

Working lives of teachers and leaders – wave 1

Technical report

April 2023

Authors: IFF Research



Contents

List	of figures	3
List	of tables	4
Intro	oduction	5
1.	Survey sampling	6
2.	Questionnaire development	9
3.	Mainstage fieldwork	12
4.	Encouraging ongoing panel engagement	20
5.	Data processing	24
6.	Survey weighting	27
7.	Logistic regression models	32
Арр	endix A – Post-to-web letter	39
Арр	Appendix B – Contact details email	
Арр	Appendix C – Email invite	

List of figures

Figure 2.1 Questionnaire outline	9
Figure 3.1 Fieldwork stages	12
Figure 4.1 Welcome pack email/letter template	21
Figure 4.2 Change of address card	23

List of tables

Table 1.1 Survey Exclusions	7
Table 1.2 Respondent Profile	8
Table 2.1 Profile of cognitive testing respondents	10
Table 2.2 Profile of pilot respondents	11
Table 3.1 Fieldwork timings	13
Table 3.2 Outcome of HEI contact	15
Table 3.3 Fieldwork response	18
Table 3.4 Response by job role, phase, gender and ethnicity	19
Table 5.1 Sampling error in year 1 of the WLTL survey	25
Table 5.2 Examples of variables derived for analysis of the results from year 1 of theWLTL survey	26
Table 6.1 Core weighting targets	28
Table 6.2 Module weighting targets	31
Table 7.1 Hierarchical logistic regression model – starting variables	34

Introduction

The inaugural Working Lives of Teachers and Leaders (WLTL) survey was carried out in Spring 2022 with teachers and leaders in state schools in England. Conducted by IFF Research and the Institute of Education (IoE) on behalf of the Department for Education (DfE), the survey is longitudinal by design and will run annually for at least five years, up to 2026.

In support of the DfE's Recruitment and Retention Strategy, the study aims to explore factors affecting the supply, recruitment and retention of teachers and leaders to help DfE design policies that better support them.¹ Specifically, it looks at factors such as pupil behaviour, pay and reward, flexible working, workload, and continuing professional development (CPD), by an intersection of school and teacher characteristics (e.g. phase, length of service, subject area, gender, race/ethnic background, etc.).

This technical report covers:

- Survey sampling
- Questionnaire development
- Mainstage fieldwork
- Encouraging panel engagement
- Data processing
- Survey weighting
- Logistic regression models

It also includes the recruitment materials as appendices.

¹ Department for Education, 'Teacher Recruitment and Retention Strategy', January 2019. Source: <u>https://www.gov.uk/government/publications/teacher-recruitment-and-retention-strategy</u>

1. Survey sampling

The survey population was defined as teachers, middle leaders, and senior leaders (including headteachers) in state-funded primary, secondary, and special schools in England. This included Early Career Teachers (ECTs), defined as those in their first or second year of teaching (to align with the Early Career Framework).²

Drawing the sample

Most sample records for teachers and leaders were drawn from the 2020 School Workforce Census (SWC), with the exception of those in their first year of teaching (1st year ECTs). Those falling into this group were not present in the 2020 SWC, as at the time of the data collection and subsequent release, they had not yet finished their Initial Teacher Training (ITT) and started teaching in a school.³ Instead they were drawn from the Database of Trainee Teachers and Providers (DTTP).

The majority of the sample was drawn at random, in proportion to the starting population. The exceptions were secondary heads and 2nd Year ECTs, who were intentionally oversampled to allow for more robust subgroup analysis.⁴ This was then corrected for in the survey weighting.

Some groups were excluded from the drawn population, as outlined in Table 1.1 below.

² Early career framework - GOV.UK (www.gov.uk) "The early career framework (ECF) sets out what early career teachers are entitled to learn about and learn how to do when they start their careers. It underpins a new entitlement for 2 years of professional development designed to help early career teachers develop their practice, knowledge and working habits".

³ Sampling for the first year of Working Lives of Teachers and Leaders commenced in Spring 2021, with the SWC not released until the Summer of each year.

⁴ Where this report refers to ECTs, this includes both those who would have been referred to as Newly Qualified Teachers (NQTs) at the time of the fieldwork, and those who have participated in the Early Career Framework (ECF). Given the timing of the first year of this study, only those in their first year of participation in the ECF were covered, which is why we have expanded the definition this year to also include those in their second year of the NQT process. From the second year of this study onwards, the term 'ECTs' will refer only to those in their first and second years of participation in the ECF.

