44%	50%	48%	49%	55%	52%	51%
Conferences	39%	41%	41%	41%	42%	35%	33%	26%
Formal qualification	15%	12%	10%	5%	19%	7%	9%	4%
Visits to other schools	49%	48%	50%	46%	28%	24%	25%	23%
Visits to other organisations	7%	5%	5%	5%	6%	6%	7%	5%
Observation and coaching	70%	69%	65%	63%	73%	67%	72%	72%
Network of teachers	57%	61%	63%	65%	50%	43%	46%	38%
Reading literature	58%	71%	74%	83%	62%	58%	65%	71%
Other	20%	25%	28%	29%	20%	20%	24%	23%

Source: TALIS 2018 database; questions 11b and 22.

8. There was an increase in the proportion of lower-secondary teachers who were involved in a CPD network with other teachers between 2013 and 2018. In TALIS 2013, around a third of lower-secondary teachers said they were involved in such an activity in the 12 months preceding the TALIS survey (33%). This increased by 12 percentage points (to 45%) by the time of TALIS 2018. Similarly, in 2018, a greater percentage of lower-secondary teachers reported undertaking observation visits to other schools (25% versus 20%) and taking part in education research conferences (34% versus 29%) than in 2013. In contrast, there was no change in the proportion of teachers who completed a formal qualification or had conducted observation visits to businesses, charities or public organisations, as presented in Table 5.1.3.

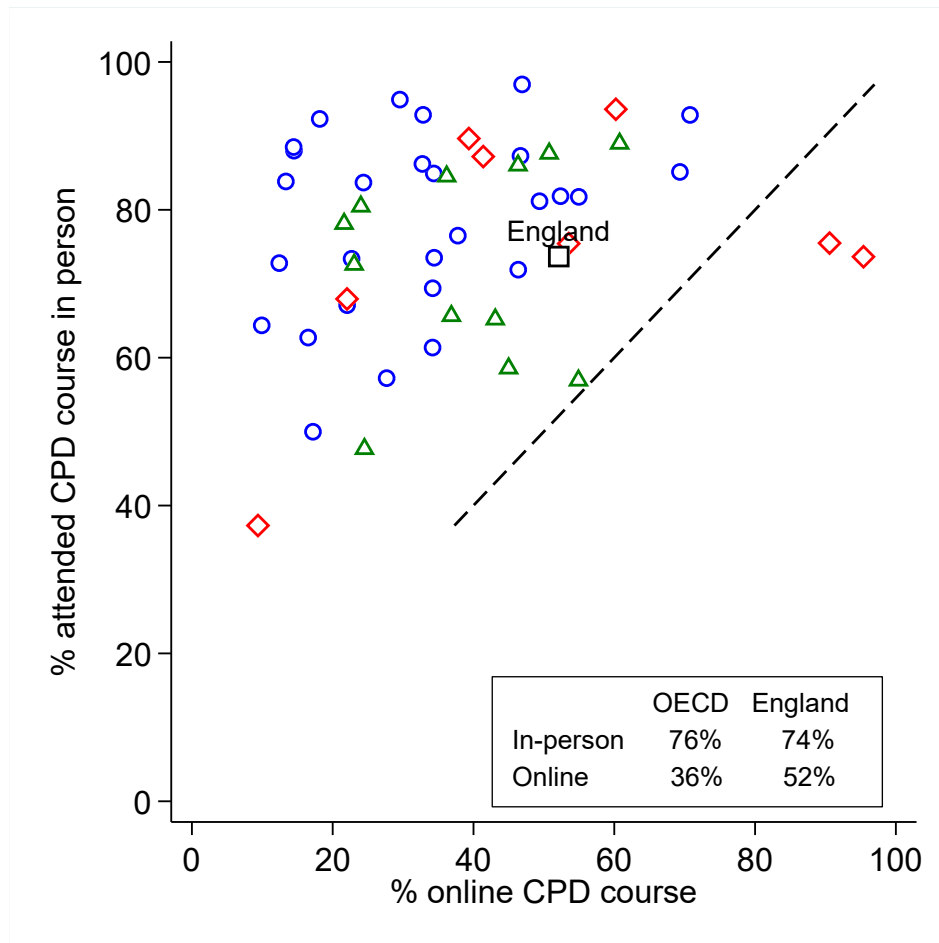
Table 5.1.3. Change in lower-secondary teachers' CPD activities between 2013 and 2018 in England.

	2013		2018	
	Percent	SE	Percent	SE
Participation in a network of teachers formed specifically for the professional development of teachers	33%	1.2%	45%	1.4%
Education conferences where teachers and/or researchers present their research or discuss educational issues	29%	1.2%	34%	1.3%
Observation visits to other schools	20%	1.1%	25%	1.3%
Formal qualification programme (e.g. a degree programme)	10%	0.9%	10%	0.7%
Observation visits to business premises, public organisations, or non-governmental organisations	6%	0.6%	6%	0.5%

Notes: 'SE' refers to the standard error; a measure of uncertainty in the estimate due to sampling variation. The average (mean) has then been calculated along this 4-point scale. Source: TALIS 2013 (question 21) and 2018 (question 22) databases for England.

9. Figure 5.1.1 compares the percentage of lower-secondary teachers who completed CPD online (horizontal axis) versus the percentage who completed it in person (vertical axis) across countries. Most countries sit above the 45-degree line, illustrating how attending CPD courses in person was more common than online provision in most jurisdictions across the world. Indeed, from this international comparative perspective, the difference between in-person and online CPD in England was relatively small. England was similar to the OECD average in terms of in-person CPD amongst lower-secondary teachers (74% versus 76%), but above the OECD average in terms of CPD completed online (52% versus 36%).

Figure 5.1.1. International comparison of the percentage of lower-secondary teachers who completed CPD in person versus online.



Notes: The dashed line illustrates the line of equality. This is where the percent of teachers who completed CPD online over the 12 months prior to the TALIS 2018 survey equals the percent who completed a CPD course in person. Red diamonds = high-performing countries, green triangles = low-performing countries, blue circles = countries with similar performance to England. Source: TALIS 2018 database; questions 22a and 22b.

10. Table 5.1.4 highlights whether England stood out from the OECD average in terms of the other forms of CPD completed by lower-secondary teachers. Formal peer/self-observation was undertaken by 71% of lower-secondary teachers in England, but only 44% across the OECD. On the other hand, lower-secondary teachers in England were less likely to attend education conferences; just 34% indicated that they had done so over the 12 months prior to the survey compared to 49% of lower-secondary teachers from across the OECD. Lower-secondary teachers in England were also less likely to have completed observation visits to businesses and other public organisations (6% in England versus an OECD average of 17%). Equivalent cross-national results for primary teachers are available in the online data tables (see online Table OF_5_1_1_Primary).

Table 5.1.4. The CPD activities of lower-secondary teachers. England compared to the OECD average.

	England	OECD
Courses in person	74%	76%
Online course	52%	36%
Education conferences	34%	49%
Formal qualification	10%	15%
Observation visits other schools	25%	26%
Observation visits outside of education	6%	17%
Peer observation	71%	44%
Network	45%	40%
Professional literature	64%	72%
Other	22%	33%

Source: TALIS 2018 database; question 22.

Key points

- Most primary (98%) and lower-secondary (97%) teachers in England completed some form of CPD in the year prior to the TALIS survey, though primary teachers completed a wider range of activities.
- Lower-secondary teachers in England were more likely to engage in peer observation than their OECD counterparts (71% versus 44%) but less likely to attend education conferences (34% versus 49%).
- The percentage of lower-secondary teachers who participated in a CPD network was higher in 2018 (45%) than in 2013 (33%). There was also an increase in the percentage of lower-secondary teachers who had attended an education conference (34% versus 29%) and who had conducted an observation visit to another school (25% versus 20%).

5.2 What support did schools provide teachers undertaking CPD activities?

11. To what extent do schools in England provide support and incentives for teachers to complete CPD activities? Teachers were asked whether they had received the various forms of support listed in Table 5.2.1 to encourage/facilitate their CPD activities over the 12 months prior to TALIS. Respondents were required to provide a yes/no response to each of the items.

12. The most common form of support teachers in England received for their CPD activities was release from regular teaching duties. Provision of materials, non-monetary professional benefits (e.g. increasing promotion opportunities) and reimbursement of costs were the next most frequently offered support, accessed by around a third of teachers. On the other hand, direct increases in salaries and monetary supplements for working outside of contracted hours were rare, reported by less than 15% of primary and lower-secondary teachers in England. Likewise, 14% of primary and 12% of lower-secondary teachers in England said that they received non-monetary support, such as study leave or a reduced teaching load.
13. Most teachers in England said that they did not receive reimbursement of the costs incurred for completing their CPD. In particular, 75% of primary teachers and 64% of lower-secondary teachers said that their CPD costs were not paid on their behalf. Moreover, most teachers reported that they were not provided the materials they needed for their CPD activities; only around a third of primary and lower-secondary teachers said that this was the case. A possible implication is that many teachers in England were out-of-pocket from their CPD activities.

Table 5.2.1. The support and rewards teachers in England said they received for CPD in the 12 months preceding the TALIS survey.

	Primary		Lower-secondary	
	Yes	SE	Yes	SE
Release from teaching duties for activities during regular working hours	78%	1.3%	56%	1.3%
Materials needed for the activities	33%	1.1%	33%	1.2%
Non-monetary professional benefits (e.g. improving my promotion opportunities)	33%	1.2%	30%	1.2%
Reimbursement or payment of costs	25%	1.1%	36%	1.4%
Non-monetary rewards (e.g. classroom resources/materials, book vouchers)	15%	1.0%	10%	0.7%
Increased salary	14%	0.9%	8%	0.7%
Non-monetary support for activities outside working hours (e.g. reduced teaching time, days off, study leave)	14%	0.8%	12%	0.7%
Monetary supplements for activities outside working hours	6%	0.6%	7%	0.5%

Notes: Figures refer to the percentage of teachers who ticked yes for each form of CPD support. 'SE' refers to the standard error; a measure of uncertainty in estimates due to sampling variation. Source: TALIS 2018 database; question 24.

14. Primary teachers in England were much more likely to report getting release from regular teaching duties to complete CPD activities than lower-secondary

teachers. Most primary teachers in England said they received this type of support (78%), compared to 56% of lower-secondary teachers. Similarly, primary teachers were also somewhat more likely to say that they received non-monetary rewards (15% versus 10%) and that their salary had increased as a result of their CPD (14% versus 8%). On the other hand, lower-secondary teachers were slightly more likely to have had the costs of their CPD reimbursed (36% versus 25%).

15. There was a slight increase in the support lower-secondary teachers in England received for their CPD between 2013 and 2018. The proportion who reported receiving monetary supplements to support their CPD outside of work hours marginally increased from 4.1% to 6.7% (though this is clearly something that benefitted only a small minority of lower-secondary teachers). The percentage who reported receipt of non-monetary support also slightly increased (9.1% to 11.6%). Both of these increases were statistically significant at the conventional 5% threshold, suggesting that the increase was unlikely to be due to sampling variation. Table 5.2.3 provides these results, focusing upon comparable questions from TALIS 2013 and 2018.

Table 5.2.3. Changes in the support lower-secondary teachers in England said they received for their CPD activities between 2013 and 2018.

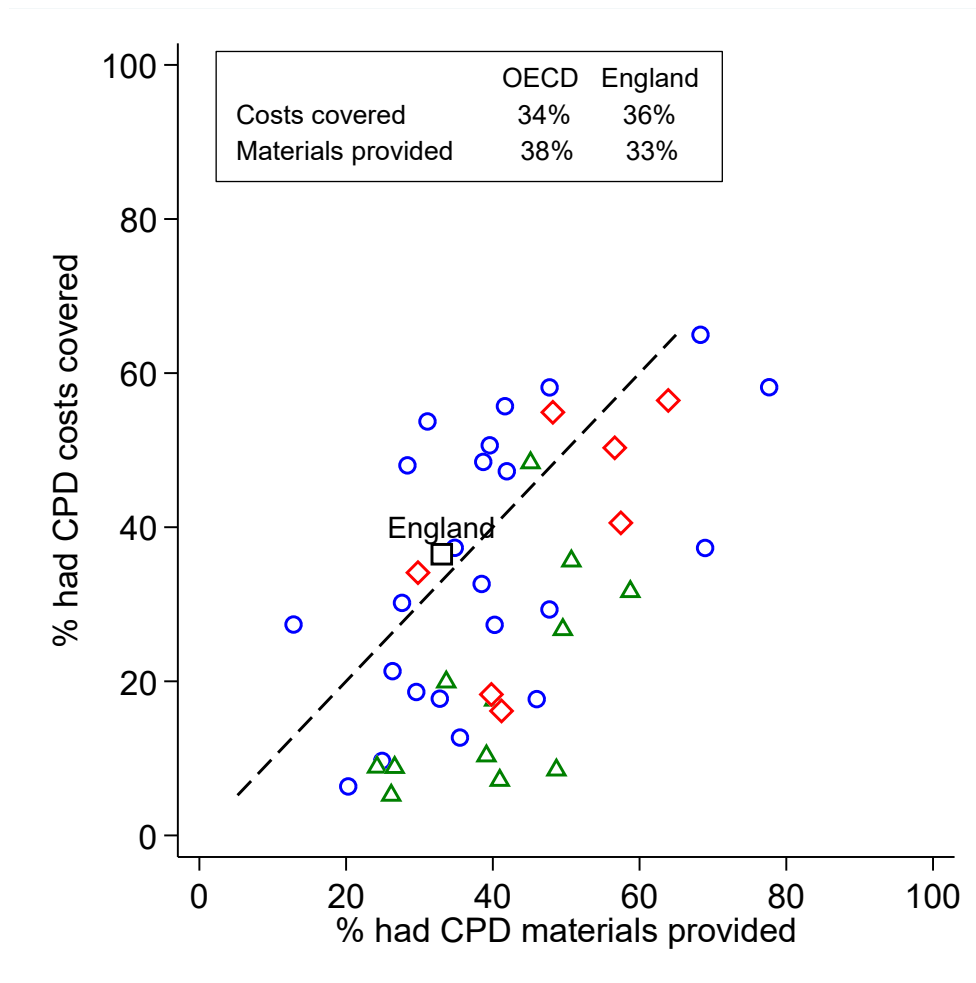
	2013		2018	
	Percent	SE	Percent	SE
Non-monetary support for activities outside working hours (e.g. reduced teaching time, days off, study leave)	9.1%	0.6%	11.6%	0.7%
Monetary supplements for activities outside working hours	4.1%	0.5%	6.7%	0.5%

Note: The question about monetary supplements was slightly different in 2013, using the term 'salary supplement' instead. Results are only reported for questions which were asked in the same way in TALIS 2013. 'SE' refers to the standard error; a measure of uncertainty in estimates due to sampling variation. Source = TALIS 2013 (question 24) and 2018 (question 24) databases for England.

16. In most countries, less than half of lower-secondary teachers said the cost of their CPD was covered and that their CPD materials were provided, as Figure 5.2.1 illustrates. Lower-secondary teachers in England were hence just as likely to have had their CPD costs paid or reimbursed as the average lower-secondary teacher from across the OECD (36% in England compared to an OECD average of 34%). England was, however, slightly below the OECD average in terms of the percentage of teachers who said that they were provided with the necessary materials (33% in England compared to an OECD average of 38%).

17. The online data tables (see online Table OF_5_2_1_Secondary) illustrate how lower-secondary teachers in England were somewhat more likely to say that they received teaching release to support their CPD than the average teacher from across the OECD (56% in England versus an OECD average of 48%). Lower-secondary teachers were also somewhat more likely to say that CPD brought them non-monetary professional benefits, such as increased opportunities for promotion (30% in England versus 20% across the OECD).

Figure 5.2.1. International comparison of the percentage of lower-secondary teachers who reported their CPD costs were paid versus the percentage who said materials were provided.



Notes: The dashed line illustrates the line of equality. This is where the percentage of teachers who reported that their CPD costs were covered equals the percentage who said that their CPD materials were provided. Red diamonds = high-performing countries, green triangles = low-performing countries, blue circles = countries with similar performance to England. Source: TALIS 2018 database; questions 24c and 24d.

18. The online tables also present the cross-national results for primary teachers (see online Table OF_5_2_1_Primary). Compared to other participating countries, primary teachers in England were more likely to be released from their

regular teaching duties to complete CPD. Otherwise, for the most part, England did not particularly stand out from the average across all participating countries.

Key points

- Although only 25% of primary and 36% of lower-secondary teachers in England report that they had their CPD paid for or reimbursed, these figures are consistent with international averages.

5.3 What were the characteristics of CPD activities that teachers felt had the greatest positive impact upon their practise?

19. CPD is most worthwhile if it has a positive impact upon teachers' practice. The TALIS 2018 survey asked teachers for their opinion on their CPD activities, specifically:

'Thinking of all of your professional development activities during the last 12 months, did any of these have a positive impact on your teaching practice?'

20. Of those primary teachers in England who said that they had completed some form of CPD over the last 12 months³⁵, 91% believed that it had a positive effect upon their teaching practices. The proportion was lower for lower-secondary teachers in England (82%).

21. It is important to understand the characteristics of high-quality CPD in order to develop effective provision. Teachers were therefore asked to respond (yes/no) to the 12 statements provided in Table 5.3.1, in response to the following question:

'Thinking of the professional development activity that had the greatest positive impact on your teaching during the last 12 months, did it have any of the following characteristics?'

22. Teachers in England felt that high-quality CPD had most of the characteristics listed in Table 5.3.1; for 11 out of the 12 statements most primary and lower-secondary teachers ticked 'yes'. There was almost unanimous agreement that

³⁵ Recall from section 5.1 that 98% of primary and 97% of lower-secondary teachers completed some form of CPD in the year prior to the TALIS survey.

effective CPD built upon prior knowledge (98% of primary teachers and 93% of lower-secondary teachers), with most agreeing that it should provide opportunities to apply new ideas in the classroom (91% in primary and 83% in lower-secondary). Opportunities for collaborative and active learning were also highlighted as important features of quality CPD, particularly amongst primary teachers. For instance, 82% of primary teachers said that collaborative learning was a key feature of effective CPD they had received, compared to 70% of lower-secondary teachers (the equivalent figures for active learning were 80% and 66% respectively). The need for CPD to involve most colleagues from the school and to take place over an extended period of time were highlighted by the lowest proportion of teachers, though around 40% still thought that this was an important component of effective CPD.

Table 5.3.1. The characteristics of CPD that teachers in England felt had the greatest impact upon their teaching.

	Primary		L. secondary	
	Percent	SE	Percent	SE
It built on my prior knowledge	98%	0.4%	93%	0.6%
It provided opportunities to practise/apply new ideas and knowledge in my own classroom	91%	0.8%	83%	1.0%
It provided opportunities for collaborative learning	82%	1.1%	70%	1.2%
It provided opportunities for active learning	80%	1.2%	66%	1.2%
It appropriately focused on content needed to teach my subjects	77%	1.2%	65%	1.3%
It had a coherent structure	77%	1.3%	70%	1.2%
It adapted to my personal development needs	70%	1.4%	64%	1.3%
It provided follow-up activities	61%	1.4%	51%	1.5%
It focused on innovation in my teaching	61%	1.5%	53%	1.4%
It took place at my school	56%	1.3%	64%	1.4%
It involved most colleagues from my school	54%	1.2%	55%	1.5%
It took place over an extended period of time (e.g. several weeks or longer)	43%	1.5%	41%	1.6%

Notes: 'SE' refers to the standard error; a measure of uncertainty in estimates due to sampling variation. Note that this question was only asked to teachers who said that the CPD they received over the past year had a positive impact on their teaching practice. Source: TALIS 2018 database; question 26.

23. There was a general tendency for primary teachers to identify more characteristics of effective CPD than lower-secondary teachers. The only feature lower-secondary teachers highlighted as more important was for the activity to take place within their school.

24. Variation in how teachers in England responded to these questions according to school and teacher characteristics is provided in the online data tables (see Tables OT_5_3a – OT_5_3l). One statement where there was interesting variation was that effective CPD '*focused on innovation in my teaching*' (see online Table OT_5_3l). Full-time teachers were more likely to highlight this as an important feature of effective CPD than those who worked part-time (64% for full-time versus 49% for part-time primary teachers). Similarly, those with 5 years teaching experience or less were more likely to report innovation in teaching as important than those who had worked as a teacher for more than 20 years (the gap amongst experienced and inexperienced primary teachers stood at around 10 percentage points). Men were also slightly more likely to highlight innovation as important than women, particularly amongst those who worked within lower-secondary schools. There was less evidence of variation by school characteristics, with the possible exception that innovation was rated as slightly more important amongst teachers who worked in high-FSM schools.
25. Full-time teachers in England tended to highlight a greater number of characteristics of effective CPD than teachers who worked part-time, as can be observed in Table 5.3.2. In primary schools, full-time teachers were more likely than part-time teachers to say that effective CPD adapted to their needs (72% versus 60%) and involved collaborative learning (85% versus 71%). There was also a large gap with reference to effective CPD being conducted over an extended period of time (46% versus 30%) and it being focused upon innovation in their teaching (64% versus 49%). There were similar gaps between full-time and part-time lower-secondary teachers, particularly with respect to effective CPD having to adapt to needs, use follow-up activities and to take place over an extended period of time.

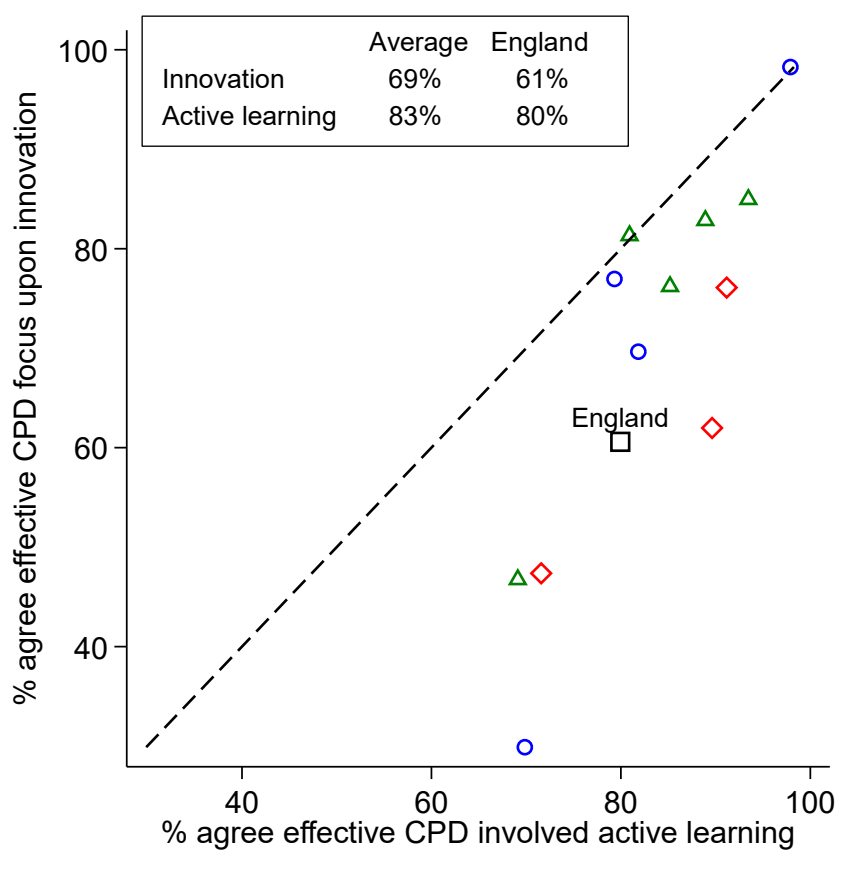
Table 5.3.2. Differences in the views of the characteristics of high-quality CPD between full-time and part-time teachers in England.