Table 1.1 Survey Exclusions

From the SWC	From the DTTP
Centrally employed teachers	Those not in their final year of study
Teaching staff in nurseries, Further Education Colleges and post-16 schools	Those in an out-of-scope Initial Teacher Training (ITT) route or with no ITT route listed ⁵
Supply teachers and teaching assistants	Those in a school-based ITT (SCITT) route with no lead or employing school
School staff who are not teachers or leaders (e.g., school business managers, etc.)	Those without a course level on sample
Those aged under 18	

Top up sample and final sample profile

The initial batch of contacted sample consisted of 52,000 teachers and leaders. After the first two months of fieldwork, a top up sample of a similar amount was agreed, due to lower levels of response than anticipated (see the fieldwork section for more details). Table 1.2 below shows the unweighted core and module⁶ profiles, alongside the final weighted profile.

⁵ Those marked as "assessment only", "Early Years Initial Teacher Training", "undergraduate *and* Post Graduate Teaching Apprenticeship/ School Direct salaried/ School Direct tuition fee".

⁶ The online survey included three module sections that were each randomly allocated to a third of the responding sample.

Table 1.2 Respondent Profile

	Core Base (n)	Core %	Module Base (n)	Module %		
Job Role						
Heads	771	6.9	592	5.7	4.3	
Assistant heads	616	5.5	513	4.9	5.9	
Deputy heads	470	4.2	365	3.5	3.6	
Leading practitioner	356	3.2	335	3.2	<1	
Classroom teacher - not ECT	7,227	64.7	7,035	67.1	71.8	
Classroom teacher - ECT year 2	1,218	10.9	1,175	11.2	4.6	
Classroom teacher - ECT year 1	211	1.9	178	1.7	4.4	
Unqualified teacher	82	<1	75	<1	2.5	
Unknown/ Other	226	2.0	216	2.1	2.2	
Phase						
Primary	5,770	51.6	5,324	50.8	49.1	
Secondary	4,859	43.5	4,672	44.6	45.5	
Special / Pupil Referral Unit (PRU) / Alternative Provision (AP)	548	4.9	487	4.6	5.4	
Gender (sample)						
Male	2,728	24.4	2,537	24.2	24.4	
Female	8,448	75.6	7,945	75.8	75.5	
Other	1	<1	1	<1	<1	
Ethnicity (sample)						
Asian	382	3.4	366	3.5	4.6	
Black	181	1.6	170	1.6	2.2	
Mixed	145	1.3	136	1.3	1.4	
White	9,622	86.1	9,021	86.1	82.5	
Other ethnic group	44	0.4	41	0.4	<1	
Unknown	803	7.2	749	7.1	8.8	

2. Questionnaire development

The questionnaire for the first year of the WLTL study was designed collaboratively between DfE, IoE and IFF Research. Members of the study's external advisory group (including academic experts, key sector bodies and representatives from teacher and school leadership unions) were also approached for input throughout the development and testing phase.

Questionnaire coverage

Figure 2.1 outlines the topics covered in the questionnaire. As shown, the survey comprised a core survey and three five-minute modules, each asked of a third of online⁷ respondents.

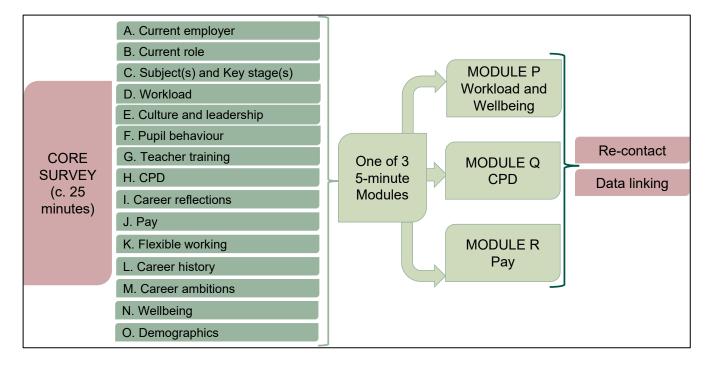


Figure 2.1 Questionnaire outline

In future years the modules will cover different issues, depending on the status of the sector and the topical issues it faces.

⁷ Telephone respondents did not get assigned to a module due to survey length - see section on piloting.

Cognitive testing

A total of 19 cognitive interviews were conducted via teleconferencing between 13 July and 13 August 2021.⁸ The profile of respondents according to teacher type and phase is outlined in Table 2.1 below.

	Achieved (n)
Teacher type	
Classroom teacher	13
Middle leader	3
Senior leader	3
Phase	
Primary	9
Secondary	10
Early Career Teacher (ECT)	
Yes	3
No	26
Total	19

Table 2.1 Profile of cognitive testing respondents

Each interview lasted approximately one hour. Respondents were asked whether they experienced any difficulties with certain questions (and why), how they arrived at each of their answers, and what the specific wording had meant to them. They were also asked to comment on the overall flow and length of the survey.

Findings from the cognitive phase were fed into the design of the pilot questionnaire.

Survey piloting

Following the cognitive phase, the survey was forecasted to run significantly over the target length of 20-25 minutes. As such, the principal purpose of the piloting phase was to identify the best means of reducing the overall length, in addition to any other improvements that could be identified at this stage.

Pilot fieldwork took place in the week commencing 31 October 2021, with a total of 32 teachers and leaders. Most of these (29) were conducted over the telephone, with the

⁸ Interviews were conducted remotely due to COVID-19 restrictions in place at the time.

remaining three completed via an online platform. The profile of achieved interviews is outlined in Table 2.2 below.

	Telephone (n)	Online (n)
Teacher type		
Classroom teacher	10	-
Middle leader	6	1
Senior leader	13	2
Phase		
Primary	20	2
Secondary	7	1
Special, PRU or AP	2	-
Early Career Teacher (ECT)		
Yes	1	-
No	28	3
Total	29	3

Table 2.2 Profile of pilot respondents

Section by section timings at the piloting stage revealed that the survey would take around one hour to complete over the phone, and 35 minutes online. While substantial deletions were subsequently suggested and actioned, they were not sufficient to bring the length down by the required amount. Given the online survey proved quicker to complete, it was agreed that the modules would only be asked of those completing the survey online, to ensure the telephone survey would be of a reasonable length.

3. Mainstage fieldwork

The fieldwork period involved both a recruitment and survey phase. As shown in Figure 3.1, the former looked slightly different depending on the sample source and training route taken.

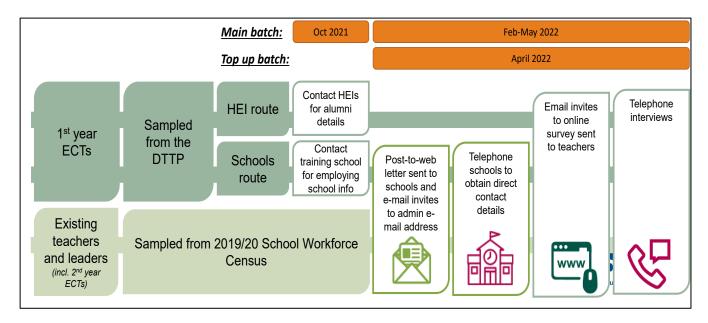


Figure 3.1 Fieldwork stages⁹

Originally fieldwork was due to take place from January to March 2022. As shown however, the start of fieldwork was delayed, running from February to May 2022. This was due to concerns around the COVID-19 pandemic and specifically the burdens that could be placed on schools due to the impact of the Omicron variant in January.

The change in fieldwork period and continued impact of the COVID-19 pandemic caused some issues with responses. As already discussed, a top up batch of SWC sample was incorporated partway through fieldwork to mitigate low response rates. One effect of delaying fieldwork was that the recruitment period now spanned the Easter break. During this time recruitment paused to avoid contacting schools during the holidays, with corresponding online responses petering off in the lead up and aftermath (see Figure 3.2 overleaf). We also saw declining response rates over a similar time period for other schools-related research.¹⁰

The response rates across both batches are explored towards the end of this chapter, after a more detailed look at the fieldwork stages.

⁹ HEI – Higher Education Institution

¹⁰ The School and College Panel, for example, which IFF Research also deliver on behalf of DfE.

Fieldwork stages

The precise fieldwork timings are outlined in Figure 3.2. As shown, the first stage of recruitment involved sampling 1st year ECTs, with their contact information sourced from the associated training provider listed in the DTTP. This commenced in October 2021 to allow ample time for sample collation before mainstage fieldwork commenced.

Week	Telephone	Online	Communications
4th Oct 2021	0	0	Direct contact to 1 st year ECT training providers: HEI and schools based dialling commences
19th Feb 2022	0	331	Post-to-web letters land
28th Feb 2022	0	807	
7th Mar 2022	0	1463	Email invite to "care of the school"
14th Mar 2022	0	792	
21st Mar 2022	47	301	Direct contact commences (telephone and online)
28th Mar 2022	83	580	
4th Apr 2022	58	232	
11th Apr 2022	0	71	Calling paused for Easter break
18th Apr 2022	70	159	
25th Apr 2022	124	719	Post-to-web letters land (batch 2)
2nd May 2022	76	2756	Direct emails to batch 2 commence
7th May 2022	86	2344	
16th May 2022	0	78	
Total	544	10633	
	111	77	

Stage one: Contacting training providers of 1st year ECTs

Different approaches were used for those who studied at a Higher Education Institution (HEI) and those who studied through school-based routes, e.g., through School Centred Initial Teacher Training (SCITT), as outlined below.