	Primary		L. secondary	
	Full-time	Part-time	Full-time	Part-time
Built upon prior knowledge	98%	98%	93%	92%
Adapted to needs	72%	60%	65%	54%
Coherent structure	79%	71%	71%	68%
Focused on content needed in my subjects	78%	73%	64%	71%
Active learning	82%	72%	66%	63%
Collaborative learning	85%	71%	72%	61%
Apply ideas in own classrooms	92%	86%	82%	81%
Follow-up activities	64%	49%	52%	43%
Took place at my school	57%	53%	65%	61%
Involved most colleagues from school	55%	51%	55%	53%
Extended period of time	46%	30%	42%	34%
Innovation in my teaching	64%	49%	55%	44%

Source: TALIS 2018 database; questions 10 and 26

26. Figure 5.3.1 illustrates cross-national variation in the proportion of primary teachers who thought effective CPD focused upon innovation (vertical axis) compared to the proportion who believed it involved active learning (horizontal axis). These results are for primary teachers. England did not stand out from other countries with respect to effective CPD involving active learning, where there was relatively little cross-national variation in general. On the other hand, there were large differences across countries as to whether effective CPD involved innovation in teaching. In England, 61% of primary teachers agreed, which was lower than in many other participating countries.

Figure 5.3.1 Cross-national comparison of primary teachers' views of whether effective CPD focused upon innovation versus active learning.



Notes: The dashed line illustrates the line of equality. This is where the percentage of teachers who agreed or strongly agreed that their experience of effective CPD involved active learning equals the percentage who agreed or strongly agreed that it focused upon innovation. Red diamonds = high-performing countries, green triangles = low-performing countries, blue circles = countries with similar performance to England. Source: TALIS 2018 database; questions 26e and 26l.

27. The online data tables illustrate how just 66% of lower-secondary teachers in England felt that effective CPD involved active learning, below the OECD average of 78%. Similarly, England stood out from other countries in terms of the proportion of lower-secondary teachers who thought effective CPD should adapt to their needs (64% compared to an OECD average of 78%). In contrast, the aspects that lower-secondary teachers in England were more likely to highlight as important than teachers in other countries was for CPD to take place at their school (64% in England thought this was an important characteristic of effective CPD compared to an OECD average of 47%) and that it involved colleagues from their school (55% in England compared to 39% across the OECD). See online Table OF_5_3_1_Secondary.

Key points

- Teachers in England felt that effective CPD had multiple different characteristics, including it building upon prior knowledge, providing opportunities to apply new ideas in the classroom and involving active and collaborative learning.

5.4 What CPD did teachers in England say that they need?

28. Chapter 3 highlighted how more than one-third of primary teachers and nearly half of lower-secondary teachers in England felt they spent too little time upon CPD. That then begs the question, in what areas did teachers feel they needed further training? To capture this information, the TALIS questionnaire asked teachers to state their need for the 17 CPD activities listed in Table 5.4.1 using a 4-point scale ('no need at present' through to 'high level of need'):

'For each of the areas listed below, please indicate the extent to which you currently need professional development'

29. Additional training to support EAL and SEN pupils were the areas of need most frequently cited by teachers in England. Over a third of primary and lower-secondary teachers indicated that they had a moderate or a high need for teaching SEN pupils, with around 30% suggesting they needed to develop their skills in teaching EAL pupils. Additionally, more than a quarter of primary teachers and a third of lower-secondary teachers in England felt they had a moderate or high need for further CPD in approaches to individualised learning.
30. Other areas where more than a quarter of teachers in England felt they had a moderate or high need for further CPD included pupil assessment practices, ICT skills for teaching and analysis and use of pupil assessments. By contrast, classroom/behaviour management and co-operation with parents/carers were the areas in least demand.

Table 5.4.1. The CPD needs of teachers in England.

		1. None	2. Low	3. Medium	4. High	Average
Knowledge and understanding of my subject field(s)	Primary	40%	48%	12%	1%	1.74
	L. Secondary	44%	38%	16%	3%	1.77
Pedagogical competencies in teaching my subject field(s)	Primary	39%	48%	12%	1%	1.75
	L. Secondary	38%	45%	15%	2%	1.81
Knowledge of the curriculum	Primary	41%	47%	10%	1%	1.71
	L. Secondary	35%	42%	19%	4%	1.91
Pupil assessment practices	Primary	32%	45%	21%	2%	1.93
	L. Secondary	28%	43%	25%	4%	2.05
ICT (information and communication technology) skills for teaching	Primary	18%	37%	36%	8%	2.34
	L. Secondary	32%	35%	28%	5%	2.07
Pupil behaviour and classroom management	Primary	44%	44%	11%	1%	1.69
	L. Secondary	44%	40%	13%	3%	1.75
School management and administration	Primary	41%	37%	20%	3%	1.84
	L. Secondary	41%	36%	19%	4%	1.86
Approaches to individualised learning	Primary	30%	45%	23%	2%	1.96
	L. Secondary	26%	43%	28%	3%	2.07
Teaching SEN pupils	Primary	21%	42%	31%	5%	2.20
	L. Secondary	19%	44%	31%	6%	2.23
Teaching in a multicultural or multilingual setting	Primary	38%	36%	22%	4%	1.92
	L. Secondary	37%	38%	20%	5%	1.94
Teaching cross-curricular skills (e.g. creativity, critical thinking, problem solving)	Primary	30%	43%	23%	3%	1.99
	L. Secondary	29%	44%	23%	3%	2.01
Analysis and use of pupil assessments	Primary	31%	45%	21%	3%	1.95
	L. Secondary	29%	43%	24%	4%	2.03
Teacher-parent/guardian co-operation	Primary	49%	40%	9%	1%	1.62
	L. Secondary	45%	42%	11%	1%	1.68
Communicating with people from different cultures or countries	Primary	43%	39%	15%	3%	1.77
	L. Secondary	44%	39%	14%	3%	1.76
Mentoring/coaching peers	Primary	39%	38%	21%	2%	1.87
	L. Secondary	39%	40%	18%	3%	1.85
Using academic research evidence to inform my teaching practice	Primary	36%	43%	19%	2%	1.86
	L. Secondary	34%	41%	22%	3%	1.95
Supporting EAL pupils	Primary	33%	36%	25%	5%	2.02
	L. Secondary	32%	39%	23%	6%	2.03

Notes: The 'average' column treats the question as a 4-point ordinal variable, with a value of 1 assigned to the lowest category ('none') and 4 to the highest category ('high'). The average (mean) has then been calculated along this 4-point scale. Source: TALIS 2018 database; question 27.

31. The most pronounced difference between primary and lower-secondary teachers was with respect to the use of ICT skills for teaching. Around a third (32%) of lower-secondary teachers in England said they had no need for additional CPD in this area, compared to approximately a fifth of primary school teachers (18%).
32. Conversely, developing better knowledge of the curriculum was highlighted as a greater area of need amongst lower-secondary teachers. Almost a quarter of lower-secondary teachers (23%) indicated that they had a moderate to high need for this form of CPD, compared to 12% of primary teachers.
33. Although additional training in teaching SEN pupils was highlighted by teachers in England as a key area of CPD demand, there was substantial variation between different groups. Men were more likely to highlight this as an area of moderate or high need than women (42% versus 33% within lower-secondary schools). Within primary settings, demand was also higher amongst regular classroom teachers than amongst those with managerial responsibilities, such as the head of year or head of key stage. Likewise, there was substantial variation according to teaching experience. Those who were new to the teaching profession were more likely to highlight teaching SEN pupils as a CPD need; for instance, 51% of those who had worked in primary schools for 5 years or less reported this to be a training need, compared to only 23% of primary teachers with more than 20 years of experience. These results can be found in online data Table OT_5_4i, with equivalent results for the other questions available in online Tables OT_5_4a to OT_5_4q.
34. As highlighted in Table 5.4.2, teachers with less experience reported that they had a greater need for additional CPD relative to individuals who had been working as a teacher for a long time. Focusing upon the results for primary teachers, the link between teaching experience and CPD need was particularly pronounced in certain areas. For instance, recently appointed primary school teachers were much more likely than more experienced teachers to report a moderate to high CPD need for school management/administration skills (27% for under 6 years versus 12% for 20 years or more), teaching in multi-lingual settings (34% versus 17%), mentoring peers (33% versus 13%) and supporting EAL pupils (41% versus 18%). On the other hand, the difference between the most and least experienced groups was comparatively small in terms of the need for training in knowledge of the curriculum (14% versus 9%) and using academic research to inform teaching practice (23% versus 19%). For the most part, similar patterns held for lower-secondary teachers as well.
35. An area where more experienced teachers felt they needed more CPD support than their less experienced counterparts was in ICT skills needed for teaching. More than half (55%) of the most experienced primary teachers said they had a moderate or high need for CPD in the ICT skills required for effective teaching,

compared to around 40% of those with less than 20 years of experience. A similar finding emerged for lower-secondary teachers.

Table 5.4.2. The link between the CPD needs of teachers in England and number of years of teaching experience.

(a) Primary

	5 years or less	6 to 10 years	11 to 20 years	More than 20 years
Knowledge of subjects	17%	12%	10%	12%
Pedagogy in teaching my subject	19%	12%	11%	8%
Knowledge of the curriculum	14%	12%	10%	9%
Assessment practices	32%	21%	19%	17%
ICT skills for teaching	42%	38%	45%	55%
Behaviour/classroom management	18%	9%	10%	10%
School management / administration	27%	26%	22%	12%
Individualised learning	37%	23%	19%	18%
Teaching pupils with SEN	51%	38%	30%	23%
Multilingual/multicultural settings	34%	28%	23%	17%
Cross-curricular skills	34%	25%	20%	25%
Analysis and use of assessments	31%	21%	20%	20%
Teacher-parent/guardian co-operation	15%	9%	8%	7%
Communicating with different cultures	25%	18%	14%	13%
Mentoring/coaching peers	33%	25%	20%	13%
Using academic research	23%	22%	19%	19%
Supporting EAL pupils	41%	32%	25%	18%

(b) Lower-secondary

	5 years or less	6 to 10 years	11 to 20 years	More than 20 years
Knowledge of subjects	21%	20%	18%	15%
Pedagogy in teaching my subject	25%	18%	15%	9%
Knowledge of the curriculum	24%	25%	23%	18%
Assessment practices	36%	30%	27%	22%
ICT skills for teaching	33%	29%	33%	40%
Behaviour/classroom management	28%	16%	12%	8%
School management / administration	28%	29%	22%	13%
Individualised learning	37%	31%	30%	26%
Teaching pupils with SEN	45%	36%	36%	27%
Multilingual/multicultural settings	32%	26%	23%	20%
Cross-curricular skills	34%	28%	25%	19%
Analysis and use of assessments	33%	30%	27%	22%
Teacher-parent/guardian co-operation	18%	16%	11%	4%
Communicating with different cultures	22%	20%	15%	11%
Mentoring/coaching peers	31%	31%	16%	9%
Using academic research	26%	29%	28%	17%
Supporting EAL pupils	36%	32%	26%	23%

Source: TALIS 2018 database; questions 11 and 27.

36. Between 2013 and 2018, lower-secondary teachers in England reported an increased need for CPD in certain areas – see Table 5.4.3. Whereas 14% of lower-secondary teachers said they needed to develop their knowledge of the curriculum in 2013, this increased to 23% in 2018. There was a similar increase in the proportion of lower-secondary teachers who reported a moderate or high need for additional training in assessment practices (22% in 2013 compared to 29% in 2018) and developing their knowledge and understanding of their subject field (12% to 18%). These increases might have been due to changes to the curriculum and GCSE examinations between the TALIS 2013 and 2018 surveys. The only area where there was a slight decline in CPD need was in the mentoring/coaching of peers, falling from 25% to 21%.

Table 5.4.3. Change in the CPD needs of lower-secondary teachers between 2013 and 2018. Results for England.

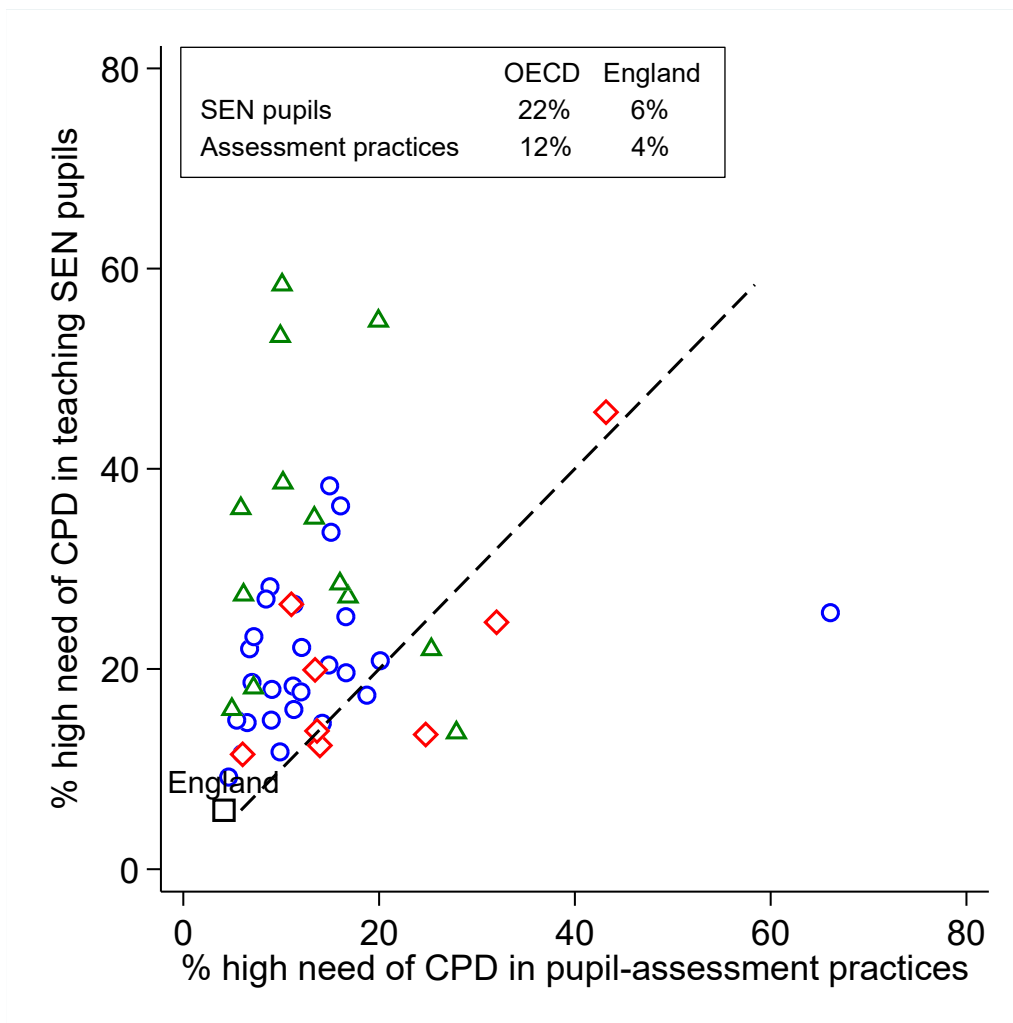
	2013		2018	
	Percent	SE	Percent	SE
Teaching pupils with SEN	35%	1.0%	37%	1.2%
ICT (information and communication technology) skills for teaching	34%	1.2%	33%	1.3%
Approaches to individualised learning	30%	1.0%	31%	1.1%
Pupil assessment practices	22%	0.8%	29%	1.2%
Teaching cross-curricular skills (e.g. creativity, critical thinking, problem solving)	24%	1.0%	27%	1.1%
Teaching in a multicultural or multilingual setting	24%	1.0%	25%	1.1%
School management and administration	23%	0.9%	23%	0.9%
Knowledge of the curriculum	14%	0.8%	23%	1.0%
Mentoring/coaching peers	25%	1.1%	21%	1.0%
Knowledge and understanding of my subject field(s)	12%	0.6%	18%	1.0%
Pedagogical competencies in teaching my subject field(s)	16%	0.7%	17%	0.9%
Pupil behaviour and classroom management	15%	0.9%	16%	1.1%

Note: Figures refer to the percentage of teachers reporting a moderate or high need for CPD. ‘SE’ refers to the standard error; a measure of uncertainty in estimates due to sampling variation. TALIS 2013 (question 26) and 2018 (question 27) databases for England.

37. Compared to other countries, lower-secondary teachers in England were much less likely to say that they had a high CPD need in most areas than lower-secondary teachers in other countries. For instance, Figure 5.4.1 compares England to other countries in terms of the percentage of lower-secondary teachers who said they had a high need for additional CPD in teaching SEN pupils (vertical axis) against those who said they had a high need for CPD in

assessment practices (horizontal axis). Recall from Table 5.4.1 that these were areas where lower-secondary teachers in England said their need for further CPD was at its greatest. Yet, when put in an international, comparative perspective, England was below the OECD for both. In particular, note how England is in the bottom left-hand corner of Figure 5.4.1; most other countries had more lower-secondary teachers who said that they had a high need for CPD in both of these areas. For instance, 6% of lower-secondary teachers in England said that they had a high CPD need for teaching SEN pupils, compared to an OECD average of 22%.

Figure 5.4.1. Cross-national comparison of lower-secondary teachers' needs for CPD in teaching SEN pupils versus pupil-assessment practices.



Notes: The dashed line illustrates the line of equality. This is where the percentage of teachers who reported a need for CPD in pupil-assessment practices equals the percentage who reported a high need for teaching SEN pupils. Red diamonds = high-performing countries, green triangles = low-performing countries, blue circles = countries with similar performance to England. Source: TALIS 2018 database; questions 27d and question 27i.

38. This finding is reiterated by Table 5.4.4, where England is compared at a lower-secondary level to the OECD average across the CPD topics covered within the TALIS survey, with figures referring to the percent of lower-secondary teachers who said that they had a high need for CPD in each area). The point estimate for England was below the OECD average on each occasion, again highlighting how lower-secondary teachers in England felt in less urgent need of further CPD than lower-secondary teachers in other developed countries. Further details are available within the online data tables (see online Table OF_5_4_1_Secondary). The online data tables also provide equivalent results for primary teachers, with a similar conclusion reached (see online Table OF_5_4_1_Primary).

Table 5.4.4 The percentage of lower-secondary teachers who reported a high CPD need. England compared to the OECD average.

	OECD average	England
Subject Knowledge	9%	3%
Pedagogy	10%	2%
Curriculum	8%	4%
Assessment practises	12%	4%
ICT	18%	5%
Classroom management	14%	3%
Management / admin	8%	4%
Individualised learning	14%	3%
SEN	22%	6%
Teaching in multicultural settings	15%	5%
Cross-curricular skills	14%	3%
Analysis and use of pupil assessments	11%	4%
Teacher/parent cooperation	9%	1%
Communication with different cultures	11%	3%

Notes: Figures refer to percentage reporting a high need for CPD in each area; question 27.

Key points

- TALIS asked teachers about their level of need for additional CPD across 14 specific areas. Across all areas, lower-secondary teachers in England were less likely to report a high need for additional CPD than the OECD average. For instance, 3% of lower-secondary teachers in England said they had a high need for CPD in classroom management skills, compared to an OECD average of 14%.
- The highest CPD priorities amongst primary and lower-secondary teachers in England were with respect to teaching SEN pupils (where just under 40% of primary and lower-secondary teachers indicated that they had a moderate or high CPD need) and teaching EAL pupils (where around 30% of primary and lower-secondary teachers suggested that they had a moderate or high CPD need).
- Between 2013 and 2018, the proportion of lower-secondary teachers who reported a need for additional training increased in the following areas: knowledge of the curriculum (14% to 23%); assessment practises (22% to 29%); knowledge and understanding of their subject field (12% to 18%).

5.5 What did teachers perceive to be the greatest barriers to receiving more CPD?

39. The previous section investigated the perceived CPD needs of teachers in England. This section considers the barriers that teachers felt prevented them from undertaking more CPD. Specifically, they were asked on a 4-point scale the extent to which the factors listed in Table 5.5.1 acted as a barrier to their CPD activities: *'How strongly do you agree or disagree that the following present barriers to your participation in professional development?'*

Table 5.5.1. The barriers to participation in CPD activities amongst teachers in England.

		1. Strongly disagree	2. Disagree	3. Agree	4. Strongly agree	Average
I do not have the pre-requisites (e.g. qualifications, experience, seniority)	Primary	54%	38%	7%	1%	1.54
	L. Secondary	59%	32%	7%	2%	1.51
Professional development is too expensive/unaffordable	Primary	17%	34%	38%	11%	2.42
	L. Secondary	17%	26%	39%	17%	2.56
There is a lack of employer support	Primary	31%	51%	15%	4%	1.92
	L. Secondary	22%	50%	21%	7%	2.13
Professional development conflicts with my work schedule	Primary	18%	35%	36%	11%	2.40
	L. Secondary	11%	25%	46%	18%	2.72
I do not have time because of family responsibilities	Primary	30%	40%	23%	6%	2.05
	L. Secondary	29%	39%	25%	7%	2.10
There is no relevant professional development offered	Primary	23%	52%	21%	4%	2.04
	L. Secondary	23%	49%	21%	6%	2.09
There are no incentives for participating in such activities	Primary	21%	44%	27%	9%	2.24
	L. Secondary	17%	38%	33%	11%	2.38

Notes: The 'average' column treats the question as a 4-point ordinal variable, with a value of 1 assigned to the lowest category ('strongly disagree') and 4 to the highest category ('strongly agree'). The average (mean) has then been calculated along this 4-point scale. Source: TALIS 2018 database; question 28.