HEIs

Step-by-step process:

- 1. We carried out desk research to find email and, where possible, phone contact details for relevant alumni or careers departments.
- 2. An initial email was sent to HEIs to explain the purpose of the research and to request provider's help in gathering contact details. A template containing the sampled graduates was provided for this purpose.
- 3. Follow up calls were made to those who did not respond in the weeks that followed, to confirm receipt of the email, and answer any concerns or queries from providers.
- 4. Later in the process, those who had not provided the information were given the option to circulate the opt-in link instead.

Contact information for a total of 3,184 teachers and leaders was requested from 70 HEIs. Despite concerted efforts to secure the necessary information (detailed above), success was limited, given the necessarily indirect approach: 711 details were secured across 13 institutions, equivalent to 22% of the 3,184 originally requested. While the project is fully General Data Protection Regulation (GDPR) compliant, the main barrier was concerns around compliance with GDPR and/or institution's own data sharing policies. As a result, we offered an opt in option, whereby HEIs would supply the relevant graduates with a link to the Working Lives online contact details portal. This too had limited success; while 16 HEIs agreed to circulate the opt-in link, just 33 teachers and leaders filled it in.

A detailed breakdown of the outcomes reached is outlined below. As shown, a significant number (23) did not respond to the different modes of contact. It is likely that a proportion of these also shared concerns around data protection and GDPR, while others may have been affected by the ongoing burdens around the COVID-19 pandemic.

Table 3.2 Outcome of HEI contact

Outcome	Number of HEIs
Returned graduate details	13
Agreed to circulate opt-in link (after refusal to provide details directly)	16
Refused (both direct and opt-in link)	10
Refused to provide details directly, no response to offer of opt-in link	8
No outcome achieved	23
Total	70

Where contact details *were* secured, teachers and leaders were invited to take part as per stage four.

When the second sample batch was added later in fieldwork, contact information for 1st year ECTs available on the updated SWC (i.e., the 2021 submission) was also appended to batch one.

Note that we are considering lessons learnt from this approach at wave 1, with an aim to improve response rates among this group for future survey waves.

SCITT

The SCITT exercise was more successful, perhaps because providers were asked to provide details of the employing school – as opposed to direct contact information – so that teachers could be incorporated at stage two.

As with HEI sampling, this was a multi-staged approach involving:

- Desk research to find email and telephone contact details for the SCITT providers, with a focus on individuals responsible for managing the SCITT program at their organisation and/or those with recruitment or administration responsibilities.
- An initial email to explain the purpose of the research and to request providers' help identifying the employing school. The sampled graduates from the SCITT were listed in the email, and the name, address and URN of the school were requested to ensure the right school was identified.

• As with the HEIs, follow up calls were made to those who did not respond in the weeks that followed, to confirm receipt of the email, and answer any concerns or queries from providers.

In total, 125 SCITTs were contacted for details of 615 graduates, with information from 329 employing schools returned in total. Confirmation was received that a further 84 had either dropped out of their ITT or had not yet finished.

Where details of the employing school were secured, teachers and leaders were invited to take part using the post-to-web methodology (i.e., stage two below). As with the HEI sample, when the second sample batch was added later in fieldwork, contact information available on the updated SWC (i.e., the 2021 submission) was also appended to batch one.

Stage two: Post-to-web letter

Recipients of the post-to-web letter included all of those sampled via the School Workforce Census (SWC) – i.e., all existing teachers and leaders, including 2^{nd} year ECTs – as well as 1^{st} year ECTs who had taken a schools-based route to training. The post-to-web letter – included in Appendix A – contained a request for the recipient to pass the communication onto the relevant staff member, for them to then complete the survey online.

Stage three: email invitation to "care of the school"

Schools were contacted via email in early March 2022 to provide the work contact details for the named teachers and leaders who had been selected to take part (and were yet to respond). Schools could either provide these work contact details over the phone or via the online portal.

Appendix B shows the email containing the online portal link which would allow those who manage school inboxes, most likely receptionists or school office staff, to provide the work contact details for the named staff members. The email also contained reassurances around the legitimacy of the survey and the ways in which personal data would be handled.