40. The greatest perceived barrier to CPD amongst teachers in England was conflict with their work schedule. Around two-thirds (64%) of lower-secondary teachers agreed or strongly agreed with this statement. The figure for primary teachers was somewhat lower (47%).
41. Other significant barriers reported by teachers included CPD being unaffordable or too expensive and a lack of incentives to participate in such activities. For instance, 49% of primary teachers agreed or strongly agreed that CPD was too expensive, with the proportion slightly higher (56%) amongst lower-secondary teachers. This could be linked to the results presented in section 5.2, which highlighted how most teachers in England did not have the cost of their CPD reimbursed or the materials provided. In contrast, only a small minority of teachers (less than 10%) said that they did not have the necessary pre-requisites (e.g. qualifications, experience, seniority) to undertake CPD.
42. Lower-secondary teachers generally felt that there were more barriers to their participation in CPD than primary teachers. The biggest difference was with respect to conflicts with work schedules, as discussed above, and the expense of CPD (49% of primary teachers agreed or strongly agreed compared to 56% of lower-secondary), incentives to participate (36% versus 44%) and a lack of employer support (19% versus 28%).
43. There was relatively little variation in teachers' perceptions of CPD barriers by school and teacher characteristics (see online Tables OT_5_5a – OT_5_5g). One area that did stand out, however, was that family responsibilities were a particular challenge for certain groups. Specifically, online Table OT_5_5e illustrates how over 40% of primary and lower-secondary teachers in England who worked part-time agreed or strongly agreed that this was an important barrier to their CPD participation, compared to 30% or fewer full-time teachers. Similarly, around 40% of primary teachers with between 11 and 20 years of experience agreed that family responsibilities were a barrier, around twice as many as those within the first 5 years of their teaching career (which could, in fact, be more related to age rather than experience per se). There was also evidence of a gender gap, at least amongst lower-secondary teachers, with men more likely to say family responsibilities limited their CPD activities than women³⁶.
44. The link between CPD needs and perceived barriers are also investigated in the online data tables (see online Table OT_5_5h). Interestingly, the perceived barriers to CPD participation did not vary by the CPD needs that teachers said

³⁶ In additional analysis, a regression model was estimated to investigate whether this was due to differences in part-time working. There was no evidence that this was the case, with the gender gap amongst lower-secondary teachers remaining stable.

they had. Take, for instance, the cost of CPD. This was just as big a barrier to teachers who said they required more CPD in coaching/mentoring as it was for teachers who said they required support in teaching SEN pupils.

45. Expense became a greater barrier to lower-secondary teachers CPD activities between 2013 and 2018. In 2013, 33% of lower-secondary teachers in England agreed that expense was a barrier, while a further 11% strongly agreed. In 2018, these percentages had risen to 39% and 17% respectively, as can be seen in Table 5.5.2.
46. There was a relatively small increase in some other perceived barriers to CPD participation amongst lower-secondary teachers in England between 2013 and 2018. For instance, more lower-secondary teachers reported a lack of incentives to participate in CPD (38% in 2013 versus 44% in 2018), with slightly more indicating that they did not have time due to family commitments (27% versus 32%).

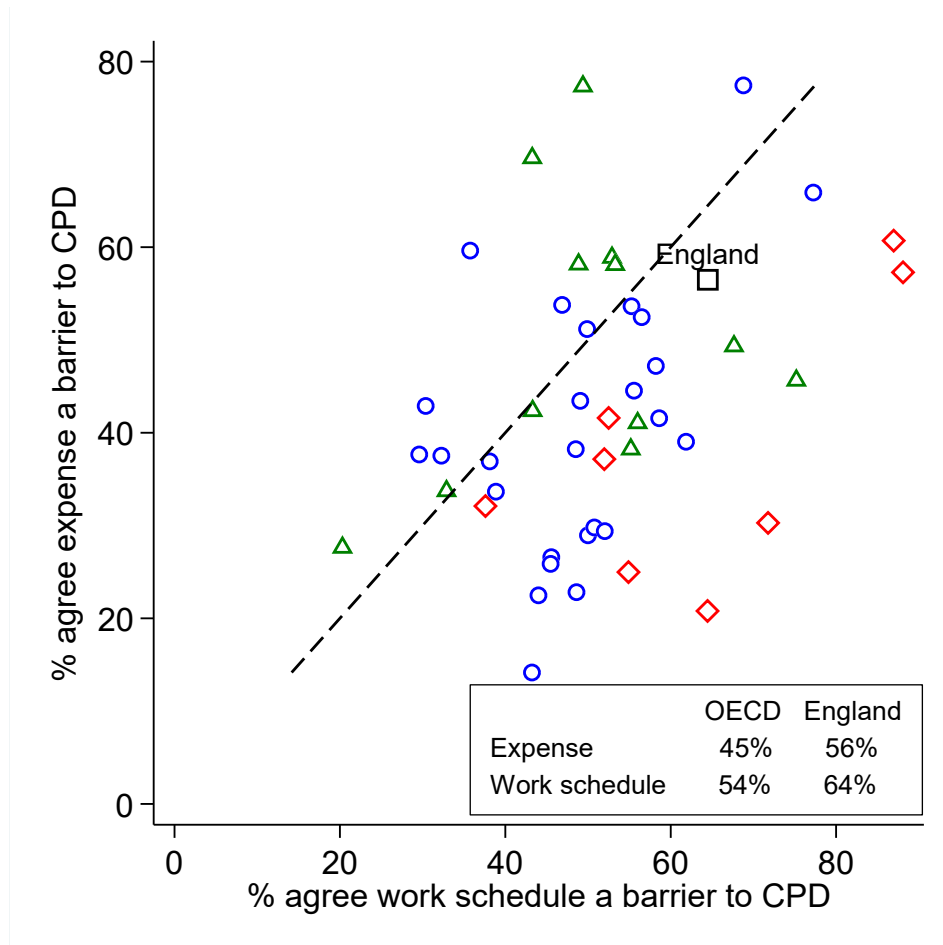
Table 5.5.2. Change in barriers to CPD participation between 2013 and 2018. Results for lower-secondary teachers in England.

		1. Strongly disagree	2. Disagree	3. Agree	4. Strongly agree	Average
I do not have the pre-requisites	2013	56%	34%	9%	2%	1.56
	2018	59%	32%	7%	2%	1.51
Professional development is too expensive/unaffordable	2013	23%	34%	33%	11%	2.31
	2018	17%	26%	39%	17%	2.56
There is a lack of employer support	2013	26%	47%	21%	7%	2.09
	2018	22%	50%	21%	7%	2.13
Professional development conflicts with my work schedule	2013	14%	26%	44%	16%	2.63
	2018	11%	25%	46%	18%	2.72
I do not have time because of family responsibilities	2013	32%	41%	21%	6%	2.01
	2018	29%	39%	25%	7%	2.10
There is no relevant professional development offered	2013	25%	50%	19%	6%	2.05
	2018	23%	49%	21%	6%	2.09
There are no incentives for participating in such activities	2013	20%	41%	30%	8%	2.26
	2018	17%	38%	33%	11%	2.38

Notes: The 'average' column treats the question as a 4-point ordinal variable, with a value of 1 assigned to the lowest category ('strongly disagree') and 4 to the highest category ('strongly agree'). The average (mean) has then been calculated along this 4-point scale. Source: TALIS 2013 (question 27) and 2018 (question 28) databases for England.

47. The expense of CPD and conflict with work schedules were of greater concern to lower-secondary teachers in England than in other countries. This is illustrated by Figure 5.5.1 and Table 5.5.3, with England placed towards the top-right hand corner of the graph. While 56% of lower-secondary teachers in England highlighted expense as an issue, only around 45% did on average across the OECD. A similar pattern emerged for conflict with work schedules (64% in England versus 54% across the OECD).

Figure 5.5.1. International comparison of the barriers to CPD participation amongst lower-secondary teachers. Expense versus work schedule.



Notes: The dashed line illustrates the line of equality. This is where the percentage of teachers who agreed or strongly agreed that their work schedule was a barrier to their participation in CPD is equal to the percentage who agreed or strongly agreed that expense was a barrier. Red diamonds = high-performing countries, green triangles = low-performing countries, blue circles = countries with similar performance to England. Source: TALIS 2018 database; questions 28b and 28d.

48. For many of the other CPD barriers, England was around the OECD average for lower-secondary teachers. For instance, although 44% of lower-secondary teachers in England said that there was no incentive to participate in CPD, this

figure was similar to the OECD average (47%), and below some high-performing countries such as Finland, Chinese Taipei and South Korea. Similar results held for some other key barriers, such as family commitment and employer support. Hence, outside the cost of CPD and the conflict with work schedules, England did not particularly stand out from other countries in terms of most CPD barriers. One exception was around the availability of CPD provision, where 27% of lower-secondary teachers in England said that there was no relevant CPD available, which was less than the average across OECD countries (38%).

Table 5.5.3. Barriers to the CPD of lower-secondary teachers. England in comparisons to high-performing countries and the OECD average.

Country	Prerequisites	Expense	Employer support	Work schedule	Family	No relevant CPD	No incentive
Japan	31%	61%	57%	87%	67%	38%	46%
South Korea	40%	57%	71%	88%	65%	40%	66%
England	8%	56%	28%	64%	32%	27%	44%
OECD 31	11%	45%	31%	54%	37%	38%	47%
Alberta	5%	42%	16%	52%	41%	29%	41%
Finland	6%	37%	27%	52%	38%	41%	52%
Estonia	8%	32%	12%	38%	25%	30%	15%
Chinese Taipei	14%	30%	26%	72%	58%	39%	55%
Shanghai	21%	25%	25%	55%	38%	25%	46%
Singapore	13%	21%	20%	64%	41%	22%	38%

Notes: Figures refer to the percentage who agree or strongly agree. Green shading should be read vertically, with darker shades referring to a greater percentage of teachers in agreement in comparison to other countries included in the column. Source: TALIS 2018 database; question 28.

49. Table 5.5.4 provides equivalent results for primary teachers. Interestingly, the expense and conflicts with work schedule did not stand out as much in England compared to other countries (albeit with a much smaller pool of potential comparators). In fact, England was around average for both. England compared quite favourably to other countries in terms of employer support for CPD, the relevance of the CPD available and the incentives to take part. Overall, primary teachers in England were thus less likely to report a range of barriers to CPD than primary teachers in other participating countries.

Table 5.5.4. Barriers to the CPD of primary teachers. England in comparison to other participating countries.

	Prerequisites	Expense	Employer support	Work schedule	Family	No relevant CPD	No incentive
Japan	31%	61%	57%	84%	71%	37%	44%
Buenos Aires	19%	57%	36%	64%	62%	41%	54%
Denmark	6%	57%	23%	51%	21%	38%	40%
South Korea	35%	50%	63%	82%	63%	37%	59%
Spain	12%	49%	22%	50%	57%	40%	68%
Sweden	8%	49%	26%	51%	20%	36%	26%
England	8%	48%	19%	47%	29%	24%	36%
UAE	9%	42%	33%	43%	36%	34%	57%
Turkey	9%	39%	56%	54%	38%	49%	69%
Flemish Belgium	8%	38%	18%	44%	30%	19%	20%
Vietnam	23%	35%	42%	39%	22%	25%	40%
France	14%	27%	36%	61%	53%	47%	52%
Chinese Taipei	14%	27%	21%	66%	56%	38%	50%

Notes: Figures refer to the percentage who agree or strongly agree. Green shading should be read vertically, with darker shades referring to a greater percentage of teachers in agreement than for other countries in the column. Source: TALIS 2018 database; question 28.

Key points

- Lower-secondary teachers in England were less likely to say there was no relevant CPD available than the average lower-secondary teacher across the OECD (27% versus 38%). A similar result held for primary teachers in England compared to other participating countries.
- 56% of lower-secondary teachers in England saw expense as a barrier to their participation in CPD, while 64% highlighted conflicts with their work schedule. These figures were above the OECD average (45% and 54% respectively).
- There was an increase in the percentage of lower-secondary teachers in England who thought CPD was too expensive (from 43% in 2013 to 56% in 2018), that there was not sufficient incentive to participate in such activities (38% to 44%), that CPD conflicted with their work schedule (60% to 64%) and that they lacked time to complete CPD due to family responsibilities (27% to 32%).

5.6 What were the CPD activities, barriers and needs of England's headteachers

50. To conclude this chapter, CPD activities, needs and perceived barriers amongst England's headteachers are explored. Table 5.6.1 documents the CPD activities that primary and lower-secondary school headteachers said that they had completed in the year prior to the TALIS survey.

Table 5.6.1. The CPD activities completed by headteachers in England in the year prior to the TALIS survey.

		% No	% Yes
Courses/seminars about subject matter, teaching methods or pedagogical topics	Primary	12%	88%
	L. Secondary	35%	65%
Courses/seminars about leadership	Primary	12%	88%
	L. Secondary	25%	75%
Courses/seminars attended in person	Primary	2%	98%
	L. Secondary	12%	88%
Online courses/seminars	Primary	51%	49%
	L. Secondary	51%	49%
Education conferences where teachers or researchers present their research	Primary	28%	72%
	L. Secondary	21%	79%
Formal qualification	Primary	92%	8%
	L. Secondary	95%	5%
Peer and/or self-observation as part of a formal arrangement	Primary	50%	50%
	L. Secondary	51%	49%
Participation in a network of headteachers	Primary	22%	78%
	L. Secondary	29%	71%
Reading professional literature	Primary	3%	97%
	L. Secondary	3%	97%
Other	Primary	66%	34%
	L. Secondary	68%	32%

Source: TALIS 2018 database; question 7 (headteacher questionnaire).

51. Most primary and lower-secondary headteachers in England said that they had read professional literature and attended courses/seminars in person at some point during the preceding year. On the other hand, less than a tenth reported undertaking a professional qualification. Around three-quarters had attended an education research conference, with a similar proportion involved in a professional network of headteachers. The area of biggest difference between primary and lower-secondary headteachers was attendance at seminar/courses

about subject matter and teaching methods; 88% of primary headteachers reported undertaking CPD in this area compared to 65% of lower-secondary headteachers. Primary headteachers in England were also more likely to have completed a seminar/course about leadership (88% versus 75%) and to have attended CPD courses in person (98% versus 88%).

52. Table 5.6.2 compares results across countries. Most lower-secondary headteachers in high-performing East Asian nations had completed CPD about subject matter or teaching methods over the last year. The percentage in England (65%) and the OECD average (71%) was typically lower than in these high-performing East Asian nations, with the exception of Japan (53%). A similar pattern emerged with respect to training in school leadership and attendance at education research conferences.
53. Only 5% of lower-secondary headteachers in England reported completing a formal qualification in the 12 months prior to the TALIS survey; this was below the OECD (16%) average. On the other hand, England was above the OECD average in terms of the proportion of lower-secondary headteachers who were involved in a CPD network (e.g. 71% in England compared to 61% across the OECD). The same was true for most of the high-performing countries (except Finland, where the figure was 56%).
54. Lower-secondary headteachers in England were also more likely to have read relevant literature (97%) than the average lower-secondary headteachers across the OECD (87%). England was similar to the high-performing PISA jurisdictions of Estonia, Singapore and Shanghai in this respect.

Table 5.6.2. Cross-country comparison of the CPD activities of headteachers in 12 months prior to TALIS survey.

(a) Primary

	Teaching	Leadership	In person	Online	Conferences	Qualification	Observation	Network	Literature	Other
Flemish Belgium	97%	77%	91%	6%	69%	22%	31%	87%	97%	38%
Chinese Taipei	96%	91%	85%	56%	92%	20%	68%	76%	78%	59%
Vietnam	95%	77%	77%	48%	78%	54%	79%	61%	99%	64%
South Korea	92%	90%	90%	93%	65%	22%	88%	78%	94%	79%
Spain	89%	41%	87%	45%	69%	13%	36%	55%	66%	60%
England	88%	88%	98%	49%	72%	8%	50%	78%	97%	34%
Denmark	76%	90%	62%	8%	84%	24%	37%	63%	93%	32%
Buenos Aires	75%	39%	56%	33%	61%	11%	59%	55%	95%	46%
UAE	71%	87%	93%	48%	82%	24%	73%	77%	92%	63%
Japan	69%	77%	23%	10%	93%	1%	57%	75%	86%	26%
Turkey	55%	46%	80%	33%	45%	8%	38%	44%	78%	48%
Sweden	39%	73%	71%	46%	75%	31%	33%	65%	95%	36%
France	36%	14%	37%	19%	38%	3%	10%	16%	33%	17%

(b) Lower-secondary

	Teaching	Leadership	In person	Online	Conferences	Qualification	Observation	Network	Literature	Other
Chinese Taipei	93%	85%	80%	50%	89%	20%	65%	73%	81%	53%
Singapore	90%	96%	99%	37%	88%	5%	48%	83%	98%	47%
Shanghai	89%	88%	69%	88%	95%	10%	62%	67%	98%	79%
South Korea	86%	96%	86%	88%	65%	21%	82%	81%	83%	77%
Estonia	74%	83%	89%	31%	89%	6%	56%	75%	97%	56%
OECD 31	71%	73%	77%	36%	75%	16%	47%	61%	87%	43%
England	65%	75%	88%	49%	79%	5%	49%	71%	97%	32%
Finland	62%	79%	73%	45%	59%	7%	31%	56%	89%	30%
Alberta	62%	73%	95%	32%	78%	13%	38%	63%	82%	37%
Japan	53%	71%	18%	16%	92%	0%	54%	69%	90%	23%

Notes: Shading to be read vertically, with darker colours referring to a greater percentage of headteachers completing the activity compared to other countries in the column. Source = TALIS 2018 database; question 7 (headteacher questionnaire).

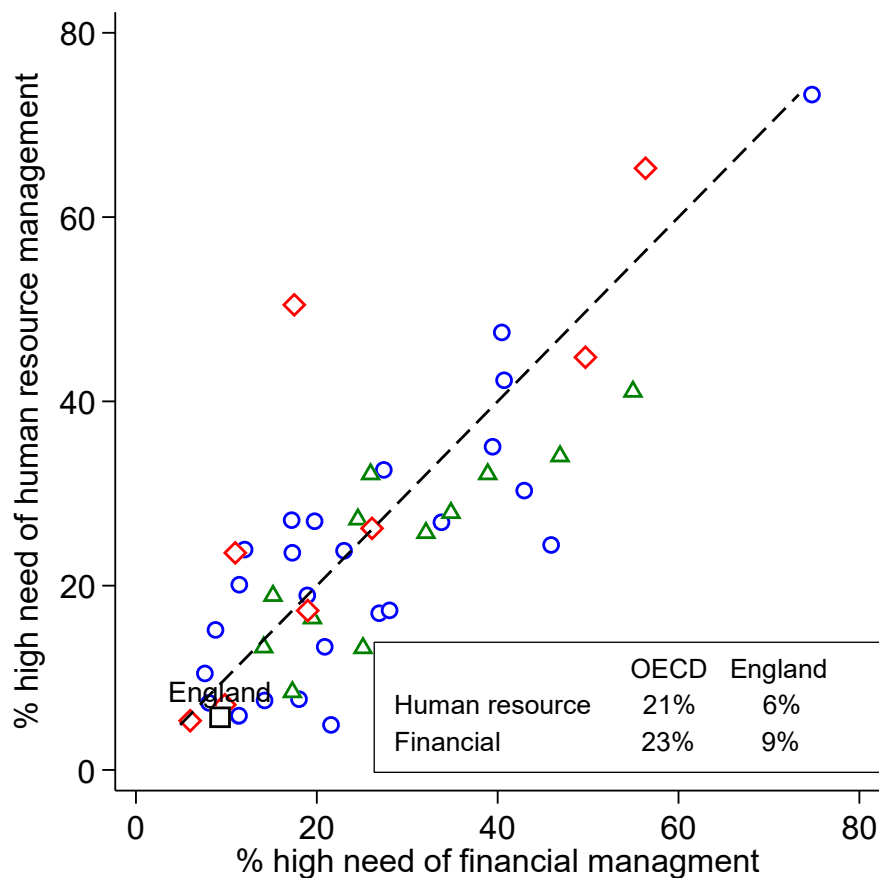
Table 5.6.3. CPD needs of headteachers in England.

		1. No need	2. Low	3. Medium	4. High	Average
Knowledge and understanding of new developments in leadership research and theory	Primary	12%	55%	30%	2%	2.22
	L.Secondary	22%	40%	36%	2%	2.18
Knowledge and understanding of current national/local policies on education	Primary	18%	53%	26%	3%	2.14
	L.Secondary	18%	46%	34%	2%	2.20
Using data for improving the quality of the school	Primary	34%	42%	20%	4%	1.94
	L.Secondary	34%	42%	22%	2%	1.93
Designing the school curriculum	Primary	28%	41%	28%	2%	2.05
	L.Secondary	37%	46%	15%	3%	1.83
Designing professional development for/with teachers	Primary	24%	53%	21%	2%	2.00
	L.Secondary	29%	46%	23%	2%	1.98
Observing classroom instruction	Primary	41%	49%	9%	2%	1.71
	L.Secondary	49%	46%	3%	2%	1.58
Providing effective feedback	Primary	39%	51%	9%	1%	1.73
	L.Secondary	51%	44%	5%	1%	1.55
Promoting equity and diversity	Primary	38%	51%	9%	2%	1.75
	L.Secondary	40%	45%	12%	3%	1.78
Developing collaboration among teachers	Primary	35%	51%	11%	3%	1.81
	L.Secondary	40%	42%	16%	2%	1.80
Human resource management	Primary	21%	39%	31%	9%	2.28
	L.Secondary	24%	45%	25%	6%	2.13
Financial management	Primary	20%	42%	27%	10%	2.27
	L.Secondary	24%	38%	29%	9%	2.24
Mentoring/coaching skills	Primary	36%	41%	21%	2%	1.89
	L.Secondary	36%	48%	14%	2%	1.81
Using academic research evidence to improve teaching effectiveness	Primary	14%	48%	33%	4%	2.28
	L.Secondary	24%	41%	27%	7%	2.17

Notes: The 'average' column treats the question as a 4-point ordinal variable, with a value of 1 assigned to the lowest category ('no need') and 4 to the highest category ('high need'). The average (mean) has then been calculated along this 4-point scale. Source: TALIS 2018 database; question 8 (headteacher questionnaire).

55. On the whole, headteachers did not report a high need for CPD, as highlighted in table 5.6.3. However, there were 3 areas of interest. The first was in the use of academic research evidence to improve teaching within their school; 37% of primary headteachers said that they had a moderate or high need in this area, along with 34% of lower-secondary headteachers. The second area was human resource management; this was deemed to be of moderate or high need amongst 40% primary and 31% of lower-secondary headteachers. Finally, just over a third of primary and lower-secondary headteachers said that they had a moderate or high need for further training in financial management.
56. In contrast, comparatively few headteachers suggested that they had a pressing need for further training in observing classroom instruction and providing effective feedback. Similarly, additional training in promoting equity and diversity and developing collaboration amongst teachers was considered a lower priority amongst most headteachers. Perhaps the most notable difference between primary and lower-secondary headteachers was with respect to designing the school curriculum. More primary headteachers in England suggested that they had a moderate or high need for further CPD in this area than lower-secondary headteachers (30% versus 18%).
57. Similar to the results for teachers, headteachers in England were less likely to say that they had a high need for further CPD than headteachers in other countries. Figure 5.6.1 illustrates this result with respect to the percentage of lower-secondary headteachers who said they had a high need for extra training in human resource management (vertical axis) compared to financial management (horizontal axis). England is situated in the bottom-left corner of this graph; headteachers in most other countries reported greater need for further CPD in both of these areas.

Figure 5.6.1. Cross-national comparison of the CPD needs of lower-secondary headteachers. Human resource management versus financial management.



Notes: The dashed line illustrates the line of equality. This is where the percentage of headteachers who reported a high need for CPD in financial management equals the percentage who reported a high need for human resource management. Red diamonds = high-performing countries, green triangles = low-performing countries, blue circles = countries with similar performance to England. Source: TALIS 2018 database; questions 8j and 8k (headteacher questionnaire).

58. This is reinforced by Table 5.6.4, which illustrates that headteachers in England were less likely to report a high need for CPD than the average headteacher across the OECD. This held true across a wide range of areas. For instance, just 2% of headteachers in England said that they had a high need for further training in the use of data for improving school quality, compared to an OECD average of 24%. Likewise, just 1% of headteachers in England said that they had a high need for training in providing effective feedback, compared to around a fifth of headteachers across the OECD. A similar substantive conclusion was reached when inspecting the results for primary headteachers (these are provided in online data Table OF_5_6_1_Primary).

Table 5.6.4. The percentage of lower-secondary headteachers who said that they had a high CPD need. England compared to the OECD average.

	OECD	England
Leadership research	14%	2%
National policies	16%	2%
Use data	24%	2%
Designing curriculum	18%	3%
Designing CPD	20%	2%
Observation	15%	2%
Effective feedback	19%	1%
Promoting equity	13%	3%
Developing collaboration	26%	2%
Human resource management	21%	6%
Financial management	23%	9%

Source: TALIS 2018 database; question 8 (headteacher questionnaire).

59. The main barriers headteachers in England reported to their CPD participation were expense (58% of primary headteachers in England agreed or strongly agreed, along with 49% of lower-secondary headteachers) and conflicts with work schedules (52% at primary and 58% at lower-secondary). Positively, most headteachers suggested that they had the support of their employer to participate in CPD, while only 17% of primary and 8% of lower-secondary headteachers in England said that no relevant CPD was offered. These findings are highlighted in Table 5.6.5.

Table 5.6.5. What were the barriers that prevented primary and lower-secondary headteachers in England from completing more CPD?

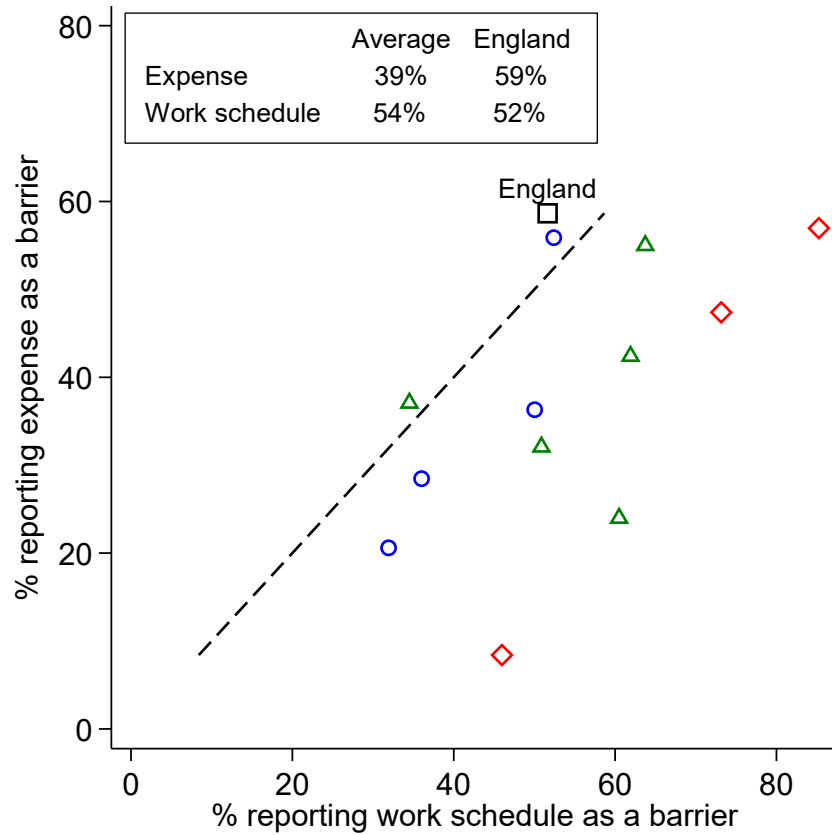
		1. Strongly disagree	2. Disagree	3. Agree	4. Strongly agree	Average
I do not have the pre-requisites	Primary	65%	30%	3%	2%	1.41
	L. Secondary	72%	28%	0%	0%	1.28
Professional development is too expensive	Primary	12%	29%	51%	7%	2.53
	L. Secondary	15%	36%	42%	7%	2.42
There is a lack of employer support	Primary	37%	53%	9%	2%	1.76
	L. Secondary	46%	48%	5%	0%	1.59
Professional development conflicts with my work schedule	Primary	13%	35%	40%	12%	2.51
	L. Secondary	12%	30%	44%	15%	2.61
I do not have time because of family responsibilities	Primary	28%	45%	23%	5%	2.05
	L. Secondary	30%	47%	22%	1%	1.94
There is no relevant professional development offered	Primary	22%	61%	15%	2%	1.96
	L. Secondary	25%	67%	8%	0%	1.84
There are no incentives for participating in professional development	Primary	18%	53%	25%	4%	2.16
	L. Secondary	27%	49%	22%	2%	2.00

Notes: The 'average' column treats the question as a 4-point ordinal variable, with a value of 1 assigned to the lowest category ('strongly disagree') and 4 to the highest category ('strongly agree'). The average (mean) has then been calculated along this 4-point scale. Source: TALIS 2018 database; question 9 (headteacher questionnaire).

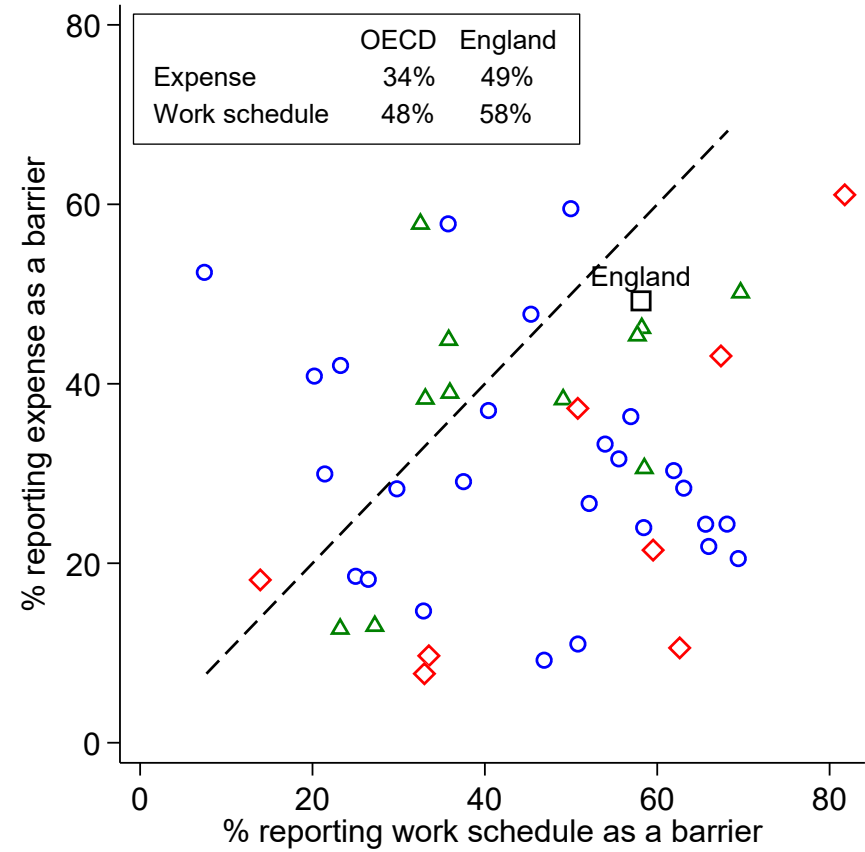
60. Lower-secondary headteachers in England were more likely to report cost and conflicts with work schedules as significant barriers to CPD than headteachers in other countries. For instance, a third of lower-secondary headteachers across the OECD agreed or strongly agreed CPD was too expensive compared to half of headteachers in England. These results are shown in Figure 5.6.2 panel (b).
61. By contrast, primary and lower-secondary headteachers in England were less likely to identify other issues as barriers to CPD than headteachers in other countries. This included a lack of employer support and a lack of relevant CPD available. Otherwise, England was around the OECD average. The results for lower-secondary headteachers can be found in Table 5.6.6, with those for primary headteachers available in online Table OT_5_6_6_Primary.

Figure 5.6.2 International comparison of headteachers barriers to CPD. Expense versus conflict with work schedule.

(a) Primary



(b) Lower-secondary



Notes: The dashed line illustrates the line of equality. This is where the percentage of headteachers who reported work schedule as a barrier to their participation in CPD is equal to the percentage who reported the expense of CPD as a barrier. Red diamonds = high-performing countries, green triangles = low-performing countries, blue circles = countries with similar performance to England. Source: TALIS 2018 database; questions 9b and 9d (headteacher questionnaire).

Table 5.6.6. Barriers to CPD amongst lower-secondary headteachers. England compared to the OECD average and high-performing countries.

	Prerequisites	Expense	Support	Work Schedule	Family	Relevant	Incentives
Japan	21%	61%	54%	82%	33%	34%	40%
England	0%	49%	5%	58%	23%	8%	25%
South Korea	27%	43%	49%	67%	22%	22%	56%
Alberta	2%	37%	5%	51%	29%	11%	33%
OECD 31	6%	34%	20%	48%	18%	27%	34%
Finland	3%	21%	14%	60%	27%	34%	37%
Estonia	7%	18%	13%	14%	7%	19%	12%
Chinese Taipei	7%	11%	15%	63%	22%	28%	41%
Shanghai	12%	10%	11%	34%	4%	8%	19%
Singapore	3%	8%	4%	33%	11%	3%	4%

Note: Figures refer to percentage of headteachers who agreed or strongly agreed that the factor was a barrier to their participation in CPD. Darker shading should be read vertically, with higher values indicating a greater percentage of headteachers in agreement than in other countries in the column. Source: TALIS 2018 database; question 9 (headteacher questionnaire).

62. There was some evidence that the obstacles to headteachers' CPD increased in England between 2013 and 2018, as illustrated by Table 5.6.7. The most substantial change was with respect to the cost of CPD. In 2013, 28% of lower-secondary headteachers agreed that this was a barrier, with a further 2% in strong agreement. In 2018, 42% of lower-secondary headteachers in England agreed and 7% strongly agreed.

Table 5.6.7 Barriers to CPD amongst headteachers in England. Change between 2013 and 2018.

		1. Strongly disagree	2. Disagree	3. Agree	4. Strongly agree	Average
I do not have the pre-requisites	2013	82%	15%	2%	2%	1.23
	2018	72%	28%	0%	0%	1.28
Professional development is too expensive	2013	28%	42%	28%	2%	2.04
	2018	15%	36%	42%	7%	2.42
There is a lack of employer support	2013	62%	34%	3%	1%	1.42
	2018	46%	48%	5%	0%	1.59
Professional development conflicts with my work schedule	2013	17%	26%	44%	13%	2.53
	2018	12%	30%	44%	15%	2.61
I do not have time because of family responsibilities	2013	45%	38%	14%	3%	1.75
	2018	30%	47%	22%	1%	1.94
There is no relevant professional development offered	2013	42%	50%	6%	1%	1.67
	2018	25%	67%	8%	0%	1.84
There are no incentives for participating in professional development	2013	40%	42%	17%	1%	1.80
	2018	27%	49%	22%	2%	2.00

Notes: The 'average' column treats the question as a 4-point ordinal variable, with a value of 1 assigned to the lowest category ('strongly disagree') and 4 to the highest category ('strongly agree'). The average (mean) has then been calculated along this 4-point scale. Source: TALIS 2013 (headteacher question 8) and 2018 (headteacher question 9) databases for England.

Key points

- Headteachers in England were less likely to say that they had an urgent need for further CPD than headteachers in other countries. For instance, just 6% of lower-secondary headteachers in England reported a high need for CPD in human resource management, compared to an OECD average of 21%. Cost and conflicts with work schedules were the most important reasons why headteachers in England did not complete more CPD.

Chapter 6: The school and class environment

- Lower-secondary teachers in England reported a similar level of classroom disruption to teachers in many other countries participating in TALIS in 2018. For instance, around 13% of lower-secondary class time in England was lost due to teachers keeping order amongst pupils, which was the same as the OECD average. Within primary schools, concerns around classroom disruption were lower than in many comparator countries.
- In classes in England where more than 60% of pupils came from disadvantaged backgrounds, around 18% of time was lost to disruption (on average), compared to 8% of time in classes with no disadvantaged pupils.
- Most teachers in England were confident in their ability to maintain classroom discipline. For instance, 70% of primary and 55% of lower-secondary teachers in England said that they could get pupils to follow classroom rules 'a lot'.
- Within lower-secondary schools, teachers with 5 years of experience or less tended to report greater challenges with classroom management than more experienced teachers. For example, 36% of lower-secondary teachers in England with five years of experience or less said that they could control disruptive behaviour 'a lot', compared to 52% of those who had taught for more than 20 years. The same pattern was not observed for primary teachers in England.
- Primary and lower-secondary headteachers in England generally reported that severe behavioural issues occurred only rarely within their schools. However, intimidation and bullying amongst pupils was reported to be a weekly occurrence in around a fifth of lower-secondary schools in England.
- Pupil or parental reports of hurtful information on the internet about pupils occurred more frequently in schools in England than in other countries, according to headteachers (at least weekly in 14% of England's lower-secondary schools, compared to the OECD average of 2%). This result could be due to, for example, cross-national differences in what is considered to constitute hurtful information, differences in interpretation or differences in the awareness amongst headteachers of such issues.
- In total, 84% of primary and 76% of lower-secondary teachers stated that their colleagues were open to change. This was similar to most other participating countries (the OECD average for lower-secondary teachers was 74%).
- In England, 95% of primary and 92% of lower-secondary teachers thought that teachers could rely upon one another for support. This was slightly above international averages; for example, the OECD average amongst lower-secondary teachers was 87%.

6.1 To what extent was there noise and disorder in England's classrooms?

1. Teachers were asked a series of questions about the class they had taught the preceding Tuesday at 11am (known as the 'target class'). This sub-section focuses upon how teachers responded. To begin, teachers were asked:

'For this target class, what percentage of class time is typically spent on each of the following activities?'

The focus of the paragraphs that follow is the percentage of time teachers spent upon 'keeping order in the classroom'.

2. On average, primary teachers in England reported losing around 12% of lesson time (i.e. 7 minutes of each hour-long lesson) to managing classroom behaviour. The average was very similar within lower-secondary schools (13%). There was, however, substantial variation in the amount of lesson time lost. At one extreme, a tenth of teachers said that they lost at least a quarter of their lesson to maintaining order in the class, while at the other extreme, a tenth of teachers reported losing almost no time at all (2% of time or less). Further details can be found in Table 6.1.1.

Table 6.1.1. Percentage of time teachers in England spent upon maintaining order in the classroom.

	Primary	Lower-secondary
10th percentile	2%	2%
25th percentile	5%	5%
50th percentile	10%	10%
75th percentile	15%	20%
90th percentile	25%	30%
Mean	12.1%	12.6%
P90-P10	23%	28%

Notes: 'P90-P10' provides the difference between the 90th and 10th percentiles. Source: TALIS 2018 database; question 39b.

3. Most teachers in England said that pupils in the target class tried to create a pleasant learning environment; 79% of primary teachers and 72% of lower-secondary teachers agreed or strongly agreed. However, an important minority indicated that there were some issues with behaviour within the target class. For instance, 25% of primary and 28% of lower-secondary teachers in England said they lost a lot of time due to pupils interrupting lessons, while around a fifth suggested that there was a lot of disruptive noise in the classroom, as can be seen in Table 6.1.2.

Table 6.1.2. The learning environment within the target class in England.

		1. Strongly disagree	2. Disagree	3. Agree	4. Strongly agree	Average
When the lesson begins, I have to wait quite a long time for pupils to quieten down	Primary	32%	51%	14%	3%	1.88
	L. Secondary	30%	48%	18%	5%	1.96
Pupils in this class take care to create a pleasant learning atmosphere	Primary	3%	18%	61%	18%	2.94
	L. Secondary	5%	22%	54%	18%	2.86
I lose quite a lot of time because of pupils interrupting the lesson	Primary	26%	49%	21%	4%	2.03
	L. Secondary	30%	42%	21%	7%	2.04
There is a lot of disruptive noise in the classroom	Primary	28%	52%	17%	3%	1.96
	L. Secondary	33%	45%	18%	5%	1.95

Notes: The 'average' column treats the question as a 4-point ordinal variable, with a value of 1 assigned to the lowest category ('strongly disagree') and 4 to the highest category ('strongly agree'). The average (mean) has then been calculated along this 4-point scale. Source: TALIS 2018 database; question 41.

4. There was substantial variation in the behaviour of the target class depending upon the characteristics of the pupils that it contained. Table 6.1.3 provides a breakdown by the percentage of pupils in the target class who were: (a) eligible for FSM; (b) low academic achievers; and (c) EAL³⁷. Note that, in order to maximise sample size, the primary and lower-secondary teacher samples for England have been pooled in this part of the analysis.
5. Classrooms in England with a high proportion of disadvantaged pupils lost more lesson time to behaviour management than those with few low socio-economic status pupils. In lessons where more than 60% of pupils were FSM eligible, 18% of lesson time (i.e. around 10 minutes of an hour-long lesson) was lost on average to managing behaviour within the classroom. The equivalent figure for classes with no FSM pupils was 8% (around 5 minutes) of lesson time.
6. A similar pattern emerged with respect to low academic achievers. Behaviour management took up almost twice as much time when the target class had mostly low-achieving pupils (17%) compared to when there were no low-

³⁷ Information on the characteristics of the target class were reported by the responding teacher.

achieving pupils in the class (7%). The same result, however, was not observed with respect to the percentage of EAL pupils (see panel (c) in Table 6.1.3).

Table 6.1.3. Variation in lesson disruption by characteristics of the target class in England. Primary and lower-secondary combined.

(a) FSM

FSM	% time lost	% agree: Quieten down	% agree: Pleasant atmosphere	% agree: Interruptions	% agree: Disruptive noise
None	7.9%	10%	88%	11%	8%
1-10%	11.0%	17%	78%	24%	19%
11-30%	13.1%	22%	74%	28%	25%
31-60%	15.5%	25%	69%	36%	29%
More than 60%	18.5%	28%	67%	34%	31%

(b) Low-achievers

Low-achievers	% time lost	% agree: Quieten down	% agree: Pleasant atmosphere	% agree: Interruptions	% agree: Disruptive noise
None	7.0%	9%	90%	9%	7%
1-10%	10.1%	14%	82%	20%	16%
11-30%	13.1%	21%	74%	29%	24%
31-60%	17.5%	29%	64%	39%	33%
More than 60%	17.3%	36%	56%	42%	33%

(c) EAL

EAL	% time lost	% agree: Quieten down	% agree: Pleasant atmosphere	% agree: Interruptions	% agree: Disruptive noise
None	11.4%	19%	77%	24%	20%
1-10%	11.9%	20%	76%	26%	22%
11-30%	13.1%	19%	77%	28%	21%
31-60%	14.5%	22%	70%	31%	26%
More than 60%	13.4%	15%	78%	21%	19%

Notes: Characteristics of the target class based upon information reported by the classroom teacher and was thus based upon their perceptions. Estimates based upon the pooled primary and lower-secondary school samples for England. Source: TALIS 2018 database; questions 35, 39b and 41.

- Experience in the teaching profession was linked to behaviour management in classrooms, particularly within lower-secondary schools. Those who had been working as a lower-secondary teacher for 5 years or less lost (on average) 16%

of their lesson to pupil disruption, compared to 9% for those who had worked as a teacher for more than 20 years. Similarly, 38% of the least experienced lower-secondary teachers said that they lost a lot of time due to pupil interruptions, compared to 15% of the most experienced group. See Table 6.1.4.

Table 6.1.4. Relationship between teaching experience and disruption reported in the target class. Results for England.

(a) Primary

	5 years or less	6 to 10 years	11 to 20 years	>20 years
% of time lost to disruption	15%	12%	11%	9%
When the lesson begins, I have to wait quite a long time for pupils to quieten down	24%	14%	14%	14%
Pupils in this class take care to create a pleasant learning atmosphere	74%	83%	79%	84%
I lose quite a lot of time because of pupils interrupting the lesson	35%	24%	20%	18%
There is a lot of disruptive noise in the classroom	29%	16%	18%	14%

(b) Lower-secondary

	5 years or less	6 to 10 years	11 to 20 years	>20 years
% of time lost to disruption	16%	12%	12%	9%
When the lesson begins, I have to wait quite a long time for pupils to quieten down	30%	21%	23%	12%
Pupils in this class take care to create a pleasant learning atmosphere	67%	73%	73%	79%
I lose quite a lot of time because of pupils interrupting the lesson	38%	28%	27%	15%
There is a lot of disruptive noise in the classroom	35%	22%	22%	11%

Source: TALIS 2018 database; questions 11b, 39b and 41.

- There are various potential explanations for these findings. For example, it could be that more experienced teachers in England had developed more effective classroom management skills. Alternatively, the results could have been driven by inexperienced teachers in England being assigned to more challenging classes. This issue was investigated in additional analysis via regression modelling: specifically, whether more experienced teachers remained less likely

to report disruption in the target class after characteristics of the class were controlled (e.g. percentage of pupils who were eligible for FSM, percentage of pupils who were low achievers). There continued to be evidence that more experienced teachers reported better behaved pupils than less experienced teachers, though the magnitude of the difference was slightly reduced. It hence seems unlikely that the results presented in Table 6.1.4 were due to less experienced teachers being assigned more challenging pupils to teach.

9. There was no change in the reported behaviour of lower-secondary pupils in England between 2013 and 2018. In TALIS 2013, around a quarter of teachers in England said that they had to wait a long time for pupils to quieten down and that pupil interruptions led to a loss of a lot of teaching time. Very similar figures were observed in TALIS 2018, as evidenced by Table 6.1.5.

Table 6.1.5. The behaviour of lower-secondary pupils in England. Change between 2013 and 2018.