Stage four: direct contact with teachers and leaders

As shown in Figure 3.2, direct contact began towards the end of March 2022. Teachers and leaders were periodically loaded into fieldwork in batches with sample collation taking place alongside. Each batch received two reminder emails before the end of fieldwork.

As shown in Appendix C, the invitation included a unique link for teachers and leaders to complete the survey online, alongside key information about the survey, and information on how to contact IFF Research and DfE about participation.

Fieldwork response

The fieldwork outcomes and associated response rates are outlined in Table 3.2 below. DfE conducted analysis to determine a 'true' starting sample for the survey. The survey starting sample was compared against the 2021 SWC to determine which sample was either drawn from the 2020 SWC and still teaching in the same school in the 2021 SWC or drawn from the DTTP and was present in the 2021 SWC. This enabled us to identify those who were in our starting sample who should have been teaching in an English state school at the time of fieldwork and should have received a survey invite (i.e., they had not moved to a different school). This reduced the starting sample from 102,583 to 88,470 and increased the overall response rate from 11% to 13%.¹¹

¹¹ The analysis conducted by the DfE indicated that 364 records who were marked as no longer teaching at the same school between the 2020 SWC and 2021 SWC had completed the survey, despite the survey methodology making it unlikely that those who moved school between these periods would have received a survey invitation. Of the 364 records: 170 were identified as having left teaching and 194 were marked as being at a different school. It should be noted that the methodology for matching across databases may report more teachers leaving or moving than have actually left.

Table 3.3 Fieldwork response

	Batch 1				
	SWC	DTTP (1 st year ECT): HEI	DTTP (1 st year ECT): SCITT	Batch 2 (all SWC)	Grand Total
Starting sample	46,162	4,157	1,557	50,707	102,583
No longer at school or in teaching	5,324	2,269	582	5,938	14,113
Contactable	40,838	1,888	975	44,769	88,470
Completed					
Completed online	6,386	43	111	4,093	10633
Completed over the phone	487	53	4	-	544
Total responses	6,873	96	115	4,093	11177
Not completed					
Opt out	1,733	51	63	443	2,290
Refusal	254	25	1	0	280
No final outcome	31,978	1716	796	40,233	74,723
Response rate (starting sample)	15%	2%	7%	8%	11%
Response rate (contactable & eligible)	17%	5%	12%	9%	13%

Breakdown of response by role, phase, gender and ethnicity are shown in Table 3.3 below.

	Contactable sample	Completed	Response rate		
Job Role (sample)					
Heads	5,369	729	14%		
Assistant heads	4,598	578	13%		
Deputy heads	2,986	422	14%		
Leading practitioner	570	70	12%		
Classroom teacher - not ECT	62,958	7,949	13%		
Classroom teacher - ECT year 2	9,126	1,218	12%		
Classroom teacher - ECT year 1	2,863	211	7%		
Phase (sample)					
Primary	42,699	5,733	13%		
Secondary	41,666	4,896	12%		
Special / Pupil Referral Unit (PRU) / Alternative Provision (AP)	4,105	548	13%		
Gender (sample)					
Male	22,085	2,728	12%		
Female	66,361	8,448	13%		
Other	24	1	4%		
Ethnicity (sample)					
Asian	4,207	382	9%		
Black	1,960	181	9%		
Mixed	1,261	145	11%		
White	73,538	9,622	13%		
Other ethnic group	492	44	9%		
Unknown	7,012	803	11%		
Total	88,470	11,177	13%		

Table 3.4 Response by job role, phase, gender and ethnicity¹²

¹² To determine response rates, it was necessary to use sample data rather than survey data. This means there are some differences in completion figures for these subgroups when compared to the survey data. This is partly due to the difference in time between the SWC 2020 being collected and the survey fieldwork taking place, but also due to different collection methodologies.

4. Encouraging ongoing panel engagement

As a longitudinal survey, establishing an identity for the panel was important to support ongoing engagement and retention of respondents. For year one, this was primarily achieved through a survey microsite and welcome packs.

Website

We set up a microsite to help provide information and reassurances of legitimacy to prospective survey participants, schools, HEIs and SCITTs. As shown in Figure 4.1, this featured DfE, IFF and IoE logos, as well as the survey logo designed by IFF's marketing team.

The home page introduced IFF and IoE as conducting the survey on behalf of DfE and outlined the purpose of the survey and the topics covered. There were then links to the following:

- An FAQs document
- A more detailed overview of the research timings
- Data sharing notices for schools and HEIs
- Privacy notice

Email addresses for IFF and DfE were also provided should anyone have further questions.