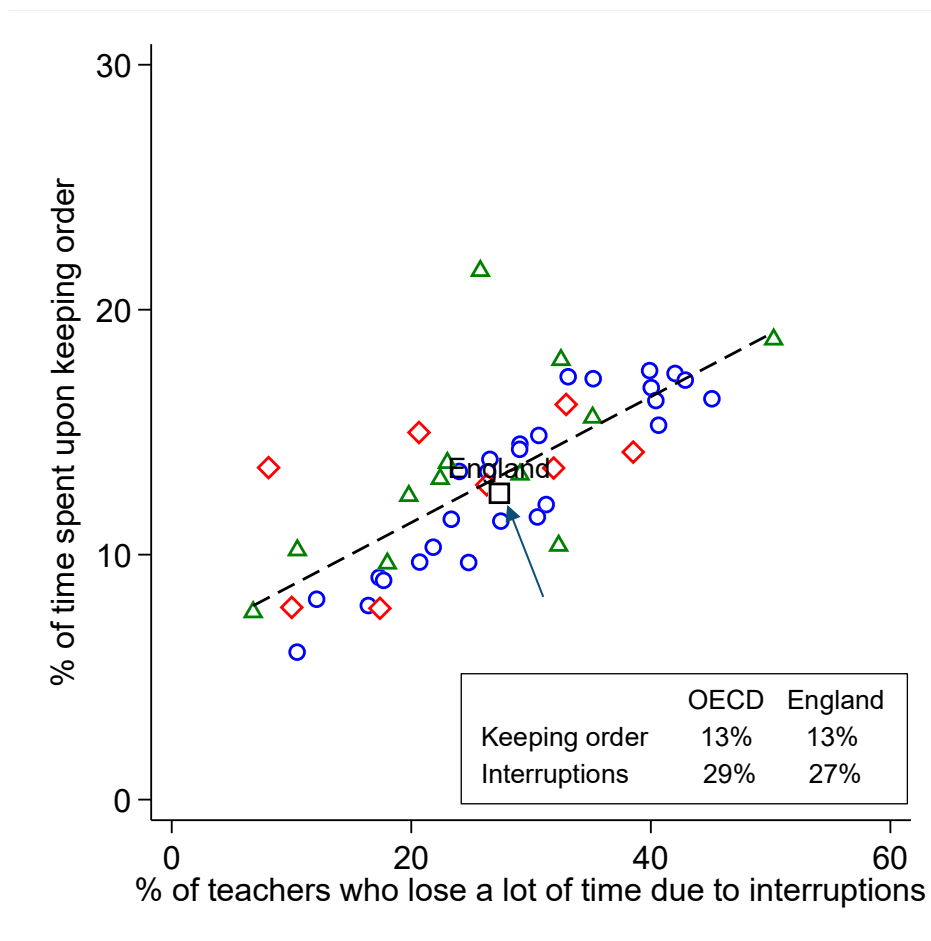
		1. Strongly disagree	2. Disagree	3. Agree	4. Strongly agree	Average
When the lesson begins, I have to wait quite a long time for pupils to quieten down	2013	31%	48%	17%	4%	1.95
	2018	30%	48%	18%	5%	1.96
Pupils in this class take care to create a pleasant learning atmosphere	2013	5%	21%	55%	19%	2.88
	2018	5%	22%	54%	18%	2.86
I lose quite a lot of time because of pupils interrupting the lesson	2013	28%	44%	22%	6%	2.05
	2018	30%	42%	21%	7%	2.04
There is a lot of disruptive noise in the classroom	2013	32%	46%	17%	4%	1.94
	2018	33%	45%	18%	5%	1.95

Notes: The 'average' column treats the question as a 4-point ordinal variable, with a value of 1 assigned to the lowest category ('strongly disagree') and 4 to the highest category ('strongly agree'). The average (mean) has then been calculated along this 4-point scale. Source: TALIS 2013 and 2018 databases for England; question 41.

10. England did not stand out from other countries in terms of classroom disruption. This is evidenced by Figure 6.1.1, which compares the percentage of teachers who said that they lost a lot of time due to disruptions to the percentage of lesson time spent upon keeping order in the class. England is squarely in the middle of this graph, with little evidence that maintaining discipline in the classroom was a greater (or lesser) challenge in England than elsewhere.

Further evidence is provided in the online data tables (see online Tables OF_6_1_1_Secondary), which illustrates how the figures for England for the other questions investigated within this section were mostly around the OECD average. Although there were some high-performing countries where fewer teachers reported classroom behaviour to be a problem (e.g. Japan and Shanghai), there were others where the situation was broadly comparable to England (e.g. Alberta and Chinese Taipei).

Figure 6.1.1. Cross-national comparison of disruption within the target class. Results for lower-secondary teachers.



Notes: Dashed line illustrates the ordinary least squares line-of-best-fit. A steeper line illustrates a stronger cross-country relationship between the percentage of class time teachers lost to disruptions and the percentage of time teachers spent upon keeping order in the class. Red diamonds = high-performing countries, green triangles = low-performing countries, blue circles = countries with similar performance to England. Source: TALIS 2018 database; questions 39b and 41c.

- The online data tables illustrate that similar results emerged within primary schools (see online Table OF_6_1_1_Primary). Indeed, classroom discipline within England's primary schools was slightly more positive than in many other

participating countries. For instance, England was significantly below the all-country average for most of the questions asked about classroom discipline, including the percentage of time spent upon keeping order in the target class (12% versus 16%), the proportion of primary teachers who said there was a lot of disruptive noise (20% versus 28%) and the percent who said that they had to wait a long time for pupils to quieten down (17% versus 26%). England was similar to the high-performing nations of Japan and Chinese Taipei in this respect (evidence for the other high-performing nation, South Korea, was more mixed).

Key points

- Lower-secondary teachers in England reported similar levels of classroom disruption to many other countries. For instance, around 13% of lower-secondary class time was lost in England due to teachers keeping order amongst pupils, which was the same as in the average OECD country. Within primary schools, concerns around classroom disruption were lower than in many other comparator countries. There was no change in the reported behaviour of lower-secondary pupils in England between 2013 and 2018.

6.2 How confident were teachers in their ability to manage disruptive classrooms?

12. The previous sub-section detailed the extent to which there was noise and disorder in England's classrooms. This sub-section considers how teachers responded to the following question about their ability to manage poor pupil behaviour: *'In your teaching, to what extent can you do the following?'* with the statements of interest presented in Table 6.2.1. Teachers were asked to respond to each of these statements using a 4-point scale (not at all, to some extent, quite a bit and a lot).
13. Most teachers in England felt confident in their ability to effectively manage behaviour in the classroom; over 90% of primary and lower-secondary teachers reported that they could get pupils to follow classroom rules 'quite a bit' or 'a lot', while more than 95% indicated that they made their expectations of behaviour clear. Nevertheless, a relatively small number of teachers had some doubts about their behaviour management skills. For instance, 14% of lower-secondary teachers in England said that they could not manage disruptive behaviour 'at all'

or only ‘to some extent’, whilst 16% had doubts about their ability to calm a disruptive pupil.

14. Primary teachers in England were, on average, more confident in their behaviour management skills than those who worked in lower-secondary schools. This difference was driven by the greater proportion of primary teachers who selected the highest response option, ‘a lot’. For instance, 59% of primary teachers said that they could manage disruptive behaviour in the classroom ‘a lot’, compared to 47% of lower-secondary teachers. Likewise, there was a 15-percentage point gap in terms of primary and lower-secondary teachers’ views as to whether they could ‘get pupils to follow classroom rules’ a lot.

Table 6.2.1. The views of primary and lower-secondary teachers in England as to whether they could maintain discipline within class.

		1. Not at all	2. To some extent	3. Quite a bit	4. A lot	Average
Control disruptive behaviour in the classroom	Primary	1%	8%	32%	59%	3.50
	L. Secondary	1%	13%	39%	47%	3.33
Make my expectations about pupil behaviour clear	Primary	0%	2%	19%	79%	3.77
	L. Secondary	0%	5%	28%	67%	3.62
Get pupils to follow classroom rules	Primary	0%	4%	26%	70%	3.66
	L. Secondary	0%	7%	37%	55%	3.48
Calm a pupil who is disruptive or noisy	Primary	0%	11%	36%	52%	3.41
	L. Secondary	1%	15%	43%	41%	3.24

Notes: The ‘average’ column treats the question as a 4-point ordinal variable, with a value of 1 assigned to the lowest category (‘not at all’) and 4 to the highest category (‘a lot’). The average (mean) has then been calculated along this 4-point scale. Source: TALIS 2018 database; question 34.

15. Lower-secondary teachers with 5 years of experience or less were not as confident in their classroom management skills as more experienced teachers, as can be seen in Table 6.2.2 panel (b). There was a particularly large difference in how more and less experienced teachers responded to the statement about managing disruptive behaviour in the classroom; only around a third of lower-secondary teachers with 5 years of experience or less said they could do this ‘a lot’, compared to around half of respondents with at least 6 years of experience. There was also a substantial difference between the most and least experienced lower-secondary teachers in the extent they felt able to get pupils to follow classroom rules (45% versus 63%). The pattern for primary teachers was less pronounced, with little evidence of a strong relationship between teaching

experience and self-confidence in classroom management (see Table 6.2.2 panel (a)).

Table 6.2.2. The link between teaching experience and whether teachers felt they could maintain discipline in their target class. Results for England.

(a) Primary

	5 years or less	6 to 10 years	11 to 20 years	>20 years
Control behaviour	58%	63%	57%	60%
Make expectations clear	76%	82%	80%	78%
Follow rules	67%	70%	70%	72%
Calm disruptive pupils	53%	56%	50%	51%

(b) Lower-secondary

	5 years or less	6 to 10 years	11 to 20 years	>20 years
Control behaviour	36%	52%	49%	52%
Make expectations clear	59%	68%	70%	68%
Follow rules	45%	59%	56%	63%
Calm disruptive pupils	33%	46%	41%	43%

Notes: See Table 6.2.1 for wording of the questions asked. Figures refer to the percentage of teachers selecting 'a lot'. Source: TALIS 2018 database; questions 11b and 34.

16. Teachers with lower levels of self-confidence in their classroom management skills recognised that they had a need for further CPD in this area. This can be seen in Table 6.2.3 (note that, to maximise sample size, the primary and lower-secondary teacher samples in England have been combined). Just over a third of teachers who only felt able to manage classroom behaviour 'to some extent' or 'not at all' thought that they had a moderate or high need for further CPD in this area. In contrast, 6% of teachers who said they could manage classroom behaviour 'a lot' felt they had a moderate or high need for CPD in behaviour management.

Table 6.2.3. Did teachers who struggled to maintain classroom discipline feel that they needed further CPD in behaviour management? Combined results for primary and lower-secondary teachers in England.

Able to Control behaviour	No CPD need	Low CPD need	Medium / High CPD need	Total
Not at all / to some extent	26%	38%	36%	100%
Quite a bit	27%	55%	18%	100%
A lot	59%	35%	6%	100%

Notes: Estimates based upon the pooled sample of primary and lower-secondary school teachers in England. Figures refer to row percentages. Source: TALIS 2018 database; questions 27f and 34D.

17. There was little change in the self-confidence of lower-secondary teachers with respect to their behaviour management skills between TALIS 2013 and 2018. In both surveys, teachers in England were generally positive about their ability to maintain order in the classroom, although around an eighth consistently reported some difficulties in managing disruptive behaviour, as can be seen in Table 6.2.4.

Table 6.2.4. The views of lower-secondary teachers in England as to whether they could maintain classroom discipline. Change between 2013 and 2018.

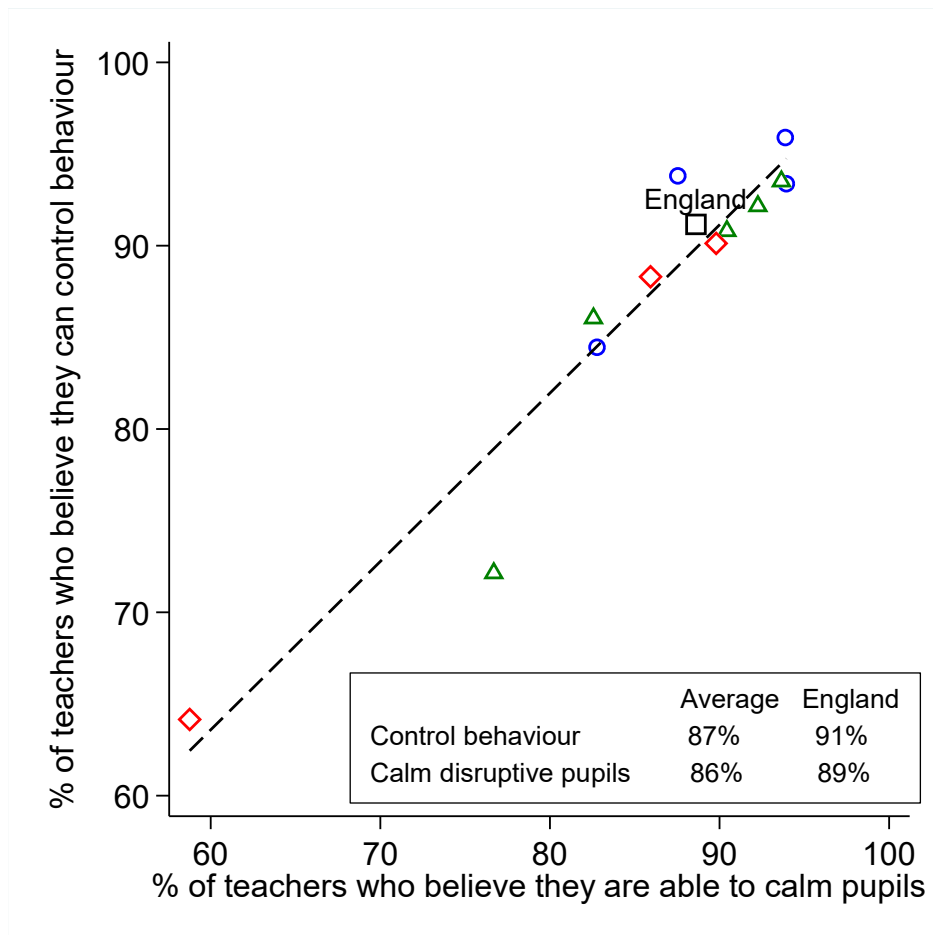
		1. Not at all	2. To some extent	3. Quite a bit	4. A lot	Average
Control disruptive behaviour in the classroom	2013	1%	11%	38%	51%	3.39
	2018	1%	13%	39%	47%	3.33
Make my expectations about pupil behaviour clear	2013	0%	4%	27%	69%	3.64
	2018	0%	5%	28%	67%	3.62
Get pupils to follow classroom rules	2013	0%	6%	37%	56%	3.49
	2018	0%	7%	37%	55%	3.48
Calm a pupil who is disruptive or noisy	2013	1%	13%	43%	43%	3.29
	2018	1%	15%	43%	41%	3.24

Notes: The 'average' column treats the question as a 4-point ordinal variable, with a value of 1 assigned to the lowest category ('not at all') and 4 to the highest category ('a lot'). The average (mean) has then been calculated along this 4-point scale. Source: TALIS 2013 and 2018 databases for England; question 34.

18. Figure 6.2.1 compares the results for primary teachers in England to those for other participating countries. In most countries, including England, around 90% of primary teachers were confident in their ability to control classroom behaviour and calm disruptive pupils. However, two countries emerged as outliers. The first

was Japan, where around a third of teachers expressed doubts about their classroom management skills. The second was France, where only 70% of primary teachers said that they could manage pupil behaviour quite a bit or a lot (compared to around 90% in England).

Figure 6.2.1. International comparison of whether primary teachers felt that they could maintain classroom behaviour.



Notes: The dashed line illustrates the line of equality. This is where the percentage of teachers who were confident in their ability to calm pupils (selected either 'quite a bit' or 'a lot') is equal to the percentage who were confident in their ability to manage pupil behaviour. Red diamonds = high-performing countries, green triangles = low-performing countries, blue circles = countries with similar performance to England. Source: TALIS 2018 database; questions 34d and 34i.

19. The online data tables provide equivalent results for England's lower-secondary schools (see online Table OF_6_2_1_Secondary). England was similar to most other countries in terms of how lower-secondary teachers responded to the questions about their classroom management skills. For example, 87% of lower-secondary teachers in England felt they could manage disruptive classroom behaviour, compared to an OECD average of 85%.

Key points

- Most teachers in England were confident in their ability to maintain classroom discipline. For instance, 70% of primary and 55% of lower-secondary teachers in England said that they could get pupils to follow classroom rules 'a lot'.

6.3 Headteachers views on school environment and discipline

20. Headteachers were asked a series of questions about the frequency with which a selection of serious behavioural issues occurred within their school. Specifically, they were asked how often the set of issues documented in Table 6.3.1 occurred within their school, from 'never' to 'daily'. As this was based upon data gathered in the headteacher questionnaire, the sample size these results are based upon is quite limited (around 150 headteachers for each of primary and lower-secondary).
21. Headteachers reported serious behavioural issues to be relatively uncommon within England's schools. In most primary and lower-secondary schools (80% or more), vandalism, violence amongst pupils, verbal abuse of teachers and possession of alcohol/drugs occurred less than monthly. Such serious issues reportedly occurred on a weekly or daily basis in less than 5% of England's schools.

Table 6.3.1. Behavioural issues within England’s schools. Occurrences reported by headteachers in England.

		1. Never/ less than monthly	2. Monthly	3. Weekly /daily	Average
Vandalism and theft	Primary	99%	1%	0%	1.02
	L. Secondary	83%	14%	3%	1.20
Intimidation or bullying among pupils	Primary	85%	10%	5%	1.19
	L. Secondary	60%	20%	21%	1.61
Physical injury caused by violence among pupils	Primary	88%	8%	4%	1.16
	L. Secondary	87%	10%	3%	1.15
Intimidation or verbal abuse of teachers or staff	Primary	91%	4%	5%	1.14
	L. Secondary	84%	11%	5%	1.21
Use/possession of drugs and/or alcohol in school	Primary	100%	0%	0%	1.00
	L. Secondary	98%	2%	0%	1.02
A pupil or parent reports postings of hurtful information on the Internet about pupils	Primary	92%	6%	2%	1.10
	L. Secondary	62%	24%	14%	1.52
A pupil or parent reports unwanted electronic contact among pupils	Primary	88%	10%	2%	1.15
	L. Secondary	49%	24%	27%	1.78

Note: The bottom two ('never' and 'less than monthly') and top two ('weekly' and 'daily') response options have combined due to small sample sizes. The 'average' column treats the question as a 3-point ordinal variable, with a value of 1 assigned to the lowest category ('never/less than monthly') and 3 to the highest category ('weekly/daily'). The average (mean) has then been calculated along this 3-point scale. Source: TALIS 2018 database; question 30 (headteacher questionnaire).

22. Bullying, whether in school or online, occurred somewhat more frequently – and was a particular challenge within lower-secondary schools. Around 40% of headteachers of lower-secondary schools said bullying among pupils occurred at least monthly, with a fifth saying that it occurred each week. The frequency of bullying reported by primary teachers in England was lower, suggesting that this was a specific challenge within lower-secondary schools.
23. Table 6.3.1 also illustrates how 24% of lower-secondary headteachers said pupils or parents reported hurtful information about pupils posted online occurred monthly, while 14% said it happened weekly/daily. Similarly, around a quarter of lower-secondary headteachers in England said that a pupil or parent reported an incidence of unwanted electronic contact every week (27%), while a further quarter of headteachers said it occurred each month (24%).

24. There was some suggestion that the occurrence of serious behaviour issues in England's schools increased between 2013 and 2018 (see Table 6.3.2). The average score was statistically significantly higher in 2018 than in 2013 for vandalism/theft; a greater proportion of headteachers said that this occurred on a monthly basis in 2018 (14%) than in 2013 (3%). Similarly, a greater number of lower-secondary headteachers suggested bullying amongst pupils occurred at least monthly in 2018 (41%) than in 2013 (26%). Reports of physical injury were also reported to occur slightly more often, though from a low initial base. Specifically, whereas 5% of lower-secondary headteachers reported that physical injury caused by violence amongst pupils occurred on a monthly basis in 2013, this increased to 13% in 2018. Yet readers should remember that the TALIS sample size for lower-secondary headteachers in England was limited (around 150 headteachers in both 2013 and 2018) with many of the apparent increases just about reaching statistical significance. There is hence a reasonable degree of uncertainty surrounding these results and they should thus be interpreted with care.

Table 6.3.2. Occurrence of behavioural issues within England's schools. Change between 2013 and 2018.

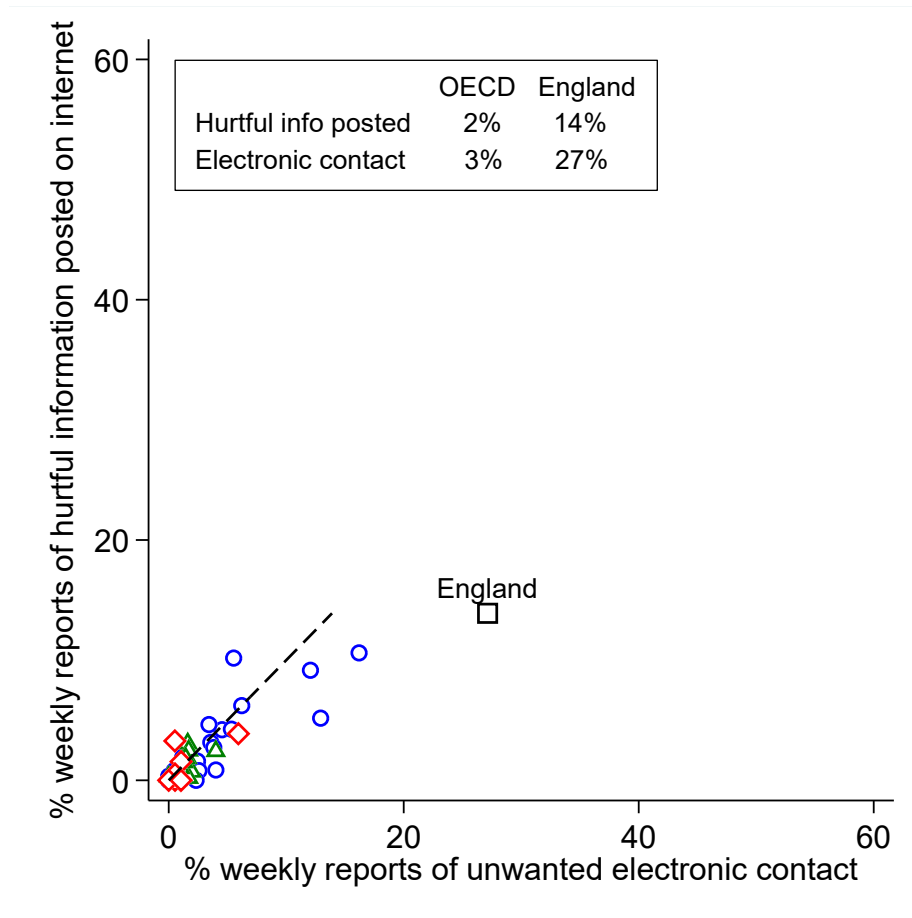
		1. Never / less than monthly	2. Monthly	3. Weekly /daily	Average
Vandalism and theft	2013	95%	3%	2%	1.07
	2018	83%	14%	3%	1.20
Intimidation or bullying among pupils	2013	73%	12%	14%	1.41
	2018	60%	20%	21%	1.61
Physical injury caused by violence among pupils	2013	94%	4%	1%	1.07
	2018	87%	10%	3%	1.15
Intimidation or verbal abuse of teachers or staff	2013	86%	8%	6%	1.19
	2018	84%	11%	5%	1.21
Use/possession of drugs and/or alcohol in school	2013	100%	0%	0%	1.00
	2018	98%	2%	0%	1.02

Note: The bottom two ('never' and 'less than monthly') and top two ('weekly' and 'daily') response options have been combined due to small sample sizes. The 'average' column treats the question as a 3-point ordinal variable, with a value of 1 assigned to the lowest category ('never/less than monthly') and 3 to the highest category ('weekly/daily'). The average (mean) has then been calculated along this 3-point scale. Source: TALIS 2013 (question 32) and 2018 (question 30) databases for England.