The full site can be viewed on https://www.workinglivesofteachers.com/.

Welcome packs

The welcome packs were disseminated to teachers after fieldwork closed. As shown in Figure 4.1, this comprised a cover note thanking teachers and leaders for taking part and welcoming them to the panel. It also gave a brief explanation of the longitudinal nature of the survey, a link to the microsite, and invited them to let us know if their contact details changed, they had moved schools, or they had left the profession entirely between survey years.

Figure 4.1 Welcome pack email/letter template



Unique ID: <IFF ID>

Welcome to the Working Lives of Teachers and Leaders Survey Thank you for taking part in the 2022 wave

Dear <CONTACT>,

Thank you very much for recently completing the Working Lives of Teachers and Leaders Survey 2022. Over 10,000 teachers and leaders responded to the survey, making it one of the largest surveys of its kind in the UK. Your contribution to the survey will help the Department for Education (DfE) design policies to better support teachers and leaders and help shape the future of the teaching profession.

What happens now

Now the 2022 survey has closed, responses will be analysed by IFF Research and used to produce a report for DfE based on aggregated responses, which will be published on gov.uk. We'll also share a summary of findings with all who took part. **Please be reassured that all responses will be anonymous and confidential – nobody at DfE will know how any schools or individuals responded.**

Taking part in future years

As a longitudinal study, with the aim of exploring opinions and experiences over time, we will invite you to **take part in the survey annually**, even if you move school or leave teaching (with those who leave asked to participate once more in the subsequent survey year, to find out about their change). The survey itself will be similar in content and length each time.

It is envisaged that this survey will initially run for 5 years (but it may be extended beyond this). You can choose to opt out of future waves at any point, however tracking teachers' experiences and opinions over time is very valuable in helping the Department understand how best to support teachers. It's what makes this study so unique and important. We therefore hope you will be able to take part in as many years as possible.

What if I move schools, leave teaching or my contact details change?

Your continuing participation is important to us. Part of the survey in future years will explore experiences of those who change roles, move schools, or leave the profession, as well as those who continue in their current role. If you move schools, or change your contact details, please let us know at www.workinglivesofteachersandleaders.com/changedetails. Alternatively, you can email us on workinglivesofteachersandleaders@IFFResearch.com.

General questions

If you have any further questions about the research, please contact IFF on <u>workinglivesofteachersandleaders@iffresearch.com</u> or DfE on <u>workinglives.teachers-</u> <u>leaders@education.gov.uk</u>. You can also find out more about the survey, including more about the roles of DfE, IFF and IOE on the survey website: <u>www.workinglivesofteachersandleaders.com</u>.

Kind Regards,

Loma Alann.

Lorna Adams Project Director at IFF Research Education

Heather McNaughton Director of Teaching Workforce at the Department for



5. Data processing

Data processing involved:

- Creating detailed specifications for the creation of an SPSS file, data tables, and code frame, which together outlined how the survey data should be coded and presented in the final data outputs.
- Incorporating personal and school-level variables from the School Workforce Census (SWC) and the Get Information About Schools (GIAS) service to enable comparison between groups in the survey.¹³
 - Examples of data included in the SWC used for analysis include school type (academy, local authority-maintained, etc.) and teacher/leader age.
 - Examples of data included in GIAS used for analysis include Ofsted rating, percentage of pupils eligible for free school meals (FSM), and school size.
- Cleaning and processing the raw survey data, including:
 - Rebasing questions so they reflected the experiences of the most relevant group of school leaders and teachers.
 - Creating derived variables (e.g., net agree/disagree variables). A selected list of derived variables can be found in Table 5.2 towards the end of this chapter.
 - Editing data where requests had been made by the respondent (for example, they wanted to change their answer to a question after they submitted their survey responses).

Sampling error

Data presented in the findings report is from a sample of teachers and leaders rather than the total population. Although the sample has been weighted to be nationally representative, the data is still subject to sampling error. The extent of sampling error depends on the sampling approach (the closer it is to a random sample the less the sampling error), the sample size (the larger the sample, the lower the likely sampling error) and the survey result (the closer to 50% the less confident statistically we can be in the finding).¹⁴

¹³ Get Information about Schools - GOV.UK (get-information-schools.service.gov.uk)

¹⁴ A survey result of 50% has been used as an example to show that as a percentage moves closer to a null result, the less confidence we can have in the result. It is important to note, however, that this example assumes there are two response options (and no option for non-response) – e.g., a yes/no question – meaning 50% is the null result and where there are more options the null result may not be 50%.

The sample of 11,177 responses means that, statistically, we can be 95% confident that the 'true' value of any survey finding of 50% will lie within a +/- 0.9% range (i.e., 49.1% - 50.9%). Results based on a sub-set of teachers and leaders interviewed are subject to a wider margin of error. For example, where the table indicates that a survey result is based on all leaders, where the survey result is 50% we can be 95% confident that the true figure lies within the range 47.7% to 52.3%.

Table 5.1 shows the sampling error based on any survey finding of 50% because this percentage produces the maximum possible variation. If a survey finding is further away from 50%, the sampling error will be less. For example, with a survey finding of either 75% or 25% at a question based on all teachers and leaders, we can be 95% confident that the 'true' value of the survey findings will lie within a +/- 0.8% range (e.g., 74.2%-75.8%).

Group	Base size	Sampling error for survey findings of 50%
All teachers and leaders	11,177	+/- 0.9%
All primary	5,770	+/- 1.3%
All secondary	4,859	+/- 1.4%
All special school, PRU or AP	548	+/- 4.2%
All leaders	1,857	+/- 2.3%
All primary leaders	1,091	+/- 3.0%
All secondary leaders	640	+/- 3.9%
All teachers	9,094	+/- 1.0%
All primary teachers	4,533	+/- 1.5%
All secondary teachers	4,144	+/- 1.5%

Table 5.1 Sampling error in year 1 of the WLTL survey

Differences between sub-groups were only referenced where statistically significant at the 95% confidence level. Likewise, figures based on fewer than 50 responses are not reported as standard. If any such figures were reported, this was explicitly stated. Any conclusions drawn from these figures should be treated with caution.

Derived variables

Table 5.2 shows a selected list of derived variables used for analysis, and from which questions these variables were derived.

Table 5.2 Examples of variables derived for analysis of the results from year 1 ofthe WLTL survey

Variable	How it was derived
Current job role (derived)	Combining answers from B1. Which of the following best describes your current role? and B2. Middle leadership responsibilities aside, which of the following best describes your current job role?
Which of the following best describes the job role you had at the end of the 2021 Spring term, so around April 2021? (derived)	Combining answers from B4. Which of the following best describes the job role you had at the end of the 2021 Spring term, so around April 2021? and B5. Middle leadership responsibilities aside, which of the following best describes the job role you had at the end of the 2021 Spring term, so around April 2021?
Whether moved up a job role	Combining answers from B1. Which of the following best describes your current role? and B4. Which of the following best describes the job role you had at the end of the 2021 Spring term, so around April 2021?
Whether teaching Key Stage without Key Stage qualification	Combining answers from C1. What Key Stage(s) do you teach at your current school? and C2. And which Key Stage(s) do you have qualification(s) to teach?
Secondary Confidence - Main subject taught	Combining answers from C3a. Which subject do you spend most of your time teaching at your current school? and I2. Thinking about subject knowledge specifically. How confident are you in your knowledge of the subject(s) you teach?
What activities, if any, were you undertaking in the academic year 2019/2020?	Combining answers from L1. In the academic year before last, i.e. the academic year 2019/2020, were you? and L3. What activities, if any, were you undertaking in the academic year 2019/2020?

6. Survey weighting

The target population was derived using the 2021 SWC, which was collected in November of that year.¹⁵ Weighting was applied to the core and module data to correct for a) over and under response in certain groups and b) purposive oversampling of secondary heads and ECTs.

As demonstrated by Table 6.1, the core targets focused on correcting slight discrepancies in the achieved profile by gender, ethnicity, and role within each of the primary, secondary, and special / PRU school phases. The figures in Table 6.1 show the percentage of each category as a proportion of the target population.

¹⁵ As mentioned earlier, the timings of the SWC release meant that we could not use the 2021 SWC at the sampling stage. As it was released in advance of the weighting stage – and because the survey itself focused on experiences in the 2021/2022 academic year – it was agreed that weighting back to the 2021 SWC was most appropriate.