25. Lower-secondary headteachers in England were more likely to indicate that parents or pupils reported an incidence of hurtful information being posted on the internet than lower-secondary headteachers in other countries. This is illustrated

by Figure 6.3.1, with England a clear outlier. For instance, 14% of headteachers in England said that parents or pupils reported hurtful information on the internet about students at least weekly, compared to an OECD average of 2%. A similar result occurred for unwanted electronic contact, with England (27%) again above the OECD average (3%).

Figure 6.3.1. Cross-national comparisons of hurtful information posted online and unwanted electronic contact amongst pupils. Reported frequency by lower-secondary headteachers.



Notes: The dashed line illustrates the line of equality. This is where the percentage of headteachers who indicated parents/pupils reported unwanted electronic contact to occur at least weekly equals the percentage who indicated parents/pupils reported hurtful information posted online at least weekly. Red diamonds = high-performing countries, green triangles = low-performing countries, blue circles = countries with similar performance to England. Source: TALIS 2018 database; questions 30f and 30g.

26. If these results are taken at face value, then they potentially suggest that England faces a particular challenge with online bullying – more than in other countries. There are, however, important reasons why this finding should be interpreted with care. First, although differences between England and other countries are statistically significant, the sample sizes remain small. In particular, as this information was gathered within the headteacher questionnaire, the

sample size was typically around 150 observations per country. Second, rather than reflecting higher incidence, it might be that headteachers in England were simply more aware of the issue occurring. Indeed, online bullying has received a lot of media attention in England and this could have influenced how headteachers responded to the TALIS questions. Third, this information was based upon information provided by headteachers, rather than from pupils directly. Different results may have emerged had pupils or teachers been asked these questions rather than headteachers, whose knowledge and experience of the prevalence of this issue may differ.

27. Results for each of the separate questions asked about serious behavioural issues can be found in Table 6.3.3. This provides the figures for lower-secondary schools. Consistent with the findings from Figure 6.3.1, reports of bullying occurred slightly more frequently in England than in many other countries. For instance, 21% of headteachers reported this to occur weekly in England compared to 14% in the average OECD country, though this difference of around 7 percentage points does not quite reach statistical significance (meaning sampling variation remains one plausible explanation for this result). There was a clear difference with respect to the high-performing East Asian nations, where almost no headteacher reported bullying to be a frequent problem. This reflects a more general pattern within TALIS where East Asian headteachers were very unlikely to report any frequently occurring serious behavioural issues within their school. As previously noted, regular vandalism, verbal abuse, physical injury and use of illegal substances were rare in England's lower-secondary schools, as was the case in most other countries.

Table 6.3.3. Reported behavioural issues within lower-secondary schools (at least weekly). England compared to the OECD average and high-performing countries.

Country	Vandalism	Bullying	Physical injury	Verbal abuse	Drugs alcohol	Hurtful info posted online	Unwanted electronic contact
Finland	4%	29%	2%	5%	4%	0%	1%
England	3%	21%	3%	5%	0%	14%	27%
OECD 31	3%	14%	2%	3%	1%	2%	3%
Alberta	2%	13%	1%	0%	2%	4%	6%
Estonia	0%	12%	0%	8%	1%	2%	1%
Singapore	0%	4%	0%	0%	0%	3%	1%
Japan	1%	0%	0%	1%	0%	1%	1%
South Korea	2%	0%	0%	0%	0%	0%	0%
Chinese Taipei	0%	0%	0%	0%	0%	0%	1%
Shanghai	1%	0%	0%	0%	0%	0%	1%

Notes: Figures refer to percentage of headteachers who selected weekly or daily. Shading should be read vertically, with darker cells illustrating countries where headteachers reported the issue occurring more frequently than other countries included in the column. Source: TALIS 2018 database; question 30.

28. Responses provided by primary headteachers in England are available within the online data tables (see online Table OT_6_3_3_Primary). These reiterate how serious behavioural issues were rare in England's primary schools, with the figures reported by England's headteachers comparable to those provided by headteachers in most other participating countries.

Key points

- Primary and lower-secondary headteachers in England reported severe behavioural issues occurred only rarely in their school. However, parents or pupils reported postings of hurtful information on the Internet at least weekly to 14% of England's lower-secondary headteachers. This was above the figure for most other countries (the OECD average was 2%). However, this result could be due to cross-national differences in what constitutes hurtful information, differences in interpretation or differences in the awareness amongst headteachers of such issues.

6.4 How open were teachers in England to innovation and change?

29. A new question was added to the TALIS survey in 2018 to capture teachers' views as to whether their colleagues were open to change - see Table 6.4.1. Note that respondents were asked to respond in reference to their colleagues (i.e. 'most teachers in this school') rather than about themselves.
30. Teachers in England generally provided positive responses when asked about the willingness of colleagues to develop, apply and support new ideas. For instance, 82% of lower-secondary teachers in England agreed or strongly agreed that most colleagues within their school strived to develop new ideas for teaching and learning. The figure was slightly higher for primary teachers (88%), with a particularly notable difference between the percentage of primary and lower-secondary teachers who selected strongly agree. Similar findings also held for the other statements presented in Table 6.4.1, painting a reasonably positive picture of the development, support and use of innovative teaching approaches in England.

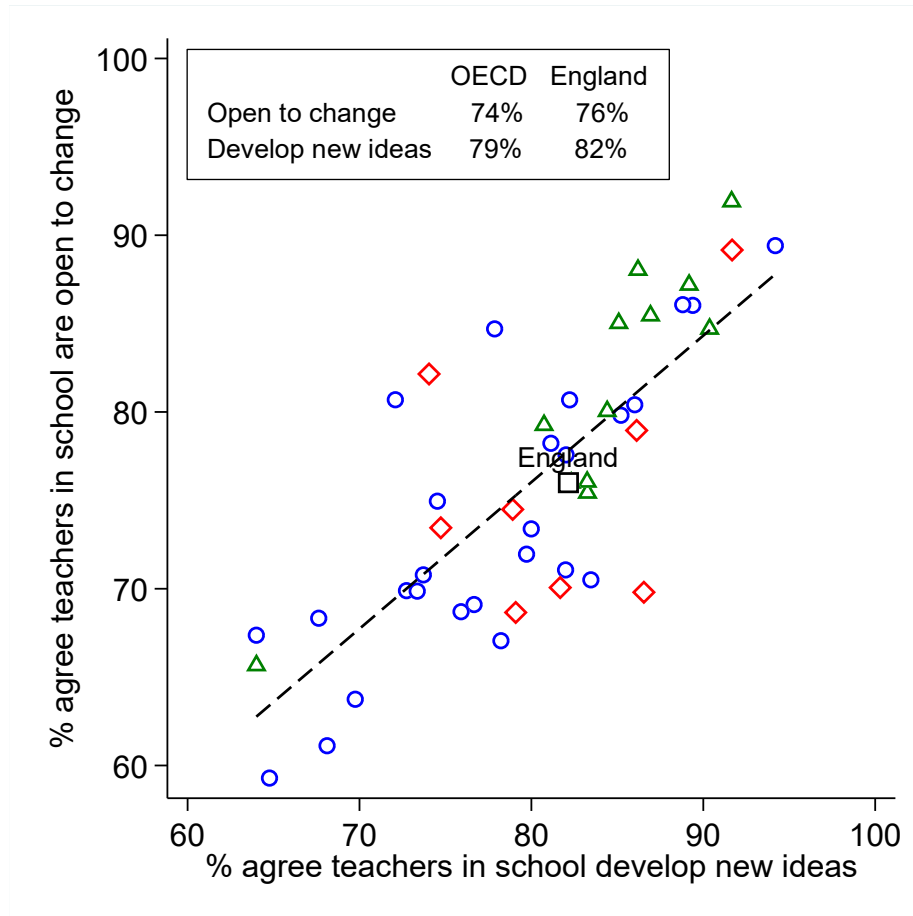
Table 6.4.1. Teachers' reports of whether their colleagues developed and applied new teaching approaches within their school. Results for England.

		1. Strongly disagree	2. Disagree	3. Agree	4. Strongly agree	Average
Most teachers in this school strive to develop new ideas for teaching and learning	Primary	2%	10%	57%	30%	3.15
	L. Secondary	2%	16%	66%	16%	2.96
Most teachers in this school are open to change	Primary	3%	13%	62%	22%	3.03
	L. Secondary	3%	21%	66%	10%	2.83
Most teachers in this school search for new ways to solve problems	Primary	3%	14%	61%	23%	3.03
	L. Secondary	2%	21%	67%	10%	2.84
Most teachers in this school provide practical support to each other for the application of new ideas	Primary	2%	8%	56%	34%	3.20
	L. Secondary	2%	13%	65%	19%	3.01

Notes: The 'average' column treats the question as a 4-point ordinal variable, with a value of 1 assigned to the lowest category ('strongly disagree') and 4 to the highest category ('strongly agree'). The average (mean) has then been calculated along this 4-point scale. Source: TALIS 2018 database; question 32.

31. There was little variation in responses to these questions by the background characteristics of teachers, as evidenced by the online data tables (see online Table OT_6_4a to OT_6_4d). One exception was the link between teaching experience and openness to change. Specifically, teachers with 10 years of experience or less were less likely to say that their colleagues were open to change than those with more than 20 years teaching experience. This held true within both primary and lower-secondary schools. For instance, around 70% of lower-secondary teachers with less than 10 years of experience agreed or strongly agreed that their colleagues were open to change, compared to 87% of those who had worked as a teacher for more than 20 years.
32. In terms of school characteristics, there was some variation by school Ofsted rating. Teachers who worked in schools rated as 'inadequate' or that 'required improvement' were less likely to say that their colleagues were open to change than their peers who worked in 'outstanding' schools. This could be observed, to some extent, across both primary and lower-secondary teachers. Variation by other school-level characteristics, such as FSM and academic achievement quartile, was less clear.
33. England was around the international average in terms of teachers' perceptions of how open their colleagues were to change. This is demonstrated in Figure 6.4.1, which compares the percentage of lower-secondary teachers who agreed or strongly agreed that teachers in their school strived to develop new ideas (horizontal axis) against the percentage who said that most teachers in the school were open to change (vertical axis). England sits in the middle of the graph and did not stand out from other countries in how teachers responded to these questions. This is further illustrated in the online data tables, with the percentage of lower-secondary teachers who agreed or strongly agreed with each statement close to the OECD average. For example, 82% of lower-secondary teachers in England said that their colleagues strived to develop new ideas, compared to an OECD average of 79%. See online Table OF_6_4_1_Secondary for further details.

Figure 6.4.1. International comparison of whether lower-secondary teachers felt their colleagues strived to develop new ideas or were open to change.



Notes: The dashed line illustrates the line of equality. This is where the percentage of teachers who agreed or strongly agreed that teachers within their school developed new ideas is equal to the percentage who agreed or strongly agreed that teachers in their school were open to change. Red diamonds = high-performing countries, green triangles = low-performing countries, blue circles = countries with similar performance to England. Source: TALIS 2018 database; questions 32a and 32b.

34. Results for primary teachers were similar; see online data Table OF_6_4_1_Primary. In particular, the percentage of primary teachers who agreed or strongly agreed with each statement was broadly comparable to most other participating countries.

Key points

- 84% of primary and 76% of lower-secondary teachers in England indicated that their colleagues were open to change. This was similar to figures in most other countries (the OECD average for lower-secondary teachers was 74%).

6.5 Did teachers feel that they could rely upon colleagues for support?

35. This section concludes by considering the extent to which teachers in England felt that they could rely upon one another. This was captured via the statement *‘teachers can rely on each other’* using a 4-point scale. Importantly, this question was asked of both teachers and headteachers, with results presented in Table 6.5.1.
36. Teachers in England overwhelmingly felt that they could rely upon their colleagues for support; 95% of primary and 92% of lower-secondary teachers either agreed or strongly agreed with this statement. Primary teachers were, however, more likely to strongly agree (51% of primary versus 33% of lower-secondary).
37. Headteachers in England also provided favourable responses; almost no primary or lower-secondary headteacher disagreed or strongly disagreed. However, it is notable how lower-secondary headteachers were more likely to strongly agree that teachers could ‘rely upon each other’ than teachers themselves (57% versus 33%).

Table 6.5.1. Could teachers rely upon each other for support? The views of teachers and headteachers in England.

		1. Strongly disagree	2. Disagree	3. Agree	4. Strongly agree	Average
Teacher	Primary	1%	4%	44%	51%	3.44
	L. Secondary	1%	7%	59%	33%	3.23
Headteacher	Primary	0%	0%	47%	53%	3.53
	L. Secondary	0%	0%	43%	57%	3.56

Notes: The ‘average’ column treats the question as a 4-point ordinal variable, with a value of 1 assigned to the lowest category (‘strongly disagree’) and 4 to the highest category (‘strongly agree’). The average (mean) has then been calculated along this 4-point scale. Source: TALIS 2018 database; question 49e (teacher) and 26k (headteacher).

38. The online data tables illustrate how there was little variation in how teachers in England responded to this question by their background characteristics (see online Table OT_6_5a). There was little evidence of substantial differences by gender, work-schedule or management responsibilities. On the other hand, there was some relationship with Ofsted grade; within both primary and lower-secondary schools, respondents were more likely to strongly agree that teachers could rely upon each other if they worked in school with a higher school inspection rating.

39. Compared to teachers working in other countries, those in England were slightly more likely to believe that they could rely upon colleagues for support. For lower-secondary schools, 92% of teachers agreed or strongly agreed with this statement, compared to an OECD average of 87% (Table 6.5.2). This difference was statistically significant. It is also notable how the estimate for each of the high-performing countries was above the OECD average. Results for primary teachers (see online data Table OT_6_5_2_Primary) were similar; England again compared favourably to other participating countries.

Table 6.5.2. Lower-secondary teachers' views of whether they could rely upon each other for support. England compared to the OECD average and high-performing countries.

Country	Teachers can rely on each other
Shanghai	96%
Alberta	93%
Estonia	92%
Singapore	92%
England	92%
Finland	90%
South Korea	89%
Chinese Taipei	88%
OECD 31	87%

Source: TALIS 2018 database; question 49e (teacher).

Key points

- In England, 95% of primary and 92% of lower-secondary teachers felt that teachers could rely upon each other for support. This was slightly higher than in many other countries; for example, the OECD average amongst lower-secondary teachers was 87%.

Chapter 7: Views on school resources

- If extra funding became available, reducing class sizes by recruiting more staff would be a high priority amongst most primary (65%) and lower-secondary (73%) teachers in England. Similarly, 64% of primary and 66% of lower-secondary teachers in England thought recruiting more support staff to reduce teachers' administration load should be a high priority.
- England was below the OECD average in terms of the percentage of lower-secondary teachers who rated increasing teacher pay (53% versus 64%) and increasing CPD spending (46% versus 55%) as high funding priorities. Further funding for support staff (66% in England versus an OECD average of 55%) and reduced class sizes (73% versus 65%) were higher priorities in England than in OECD countries, on average.
- A shortage of qualified teachers was reported to be a challenge by many lower-secondary headteachers in England; 38% felt this was limiting their school's capacity to provide effective instruction, which was high compared with the OECD average (21%).
- The situation in primary schools was more positive, with 12% of headteachers reporting that shortages were hindering instruction (TALIS average: 24%).
- A greater proportion of lower-secondary headteachers said that a lack of qualified teachers was hindering instruction 'a lot' in 2018 (22%) than in 2013 (6%). However, there was also a reduction in the proportion of lower-secondary headteachers saying that this had hindered instruction 'quite a bit' (from 37% in 2013 to 16% in 2018). This perhaps suggests that teacher shortages are becoming a more concentrated problem within certain schools (though the sample size in this analysis was small).
- Most headteachers in England did not believe that a lack of learning materials or digital/physical infrastructure was limiting their school's capacity to provide effective instruction. For instance, only 7% of primary and 13% of lower-secondary headteachers in England felt that they had inadequate access to instructional materials. These figures were similar to international averages.
- In 2013, 54% of lower-secondary headteachers in England said insufficient internet access was having at least some impact upon the quality of instruction provided by their school. This had fallen to 32% in 2018 and compared favourably to many other countries.

7.1 If the education budget increased, how would teachers spend the money?

1. A new question introduced in TALIS 2018 asked teachers the areas they would prioritise were extra funding to become available. Specifically, they were asked: *'Thinking about education as a whole, if the budget were to be increased by 5%, how would you rate the importance of the following spending priorities?'*

They were then asked to indicate whether they viewed 10 different areas as being of 'low', 'moderate' or 'high' importance. There are some challenges with interpreting cross-national results based upon this question, as countries were likely to be at different starting points, with some areas better funded in some countries than others. The responses provided can nevertheless provide new insight on spending priorities within nations. The results for England are detailed in Table 7.1.1.

Table 7.1.1. The funding priorities of teachers in England.

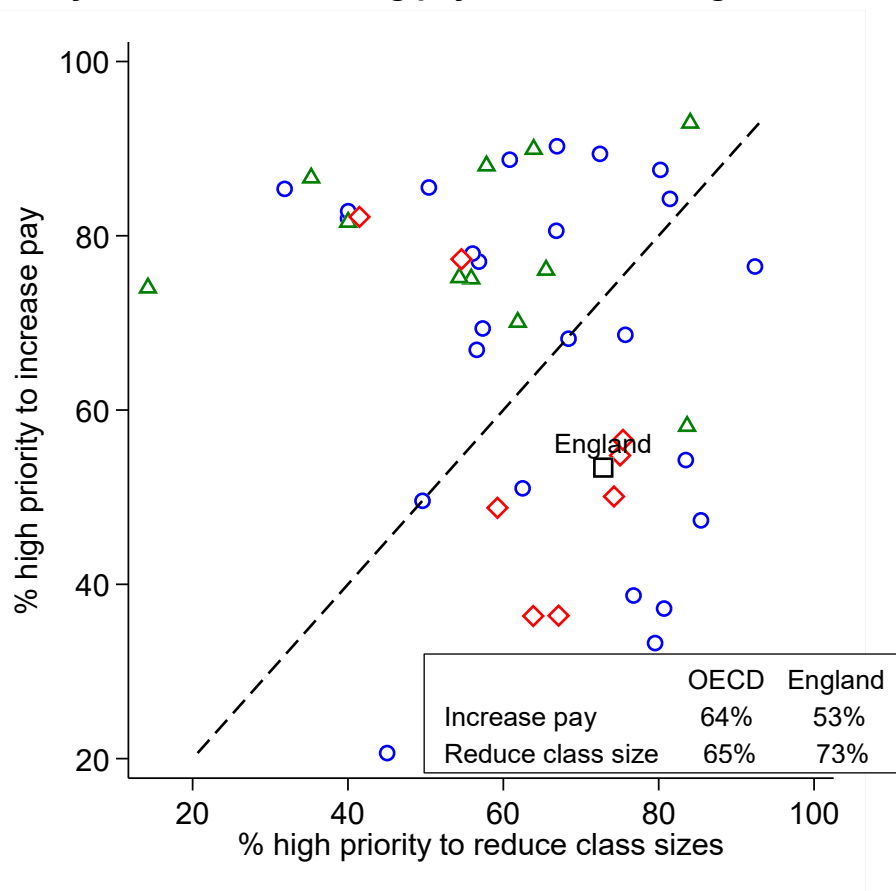
Primary	1. Low	2. Medium	3. High	Average
Reducing teachers' administration load by recruiting more support staff	7%	29%	64%	2.57
Reducing class sizes by recruiting more staff	9%	27%	65%	2.56
Supporting SEN pupils	3%	41%	56%	2.53
Improving teacher salaries	7%	37%	56%	2.49
Offering high quality CPD for teachers	5%	44%	51%	2.46
Supporting FSM pupils	6%	45%	49%	2.44
Improving school buildings and facilities	12%	47%	41%	2.29
Supporting EAL pupils	12%	56%	32%	2.20
Investing in ICT	17%	52%	31%	2.13
Investing in instructional materials	34%	50%	16%	1.82
Secondary	1. Low	2. Medium	3. High	Average
Reducing class sizes by recruiting more staff	5%	22%	73%	2.67
Reducing teachers' administration load by recruiting more support staff	7%	27%	66%	2.59
Improving teacher salaries	10%	37%	53%	2.43
Offering high quality CPD for teachers	8%	46%	46%	2.39
Supporting SEN pupils	6%	52%	42%	2.36
Supporting FSM pupils	9%	50%	41%	2.33
Improving school buildings and facilities	14%	44%	42%	2.28
Supporting EAL pupils	15%	58%	27%	2.12
Investing in instructional materials	24%	50%	26%	2.03
Investing in ICT	23%	51%	26%	2.02

Notes: The 'average' column treats the question as a 3-point ordinal variable, with a value of 1 assigned to the lowest category ('low priority') and 3 to the highest category ('high priority'). The average (mean) has then been calculated along this 3-point scale. Source: TALIS 2018 database; question 55.

2. Reducing the administrative burden by recruiting more support staff and reducing class sizes by recruiting more staff were high priorities for extra funding amongst primary and lower-secondary teachers in England. Around two-thirds of primary teachers said that both areas were of high-importance, with reducing class sizes highlighted as a priority amongst almost three-quarters of lower-secondary teachers.
3. Providing additional investment in ICT and instructional materials were typically considered lower priorities amongst primary and lower-secondary teachers, although the average teacher in England still felt that these areas were of 'moderate importance' (i.e. the average was still around 2 on this 3-point scale). Likewise, for both primary and lower-secondary teachers, improving school buildings/facilities and providing further support to EAL pupils were lower down their list of priorities.
4. More than 90% of teachers in England thought that improving teacher pay should be a moderate or high priority for additional funding. Indeed, 56% of primary and 53% of lower-secondary teachers said this was of high importance. This is consistent with the results presented in section 4.1, which suggested many teachers in England felt their profession was underpaid relative to other professionals.
5. Table 7.1.1 also illustrates the difficult task education policymakers in England face when allocating resources. For 5 of the 10 areas, more than half of primary teachers indicated it was a high priority for additional funding. Likewise, with the exception of investing in ICT and additional materials, very few areas were highlighted as of low importance. If the education budget were to increase by 5%, and education policymakers were to invest in all the areas rated by teachers as of high-importance, the extra resource would be spread rather thinly. These results help to illustrate the difficult trade-offs that must be made around education spending.
6. Figure 7.1.1 illustrates cross-national variation in how lower-secondary teachers responded. Specifically, the percentage of lower-secondary teachers who said reducing class sizes was a high funding priority (horizontal axis) is compared to the percentage who said increasing teacher pay was a high-priority (vertical axis). Several features stand out. First, there was not a strong correlation of responses across countries. Those countries where teachers said that increasing pay was a high priority were not the same as those where teachers said reducing class sizes was a high priority. Second, 6 of the 8 high-performing countries sit below the 45-degree line. In these countries, reducing class sizes was a higher priority amongst lower-secondary teachers than increasing pay (the exceptions were Estonia and Shanghai). Finally, cross-referencing with Table 7.1.2, England was slightly above the OECD average in terms of the percentage

of lower-secondary teachers who thought that reducing class sizes was a high priority, while below the OECD average for the proportion who would prioritise teacher pay. Regarding the latter, it is noteworthy how 53% of teachers in England felt that improving teacher salaries should be a high priority, compared to an OECD average of 64%. Consequently, although Chapter 4 suggested some teachers in England were dissatisfied with their pay, Figure 7.1.1 and Table 7.1.2 indicate how teachers felt there were other more pressing areas for funding were the education budget increased. It should be noted that this finding holds on average across teachers and could vary by subject³⁸.

Figure 7.1.1. Cross-national comparison of the spending priorities of lower-secondary teachers. Increasing pay versus reducing class sizes.



Notes: The dashed line illustrates the line of equality. This is where the percentage of teachers who reported reducing class sizes was a high priority is equal to the percentage who said increasing pay was a high priority. Red diamonds = high-performing countries, green triangles = low-performing countries, blue circles = countries with similar performance to England. Source: TALIS 2018 database; questions 55d and 55h.

³⁸ Although information on subject specialism was collected within TALIS, these results will be released alongside the second volume of the international results in 2020. It is hence not currently possible to consider differences in responses by subject.

7. In terms of other areas of potential investment, Table 7.1.2 panel (b) suggests that lower-secondary teachers in England were less likely to believe further funding for disadvantaged pupils should be a priority than teachers in most other OECD countries; 22% of lower-secondary teachers deemed this to be a high priority in England, compared to an OECD average of 33%. Interestingly, a similar finding emerged with respect to the high-performing countries which, with the exception of Singapore, were also below the OECD average for the percentage of teachers who would prioritise additional funding for disadvantaged pupils. The other areas where England was below the OECD average was investment in ICT and CPD. Lower-secondary teachers in England were around 10 percentage points less likely to say these areas were a high priority for additional spending than the average across OECD countries.
8. In contrast, reducing teachers' administration load by recruiting more support staff was a higher priority in England than elsewhere; whereas 66% of lower-secondary teachers in England said this was a high priority, the OECD average was 55%. It is important to note, however, that some of the cross-national variation in how teachers responded to this question could have been due to differences in interpretation. For instance, 'support staff' could have been interpreted by teachers in England as increasing the number of teaching assistants but may have had a different meaning elsewhere.
9. The international results for primary schools, presented in Table 7.1.2 panel (a), are notable for the comparatively few teachers in England who felt instructional material was a priority for additional spending. For every other country except South Korea (where the percentage was broadly the same as in England), the percentage of teachers who identified instructional material as a high priority area for additional resource was greater than in England. The difference was most notable between England and countries of lower levels of economic development (e.g. Vietnam), although there were also differences between England (where 16% rated instructional material as a high priority) and other developed European nations such as Sweden (23%), Spain (25%) and the Flemish region within Belgium (39%). For the other potential spending priorities, England did not particularly stand out from most other OECD countries that participated in the TALIS primary study.

Table 7.1.2. Priorities for additional spending compared across countries.

(a) Primary

Country	ICT	Instructional material	Dis-advantaged pupils	Class Sizes	Buildings	SEN pupils	CPD	Pay	Support Staff
UAE	57%	41%	51%	65%	53%	69%	68%	77%	67%
Buenos Aires	54%	51%	55%	64%	78%	74%	73%	88%	49%
Turkey	51%	55%	21%	64%	79%	62%	75%	75%	51%
Flemish Belgium	50%	39%	50%	87%	61%	78%	42%	34%	65%
Spain	48%	25%	52%	86%	42%	76%	70%	50%	64%
Vietnam	42%	49%	37%	36%	68%	45%	63%	88%	42%
England	31%	16%	27%	65%	41%	56%	51%	56%	64%
Chinese Taipei	28%	21%	21%	60%	43%	31%	50%	44%	64%
Sweden	26%	23%	40%	63%	41%	68%	44%	69%	60%
Japan	22%	20%	23%	80%	55%	53%	17%	54%	77%
South Korea	20%	18%	23%	76%	44%	18%	49%	59%	74%
Denmark	17%	20%	29%	52%	20%	55%	43%	18%	19%

(b) Lower-secondary

Country	ICT	Instructional material	Dis-advantaged pupils	Class Sizes	Buildings	SEN pupils	CPD	Pay	Support Staff
Estonia	36%	43%	24%	55%	50%	55%	66%	77%	58%
OECD 31	35%	31%	33%	65%	49%	47%	55%	64%	55%
Singapore	30%	16%	35%	74%	36%	43%	46%	50%	69%
Chinese Taipei	29%	19%	23%	59%	44%	28%	48%	49%	58%
England	26%	26%	22%	73%	42%	42%	46%	53%	66%
Shanghai	23%	23%	17%	41%	30%	25%	59%	82%	38%
South Korea	23%	22%	20%	75%	43%	14%	45%	57%	74%
Japan	23%	15%	20%	75%	53%	38%	19%	55%	69%
Alberta	22%	17%	24%	64%	36%	42%	30%	36%	36%
Finland	13%	27%	23%	67%	51%	36%	33%	36%	32%

Note: Green shading should be read vertically, with higher values indicating a greater percentage of teachers stating the area to be a high priority compared to other countries in the column. Source: TALIS 2018 database; question 55. Results for disadvantaged pupils for England differ between Table 7.1.1 and Table 7.1.2 due to different coding of the question for national and international comparisons.

10. The online data tables illustrate how teachers' views of funding priorities varied by school and teacher characteristics. These can be found in online Tables OT_7_1_Primary and OT_7_1_Secondary. Some of the key findings from these tables are detailed below.
11. Within England, female teachers rated more areas as a high-priority for additional funding than men. For instance, in both primary and lower-secondary schools, women were more likely than men to report additional support staff, reducing class sizes and extra CPD as high priorities for further funding. Women were also more likely to place a high priority upon extra funding for SEN, EAL and FSM pupils. For instance, just 30% of male lower-secondary teachers identified additional funding for SEN as a high priority, compared to 49% of women. By contrast, there were small or no gender gaps for extra investment in ICT, school facilities and teacher pay.
12. There was relatively little difference in the spending priorities of full and part-time teachers. Perhaps the most notable difference was with respect to pay; 56% of full-time lower-secondary teachers in England said pay was a high priority for additional funding compared to 46% of part-time teachers.
13. There was a notable difference in responses depending upon the proportion of disadvantaged (FSM eligible) pupils within teachers' schools. Specifically, 18% of primary teachers in low FSM (bottom quartile) schools suggested that additional funding for FSM pupils should be a high priority for additional funding, compared to 39% within high FSM (top quartile) schools. Similar differences also emerged with respect to the priority of EAL and SEN pupils for additional funding. This provides some suggestion that teachers' responses to this question were influenced by the context of the school in which they worked.

Key points

- If extra funding were to become available, reducing class sizes by recruiting more staff would be a high priority amongst most primary (65%) and lower-secondary (73%) teachers in England. Similarly, 64% of primary teachers and 66% of lower-secondary teachers in England felt that recruiting more support staff to reduce teachers' administration load was a high priority.

7.2 To what extent did headteachers believe that staff shortages were limiting their school's capacity to provide quality instruction?

14. The following sections investigate the factors that headteachers felt were a barrier to instruction within their school. Specifically, headteachers were asked: *To what extent is this school's capacity to provide quality instruction currently hindered by any of the following issues?* Table 7.2.1 focuses upon how they responded to 6 statements about staff shortages.
15. Most of the issues around staffing covered in Table 7.2.1 were only a pressing concern for a minority of headteachers in England. For instance, around 10% of primary and 8% of lower-secondary headteachers flagged a shortage of teachers capable of teaching multilingual/multicultural pupils as a particular challenge. The figures were slightly higher with respect to a shortage of SEN teachers, particularly within lower-secondary schools, where the figure reached 23%. Less than a fifth of headteachers said shortages of vocational teachers and support staff had hindered instruction quite a bit or a lot, though with relatively few selecting the top category.
16. A shortage of qualified teachers was a particular problem faced by lower-secondary schools. Almost a quarter of lower-secondary headteachers (22%) said that this had hindered their school's capacity to provide quality instruction 'a lot', with a further 16% selecting the second highest category ('quite a bit'). Primary headteachers in England were less likely to express similar concerns; only 11% indicated that a shortage of qualified teachers had limited the quality of their school's instruction either 'quite a bit' or 'a lot'.

Table 7.2.1. Did headteachers believe staff shortages were hindering instruction within their school? Results for England.

		1. Not at all	2. To some extent	3. Quite a bit	4. A lot	Averag e
Shortage of qualified teachers	Primary	57%	31%	5%	6%	1.60
	L. Secondary	16%	46%	16%	22%	2.43
Shortage of teachers with competence in teaching pupils with SEN	Primary	44%	46%	8%	2%	1.68
	L. Secondary	34%	43%	16%	7%	1.97
Shortage of vocational teachers	Primary	72%	22%	4%	2%	1.35
	L. Secondary	58%	25%	11%	6%	1.66
Shortage of support personnel	Primary	34%	45%	14%	7%	1.95
	L. Secondary	39%	46%	11%	3%	1.79
Shortage of teachers with competence in teaching pupils in a multicultural or multilingual setting	Primary	54%	37%	9%	1%	1.57
	L. Secondary	65%	28%	5%	3%	1.46
Shortage of teachers with competence in teaching pupils from socio-economically disadvantaged homes	Primary	61%	32%	3%	3%	1.49
	L. Secondary	54%	35%	8%	3%	1.60

Notes: The 'average' column treats the question as a 4-point ordinal variable, with a value of 1 assigned to the lowest category ('not at all') and 4 to the highest category ('a lot'). The average (mean) has then been calculated along this 4-point scale. Source: TALIS 2018 database; question 29 (headteacher questionnaire).

17. Between 2013 and 2018, there was relatively little change in the overall percentage of headteachers who reported staff shortages affecting instruction in England's lower-secondary schools. For instance, similar proportions of headteachers reported a shortage of support personal and vocational teachers over this 5 year period (see Table 7.2.2). The pattern was somewhat more mixed with respect to shortages of qualified teachers. More headteachers said that this had hindered instruction 'a lot' in 2018 (22%) than in 2013 (6%). This, however, was somewhat offset by a sizable reduction in the proportion of lower-secondary headteachers who said shortages of qualified teachers had hindered instruction 'quite a bit' (from 37% in 2013 to 16% in 2018). A possible interpretation of this result is that the challenge of recruiting and retaining high-quality teachers may have become more concentrated (and therefore acute) within particular schools.

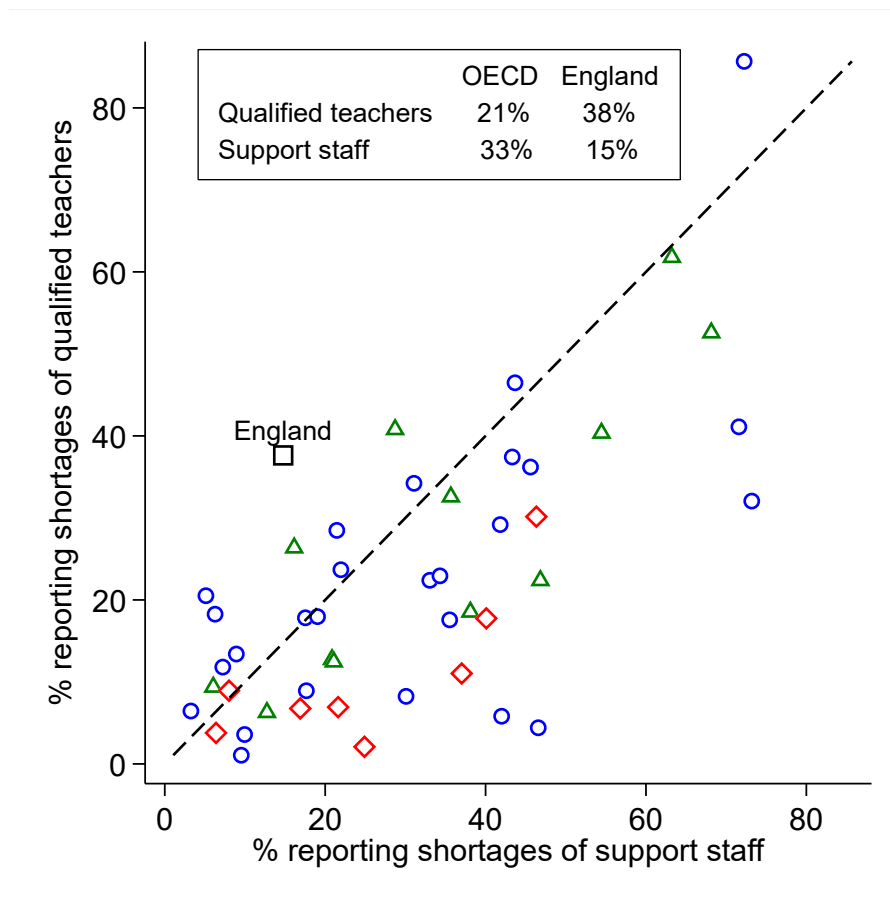
Table 7.2.2. Change in whether lower-secondary headteachers felt staff shortages were hindering instruction within their school. Results for England.

		1. Not at all	2. To some extent	3. Quite a bit	4. A lot	Average
Shortage of qualified teachers	2013	18%	39%	37%	6%	2.32
	2018	16%	46%	16%	22%	2.43
Shortage of teachers with competence in teaching pupils with SEN	2013	23%	52%	22%	3%	2.06
	2018	34%	43%	16%	7%	1.97
Shortage of vocational teachers	2013	49%	37%	14%	0%	1.67
	2018	58%	25%	11%	6%	1.66
Shortage of support personnel	2013	36%	43%	21%	0%	1.85
	2018	39%	46%	11%	3%	1.79

Notes: The 'average' column treats the question as a 4-point ordinal variable, with a value of 1 assigned to the lowest category ('not at all') and 4 to the highest category ('a lot'). The average (mean) has then been calculated along this 4-point scale. Source: TALIS 2013 (headteacher question 31) and 2018 (headteacher question 29) databases for England.

18. Figure 7.2.1 compares a selection of results across countries for lower-secondary headteachers. It compares the percentage of lower-secondary headteachers who reported that a shortage of qualified teachers had affected instruction (vertical axis) to the percentage who reported a lack of support staff had affected instruction (horizontal axis) 'quite a lot' and 'a bit'. The dashed line illustrates where these proportions are equal. England is somewhat of an outlier on this graph, sitting quite some distance above the dashed 45-degree line. This illustrates how England had a comparatively large proportion of headteachers who were concerned about teacher shortages, while the opposite was true with respect to support staff. This is further emphasised by Table 7.2.3, which compares England to the OECD average and the high-performing countries. In total, 38% of lower-secondary headteachers in England said shortages of qualified teachers hindered school instruction 'quite a bit' or 'a lot', compared to an OECD average of 21%. Moreover, with the exception of Japan, lower-secondary headteachers in the high-performing countries were less likely to report shortages of qualified teachers as a problem than England. In contrast, only 15% of lower-secondary headteachers in England raised a lack of suitably qualified support staff as an issue hindering school instruction, which was below the OECD average (33%).

Figure 7.2.1. International comparison of whether staff shortages had hindered school instruction. Lower-secondary headteachers.



Notes: The dashed line illustrates the line of equality. This is where the percentage of headteachers who reported shortages of support staff was hindering instruction equals the percentage who reported shortages of qualified teachers was hindering instruction. Red diamonds = high-performing countries, green triangles = low-performing countries, blue circles = countries with similar performance to England. Source: TALIS 2018 database; headteacher questionnaire questions 29a and 29h.

19. Table 7.2.3 also illustrates how lower-secondary headteachers in England were generally less concerned about shortages of teachers who were capable of teaching in multicultural/multilingual settings. Just 7% of lower-secondary headteachers raised this issue in England, compared to an OECD average of 20%. Similarly, only 11% of lower-secondary headteachers in England said a lack of teachers who were capable of teaching disadvantaged pupils was a concern, compared to an average of 17% across the OECD. These percentages were also similar or below the percentage of lower-secondary headteachers who were concerned about these issues in high-performing countries. Hence it seems that the key concern of lower-secondary headteachers in England was the overall supply of qualified teachers, rather than the ability of their teachers to teach pupils from disadvantaged or migrant backgrounds.

Table 7.2.3. International comparison of whether staff shortages had hindered instruction in lower-secondary schools. England compared to high-performing countries and the OECD average.

Country	Qualified teachers	Vocational teachers	Support staff	Teachers who can teach in multicultural settings	Teachers who can teach disadvantaged pupils
England	38%	17%	15%	7%	11%
Japan	30%	18%	46%	16%	18%
OECD 31	21%	16%	33%	20%	17%
Estonia	18%	4%	40%	14%	15%
South Korea	11%	29%	37%	26%	21%
Shanghai	9%	17%	8%	35%	14%
Chinese Taipei	7%	21%	22%	25%	14%
Alberta	7%	9%	17%	6%	6%
Singapore	4%	7%	6%	4%	4%
Finland	2%	1%	25%	5%	5%

Notes: Shading should be read vertically, with darker cells illustrating where a greater proportion of headteachers reported the factor to hinder instruction (selecting either 'quite a bit' or 'a lot') than for other countries within the column. Source: TALIS 2018 database; headteacher questionnaire question 29.

20. Compared to other countries, the responses of primary headteachers in England with respect to the questions about staff shortages were quite favourable (Table 7.2.4). In England, 12% of primary headteachers said a lack of qualified teachers had hindered instruction, compared to 21% in France, 27% in Denmark and 29% in the Flemish part of Belgium. In a similar manner, primary headteachers in England were less likely to report shortages of support staff, teachers with competence in multilingual settings and teachers who were competent teaching disadvantaged pupils as a barrier to effective instruction than headteachers in many of the other participating countries. For instance, 21% of primary headteachers in England reported shortages of support staff as an issue, compared to more than 40% in some OECD countries such as Japan, Spain, France and Denmark.

Table 7.2.4. International comparison of whether staff shortages had hindered instruction in primary schools. England compared to other participating countries.

Country	Qualified teachers	Vocational teachers	Support staff	Teachers who can teach in multicultural settings	Teachers who can teach disadvantaged pupils
Vietnam	79%	27%	75%	43%	40%
UAE	39%	29%	27%	30%	27%
Flemish Belgium	29%	12%	76%	25%	24%
Denmark	27%	30%	43%	18%	21%
France	21%	8%	57%	49%	48%
Buenos Aires	20%	12%	39%	12%	6%
Turkey	20%	30%	39%	20%	16%
Japan	19%	10%	56%	18%	15%
Spain	14%	-	53%	29%	14%
Sweden	14%	-	13%	17%	10%
England	12%	6%	21%	10%	7%
Korea	11%	29%	34%	30%	18%
Chinese Taipei	6%	21%	15%	26%	9%

Notes: Shading should be read vertically, with darker cells illustrating where a greater proportion of headteachers reported the factor to hinder instruction (selecting either 'quite a bit' or 'a lot') than for other countries within the column. Data for vocational teachers not available in Spain and Sweden. Source: TALIS 2018 database; headteacher questionnaire question 29.

Key points

- 38% of lower-secondary headteachers in England said a shortage of qualified teachers had hindered instruction within their school 'quite a bit' or 'a lot'. This was above the OECD average (21%). The percentage of primary headteachers in England who reported a shortage of qualified teachers as a problem was lower (12%), and less compared to other participating countries.

7.3 Did headteachers in England believe that a shortage of instructional materials was limiting their school’s capacity to provide quality instruction?

21. Whilst the previous sub-section focused upon shortages in human resources, this section turns to shortages of teaching and learning materials. Results are presented in Table 7.3.1.
22. Most primary and lower-secondary headteachers in England did not believe that a lack of instructional material was hindering instruction within their school; for most issues listed in Table 7.3.1, 20% or less selected either ‘quite a bit’ or ‘a lot’. Out of the 7 areas covered, sufficient access to digital technology was one of the biggest areas of concern. In total, 23% of primary and 15% of lower-secondary headteachers reported that this had ‘quite a bit’ or ‘a lot’ of impact upon the instruction provided by their school. Shortages of adequate instructional space was also reported to be hindering instruction ‘quite a bit’ or ‘a lot’ by 27% of primary headteachers in England.

Table 7.3.1. Did a lack of physical learning resources hinder school instruction? The views of headteachers in England.

		1. Not at all	2. To some extent	3. Quite a bit	4. A lot	Average
Shortage or inadequacy of instructional materials	Primary	63%	30%	5%	2%	1.45
	L Secondary	56%	30%	10%	3%	1.60
Shortage or inadequacy of digital technology for instruction	Primary	38%	38%	16%	7%	1.93
	L Secondary	43%	42%	8%	7%	1.78
Insufficient Internet access	Primary	52%	32%	13%	3%	1.68
	L Secondary	68%	24%	3%	5%	1.46
Shortage or inadequacy of library materials	Primary	52%	36%	12%	0%	1.60
	L Secondary	60%	29%	8%	3%	1.53
Shortage or inadequacy of instructional space	Primary	34%	39%	17%	11%	2.04
	L Secondary	48%	36%	13%	4%	1.72
Shortage or inadequacy of physical infrastructure	Primary	42%	40%	13%	5%	1.81
	L Secondary	45%	35%	14%	6%	1.81
Shortage or inadequacy of necessary materials to train vocational skills	Primary	75%	20%	4%	0%	1.29
	L Secondary	59%	29%	6%	7%	1.60

Notes: The ‘average’ column treats the question as a 4-point ordinal variable, with a value of 1 assigned to the lowest category (‘not at all’) and 4 to the highest category (‘a lot’). The average (mean) has then been calculated along this 4-point scale. Source: TALIS 2018 database; headteacher questionnaire question 29.

23. Lower-secondary headteachers in England were less concerned about shortages of certain learning resources in 2018 than in 2013 (Table 7.3.2). For instance, 54% of lower-secondary headteachers in England said that insufficient internet access had hindered instruction at least to some extent in 2013, compared to 32% in TALIS 2018. Similarly, 60% of lower-secondary headteachers in England said that shortages/inadequacy of library materials was not a problem at all in 2018, up from 42% in 2013. On the other hand, the proportion of lower-secondary headteachers who thought that they had a shortage or inadequacy of instructional material remained broadly stable over this period.

Table 7.3.2. The views of lower-secondary headteachers in England as to whether shortages of physical learning resources had hindered school instruction. Change between 2013 and 2018.

		1. Not at all	2. To some extent	3. Quite a bit	4. A lot	Average
Shortage or inadequacy of instructional materials	2013	52%	34%	14%	0%	1.62
	2018	56%	30%	10%	3%	1.60
Insufficient Internet access	2013	46%	36%	13%	4%	1.76
	2018	68%	24%	3%	5%	1.46
Shortage or inadequacy of library materials	2013	42%	40%	19%	0%	1.77
	2018	60%	29%	8%	3%	1.53

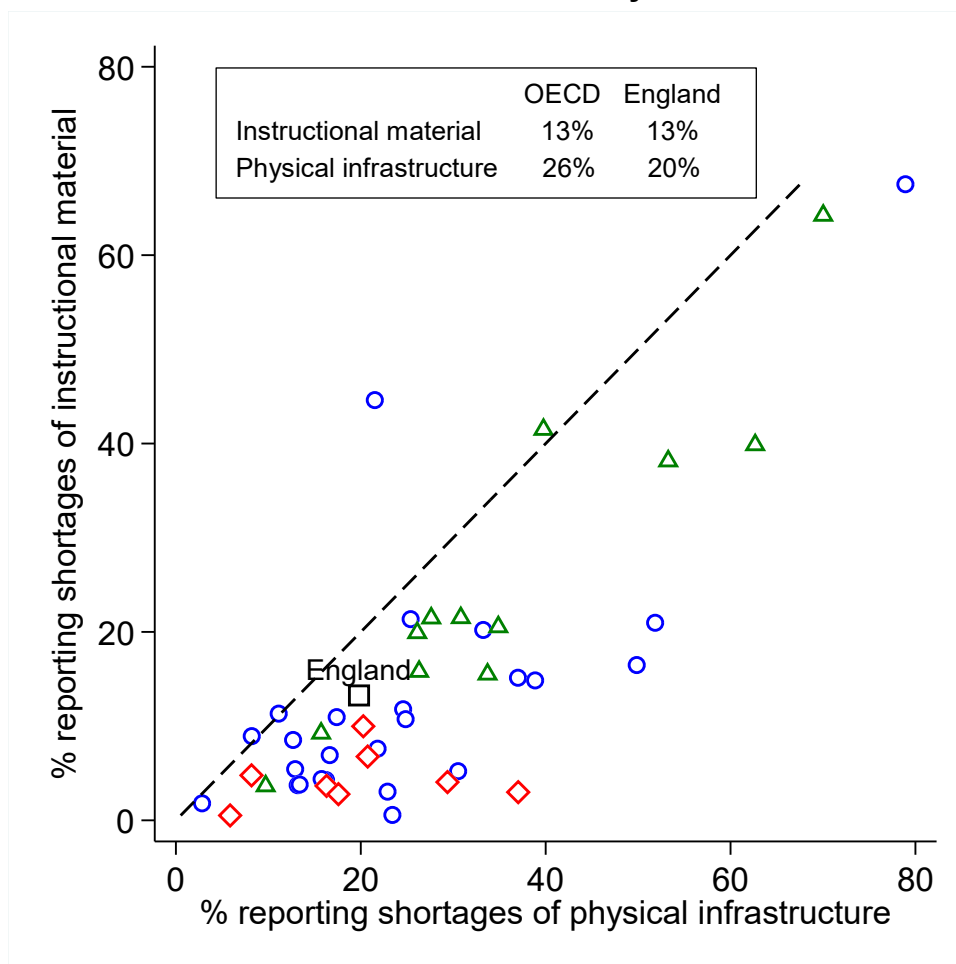
Notes: The 'average' column treats the question as a 4-point ordinal variable, with a value of 1 assigned to the lowest category ('not at all') and 4 to the highest category ('a lot'). The average (mean) has then been calculated along this 4-point scale. Source: TALIS 2013 (headteacher question 31) and 2018 (headteacher question 29) databases for England.

24. Compared to other countries, lower-secondary headteachers in England were reasonably satisfied with their access to physical learning resources. Figure 7.3.1 illustrates this with respect to the proportion of headteachers who reported a lack of physical infrastructure (horizontal axis) and a lack of instructional material (vertical axis). England is bunched with most other countries in the bottom-left corner of this plot; neither issue stood out as a particular concern amongst lower-secondary headteachers in England (compared to other countries). This is further supported by Table 7.3.3; England was level with or below the OECD average for each question. Overall, lower-secondary headteachers in England were more satisfied with their access to physical learning resources than they were with the available human resources (particularly the supply of adequately qualified teachers).

25. The online data tables (online Table OT_7_3_3_Primary) illustrate how similar results held within primary schools. In general, primary headteachers in England

were reasonably positive about the access they had to physical learning resources compared to headteachers in other countries.

Figure 7.3.1. Cross-country comparison of shortages of physical learning resources. Lower-secondary results.



Notes: The dashed line illustrates the line of equality. This is where the percentage of headteachers who reported inadequate physical infrastructure was hindering instruction equals the percentage who reported shortages of instructional material was hindering instruction. Figures refer to the percentage of headteachers who said that inadequate physical infrastructure / instructional materials hindered instruction 'quite a bit' or 'a lot'. Red diamonds = high-performing countries, green triangles = low-performing countries, blue circles = countries with similar performance to England. Source: TALIS 2018 database; headteacher questionnaire questions 29d and 29j.

Table 7.3.3. Cross-national comparison of whether shortages of physical learning resources had hindered school instruction. Lower-secondary results comparing England to high-performing countries and the OECD average.

Country	Instructional materials	Digital technology	Internet access	Library materials	Space	Physical infrastructure	Vocational materials
Japan	3%	34%	27%	19%	31%	37%	16%
Alberta	4%	12%	19%	5%	31%	29%	9%
OECD 31	13%	25%	19%	16%	25%	26%	18%
Estonia	7%	12%	17%	5%	24%	21%	7%
South Korea	10%	24%	15%	22%	29%	20%	33%
England	13%	15%	8%	11%	16%	20%	12%
Shanghai	3%	10%	7%	4%	21%	18%	18%
Finland	4%	20%	4%	9%	20%	16%	1%
Chinese Taipei	5%	12%	3%	5%	12%	8%	18%
Singapore	1%	2%	2%	2%	8%	6%	4%

Notes: Shading should be read vertically, with darker cells illustrating where a greater proportion of headteachers reported the factor to hinder instruction (selecting either 'quite a bit' or 'a lot') than in other countries included in the column. Source: TALIS 2018 database; headteacher questionnaire question 29.

Key points

- Most headteachers in England did not believe that a lack of learning materials and digital/physical infrastructure was limiting their school's capacity to provide effective instruction. For instance, only 7% of primary and 13% of lower-secondary headteachers in England felt that they had inadequate access to instructional materials and that this was having a negative impact upon instruction.
- In 2013, 54% of lower-secondary headteachers in England said insufficient internet access was having at least some impact upon the quality of instruction provided by their school. This had fallen to 32% in 2018 and compared favourably to many other countries.

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Appendix A: Sampling and response rates

Sample design

1. The TALIS survey for England was conducted between March and May 2018 and this was common for all other participating countries in the Northern Hemisphere. Countries in the Southern Hemisphere conducted their surveys between October and December 2017. In England, the survey was conducted online by all participating schools and teachers. In contrast, some countries used paper as well as online questionnaires.
2. TALIS in England, as in other countries, had a multi-stage sample design. First, the school sample for England was stratified by type of school (state or independent), size (small/not small) and region (North, Midlands, Greater London, and South). A total of 10 explicit strata were formed from combinations of these variables.
3. Schools were then selected with probability proportional to size³⁹ within these strata, with a target sample of 200 primary schools and 200 lower-secondary schools. For each of these schools, a '1st replacement' and '2nd replacement' was also selected⁴⁰. These acted as substitutes, that could have taken the place of an originally sampled school if that school refused or were unable to take part.
4. Finally, a random sample of 20 teachers was selected from within each school. If there were less than 20 eligible teachers within a school, all teachers were sampled. A small number of primary (24) and lower-secondary (12) teachers were excluded after sampling due to being out-of-scope. Teachers were considered out-of-scope after sampling if they had been included by the school as being in scope prior to sampling. These were often teachers that didn't teach either key stage 1 or 2 and only taught early years or teachers that only taught key stage 4 and not key stage 3.

School response rates

5. If a TALIS 2018 country achieves a school response rate of at least 75% after use of replacements, then its data is included in the OECD's international analyses. The final row of the online tables OT_A1_Primary and

³⁹ Size was measured by the number of teachers in the school indicated in the School Workforce Census and, for independent schools, the School Level Annual School Census.

⁴⁰ These were the schools immediately before and after the originally sampled school within each stratum.

OT_A1_Secondary illustrate how England met this threshold for both the primary and lower-secondary school samples.

6. Online table OT_A1_Primary also shows primary school response rates by stratum. In total, 152 primary schools responded to the TALIS survey. This represents an unweighted school response rate of 80% (the weighted response rate was slightly higher, standing at 86%⁴¹).
7. There are two points that need to be made about the definition of response underlying this calculation. First, if a school agreed to take part in the survey but less than half of the teachers within the school responded, TALIS rules required this school to be treated as 'not participating' in the teacher sample⁴². Second, the calculations ignore schools that did not respond but were subsequently replaced by a 1st or 2nd replacement school.
8. The figures in online Table OT_A1_Primary also show that primary school response rates varied by stratum. Response rates were lower amongst independent schools (explicit strata 1 to 5) than amongst state schools (explicit strata 6 to 10). Only around 30% of originally sampled independent primary schools were willing and able to participate, with this increasing to 48% once replacement schools were added. The results for independent primary schools in England should therefore be interpreted with caution.
9. Overall, response rates amongst state primary schools (strata 6 to 10) were high. A total of 71% of initially sampled state schools participated in the survey. This increases to 83% once first and second replacement schools were added (unweighted figures).
10. Equivalent figures for the lower-secondary school sample are provided in online Table OT_A2_Secondary. The final unweighted lower-secondary school response rate was 77% (82% when the weights are applied).
11. For independent lower-secondary schools, only around a quarter (26%) of those initially selected took part, increasing to 41% once replacement schools were included. Such response rates are not particularly high, which again means caution should be taken in the interpretation of results for independent lower-secondary schools. The situation was better for state lower-secondary schools in

⁴¹ The weighting takes into account the stratification variables and the size of the school, to account for their different probabilities of selection into the TALIS sample.

⁴² If the headteacher responds but less than 50% of teachers within their school respond to the survey, the headteacher continues to be deemed as participating and thus included within the TALIS headteacher sample. If more than 50% of teachers within a school completed the survey, but the headteacher did not, then only the teachers are counted as participating (and not the school head).

England, where 78% of those initially sampled agreed to participate, increasing to 86% when replacements were added.

12. It is worth noting that independent schools were also less likely to respond than state schools in the TALIS 2013 survey, though the difference was not quite as pronounced. A total of 8 of the 17 independent schools initially sampled in TALIS 2013 responded, with a further 2 replacements also taking part. Hence the official participation rate of independent schools in England in TALIS 2013 was 59% (after replacements had been taken into account)⁴³.
13. To confirm the representativeness of the TALIS 2018 sample for state schools, Tables A1 (primary) and A2 (secondary) compare the characteristics of (a) the sample of state schools initially selected and (b) the sample of state schools that actually participated in the TALIS study. If the achieved TALIS state school sample for England is indeed unbiased, these quantities should be similar across a range of school-level characteristics. Tables A1 and A2 confirm that this is the case for school-level measures of academic achievement (key stage 2 score for primary and attainment/progress 8 scores for lower-secondary), pupil-teacher ratios, pupil absence, average teacher pay, the proportion of pupils eligible for FSM, school type and most recent Ofsted grade. The TALIS 2018 sample of state schools in England therefore does seem to be representative of the wider state school population⁴⁴.

⁴³ See Micklewright et al (2014: Table A1) for further details.

⁴⁴ These comparisons rely upon school-level administrative data made publicly available by the DfE. Independent schools are not included in this investigation due to the lack of comparable administrative data.

Table A1. Characteristics of the drawn and achieved state primary school sample

	Sampled + open		Participating	
	n	Mean	n	Mean
Key stage 2 scores	143	104.3	124	104.3
Pupil teacher ratio	151	20.2	132	20.3
Pupil absence %	144	9	123	8
Teacher pay (£)	146	37552	129	37571
School FSM %	151	23	130	23
	n	%	n	%
Ofsted grade				
Outstanding	30	19%	26	20%
Good	101	66%	89	67%
Requires improvement	21	14%	16	12%
Inadequate	2	1%	2	2%
School type				
Academy converter	23	15%	22	17%
Community school	80	52%	70	53%
Other	8	5%	9	7%
Sponsored academy	7	5%	5	4%
Voluntary	36	23%	27	20%

Table A2. Characteristics of the drawn and achieved state lower-secondary sample

	Sampled + open		Participating	
	n	Average	n	Average
Attainment 8 scores	148	46.8	124	47.4
Progress 8 scores	147	0.00	124	0.03
Pupil teacher ratio	154	15.7	131	15.8
Pupil absence %	157	14.1	132	13.7
Teacher pay	152	39,492	129	39,380
School FSM %	157	29	132	28
	n	%	n	%
Ofsted grade				
Outstanding	41	26%	32	24%
Good	76	49%	69	53%
Requires improvement	25	16%	22	17%
Inadequate	13	8%	8	6%
School type				
Academy converter	70	44%	64	48%
Community school	26	16%	23	17%
Other	13	8%	14	11%
Sponsored academy	32	20%	19	14%
Voluntary	19	12%	12	9%

Notes: Unweighted data. Analysis at the school level. Independent schools have been excluded. Number of observations does not equal the state school total due to instances of missing or suppressed data. Number participating may be greater than the number originally sampled due to the inclusion of 'replacement schools'.

Teacher response rates

14. The teacher response rate in TALIS was defined as the percentage of all teachers in responding schools – that is, excluding the schools where teacher response fell below 50% – who responded to the survey.
15. A total of 2,423 primary teachers were sampled from responding schools to take part in the study. Of these, 24 primary teachers were out-of-scope, 32 should have been exempted from the survey, while 24 had left the school permanently. Of the remainder, 2,009 participated in the survey while 334 did not return the questionnaire. This resulted in an unweighted teacher response rate of 86% (85% once weights were applied).
16. This was above the minimum teacher response rate required for a country to be automatically included by the OECD in its analyses of the TALIS data.
17. A total of 2,960 lower-secondary teachers were sampled from responding schools to take part in the study. Of these, 12 lower-secondary teachers were out-of-scope, 52 should have been exempted from the survey, while 36 had left the school permanently. Of the remainder, 2,376 participated in the survey while 484 did not return the questionnaire. This resulted in an unweighted teacher response rate of 83% (84% once weights were applied). This was above the minimum teacher response rate required for a country to be automatically included by the OECD in its analyses of the TALIS data.

Headteacher response rates

18. Of the 200 primary schools initially sampled, 190 were eligible to participate in TALIS 2018. Headteachers from 161 of these primary schools returned the questionnaire, giving a final unweighted response rate of 85% (and a weighted response rate of 90%).
19. Of the 200 lower-secondary schools initially sampled, 192 were eligible to participate in TALIS 2018. Headteachers from 157 of these primary schools returned the questionnaire, giving a final unweighted response rate of 82%. The weighted response rate was the same (82%).

Appendix B: High-performing and low-performing countries

1. 'High-performing' and 'low-performing' countries in TALIS were identified on the basis of average (mean) PISA 2015 scores for their 15-year-olds and TIMSS and PIRLS for their 10-year-olds⁴⁵. Scores for relevant 'sub-national entities' – parts of countries – were used where appropriate.

Lower-secondary schools

2. Low-performers were defined as those countries that scored below 450 points on each of the PISA reading, mathematics and science tests. This was around 50 points (approximately half a standard deviation) below the OECD average in each of the 3 key PISA subject areas. There were 12 countries with mean scores in PISA 2015 below 450 in all 3 subjects: Mexico, Turkey, Argentina (Buenos Aires), Brazil, Bulgaria, Colombia, Cyprus, Georgia, Kazakhstan, Romania, Saudi Arabia, United Arab Emirates. Note that some of these countries score considerably below 450 in several areas.
3. High-performers were defined as those countries with average PISA scores at least 10 points higher than the average for England in at least 2 subjects. An absolute magnitude was used rather than statistically significant differences, due to substantial differences across countries in the PISA sample size (and hence power to detect a difference). In any case, differences of 10 points between countries in PISA was almost always statistically significant. There were 8 countries within this high-performing group: Canada (Alberta), Estonia, Finland, Japan, South Korea, China (Shanghai), Chinese Taipei and Singapore.
4. The full categorisation of countries participating in the TALIS ISCED 3 (lower-secondary school) study is provided in Table B1.

⁴⁵ PISA 2015 is the most recent round with reported results at the time of publication of this report.

Table B1. The classification of countries for lower-secondary performance

Group	Countries
Low-performing	Mexico, Turkey, Argentina (Buenos Aires), Brazil, Bulgaria, Colombia, Cyprus, Georgia, Kazakhstan, Romania, Saudi Arabia, United Arab Emirates, South Africa
Similar performance to England	<i>England</i> , Australia, Austria, Belgium, Chile, Czech Republic, Denmark, France, Hungary, Iceland, Israel, Italy, Latvia, Netherlands, New Zealand, Norway, Portugal, Slovak Republic, Slovenia, Spain, Sweden, United States, Croatia, Lithuania, Malta, Russia, Vietnam
High-performing	Canada (Alberta), Estonia, Finland, Japan, South Korea, China (Shanghai), Chinese Taipei, Singapore

Notes: In the following countries sub-national entities (rather than the whole country) took part: Canada (Alberta), Argentina (Buenos Aires) and China (Shanghai).

Primary schools

5. High- and low-performing primary school countries were defined using the TIMSS 2015 (year 5) mathematics and science results, along with the reading results from PIRLS 2016. Where countries do not participate in either TIMSS or PIRLS, their classification from PISA was used, as outlined above.
6. Low achievers were defined as those countries scoring at least 30 points below England in at least 2 out of the 3 international primary school reading, mathematics and science assessments. A total of 4 nations met these criteria (Spain, France, Turkey and the UAE) with Buenos Aires also included due to its low classification in the PISA assessment (and non-participation in the PIRLS and TIMSS studies).
7. High-performance was again defined as being at least 10 points ahead of England in at least 2 of the 3 subject areas. Only 3 participating countries met these criteria: South Korea, Chinese Taipei and Japan. These countries were significantly ahead of all the other nations that participated in the TALIS primary school study in terms of pupils' mathematics and science skills. Chinese Taipei achieved the same score in PIRLS 2016 as England, while neither Japan nor South Korea participated in this study.
8. The remaining countries were included in the 'average' group, with scores within 30 points of the average for England in at least 2 of the 3 subject areas. This included Australia, Sweden, the Netherlands, Denmark and Flemish Belgium. Vietnam was also included within this group, based upon its performance in PISA (and non-participation in the PIRLS and TIMSS studies).

9. Table B2 provides an overview of how each of the countries participating in the TALIS primary school study has been classified in this report, along with the average score in the 4th grade (year 5) TIMSS and PIRLS assessments.

Table B2. The classification of countries according to primary school performance

	Mathematics	Science	Reading	Classification
South Korea	608	589	-	High
Chinese Taipei	597	555	559	High
Japan	593	569	-	High
England	546	536	559	
Vietnam	-	-	-	Average
Flemish Belgium	546	512	525	Average
Denmark	539	527	547	Average
Netherlands ⁺	530	517	545	Average
Sweden	519	540	555	Average
Australia ⁺	517	524	544	Average
Spain	505	518	528	Low
Buenos Aires	-	-	-	Low
France	488	487	511	Low
Turkey	483	483	-	Low
UAE	452	451	450	Low

Notes: Mathematics and science scores based upon the country average in the TIMSS 2015 4th grade (year 5) assessment. Reading scores based upon the country average for the PIRLS 2016 4th grade (year 5) assessment. * indicates means did not meet the response rate requirements. Source: TIMSS 2015 4th grade and PIRLS 2016 international databases.

Appendix C: Sample sizes for sub-groups in England

Table C1 Teacher characteristics (number of teachers)

	Primary	Secondary
Gender		
Female	1,661	1,537
Male	348	839
Work-Schedule		
Full-time	1,514	1,844
Part-time	398	368
Role		
Class teacher	1,621	1,764
Subject lead	824	678
Head of key stage	243	167
Head of Year	98	147
Deputy Head	225	181
SEN Co-ordinator	116	27
Experience		
0 to 5 years	595	539
6 to 10 years	415	498
11 to 20 years	617	858
Over 20 years	358	421

Notes: Totals will differ due to missing data. The sum of the 'role' variable adds up to more than the total number of participants as these categories are not mutually exclusive. Job role also based upon self-reported information. Unweighted data. Source = TALIS 2018 database.

Table C2 School characteristics (number of teachers)

	Primary	Secondary
Ofsted grade		
Outstanding	360	557
Good	1,136	1,093
Requires improvement	183	331
Inadequate	30	132
School FSM %		
Low FSM	362	593
Second FSM quartile	395	525
Third FSM quartile	472	524
High FSM	455	488
School Type		
Sponsored academy	88	307
Academy converter	321	1051
Community school	928	321
Voluntary	245	209
Independent	300	252
Other	127	236
Achievement quartile		
Bottom quartile	478	520
Second quartile	387	584
Third quartile	508	620
Top quartile	258	531
Region		
South West	158	156
South East	381	400
London	368	343
West Midlands	212	276
East Midlands	137	172
East of England	250	331
North West	238	271
North East	116	64
Yorkshire and the Humber	149	363

Notes: Figures refer to number of teachers within each group. Totals will differ due to missing data. Unweighted data. Source = TALIS 2018 database.



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