Table 6.1 Core weighting targets

		Heads	Assistant heads	Deputy heads	Leading Practitioners	Classroom teacher	ECT Year 2	ECT Year 1	Unqualified
Primary	/								
	Asian	0.042%	0.085%	0.043%	0.005%	1.338%	0.102%	0.085%	0.049%
	Black	0.025%	0.038%	0.022%	0.002%	0.464%	0.041%	0.043%	0.021%
Female	Mixed	0.021%	0.027%	0.018%	0.002%	0.388%	0.031%	0.028%	0.015%
remaie	White	2.163%	1.833%	1.679%	0.080%	26.913%	1.318%	1.257%	0.559%
	Other	0.005%	0.008%	0.005%	0.001%	0.120%	0.011%	0.011%	0.012%
	Unknown	0.155%	0.127%	0.108%	0.005%	2.361%	0.176%	0.185%	0.075%
	Asian	0.009%	0.010%	0.005%	0.001%	0.113%	0.008%	0.009%	0.007%
Male	Black	0.005%	0.004%	0.002%	-	0.055%	0.006%	0.005%	0.015%
	Mixed	0.007%	0.005%	0.003%	0.000%	0.063%	0.005%	0.005%	0.006%
wate	White	0.794%	0.379%	0.397%	0.012%	3.828%	0.231%	0.221%	0.163%
	Other	0.001%	0.002%	0.000%	-	0.014%	0.001%	0.001%	0.002%
	Unknown	0.060%	0.031%	0.027%	0.001%	0.360%	0.025%	0.034%	0.018%
Second	ary								
	Asian	0.008%	0.065%	0.019%	0.022%	1.342%	0.136%	0.123%	0.063%
	Black	0.005%	0.037%	0.009%	0.014%	0.625%	0.055%	0.061%	0.040%
Female	Mixed	0.004%	0.026%	0.006%	0.006%	0.347%	0.042%	0.044%	0.021%
remale	White	0.261%	1.399%	0.451%	0.276%	17.965%	1.025%	1.122%	0.662%
	Other	0.001%	0.005%	0.003%	0.004%	0.171%	0.019%	0.019%	0.014%
	Unknown	0.028%	0.128%	0.044%	0.026%	2.168%	0.197%	0.224%	0.118%

		Heads	Assistant heads	Deputy heads	Leading Practitioners	Classroom teacher	ECT Year 2	ECT Year 1	Unqualified
	Asian	0.010%	0.045%	0.015%	0.013%	0.606%	0.062%	0.060%	0.027%
	Black	0.005%	0.024%	0.006%	0.008%	0.373%	0.031%	0.026%	0.036%
Male	Mixed	0.004%	0.013%	0.006%	0.002%	0.163%	0.015%	0.020%	0.009%
wate	White	0.375%	1.112%	0.467%	0.164%	9.245%	0.529%	0.608%	0.339%
	Other	0.001%	0.005%	0.003%	0.001%	0.078%	0.006%	0.007%	0.005%
	Unknown	0.038%	0.097%	0.042%	0.017%	1.104%	0.091%	0.110%	0.063%
Special	/ PRU								
	Asian	0.003%	0.004%	0.003%	0.0002%	0.068%	0.005%	0.005%	0.010%
	Black	0.002%	0.006%	0.002%	-	0.058%	0.003%	0.003%	0.014%
Female	Mixed	0.002%	0.003%	0.001%	0.0004%	0.038%	0.003%	0.002%	0.006%
remaie	White	0.155%	0.271%	0.150%	0.012%	2.366%	0.102%	0.096%	0.256%
	Other	0.000%	0.003%	0.001%	-	0.017%	0.001%	0.001%	0.001%
	Unknown	0.013%	0.021%	0.011%	0.002%	0.262%	0.020%	0.017%	0.029%
	Asian	0.001%	0.001%	0.001%	0.001%	0.024%	0.001%	0.001%	0.003%
	Black	0.002%	0.003%	0.001%	0.0002%	0.030%	0.002%	0.001%	0.013%
	Mixed	0.001%	0.002%	0.001%	-	0.014%	0.002%	0.000%	0.004%
Male	White	0.094%	0.098%	0.067%	0.004%	0.704%	0.029%	0.026%	0.099%
	Other	0.000%	0.001%	0.000%	-	0.004%	0.0004 %	0.0002%	0.001%
	Unknown	0.009%	0.010%	0.006%	-	0.088%	0.005%	0.002%	0.016%

Because they were only asked of a subset of the core respondents, RIM (Random Iterative Method) weights were also applied to the same groups for the module sections (i.e., role, gender, ethnicity, and school phase). Table 6.2 shows the RIM weighting targets for each category used for weighting. The figures show the target weights within each category, with the target of each category summing to 100%, rather than the target weights for the interlocking categories as shown in Figure 6.1.

	Module weighting target
Phase	
Primary	49.04%
Secondary	45.53%
Special / PRU / AP	5.42%
Job Role	
Head/exec head	4.3%
Assistant head	5.9%
Deputy head	3.6%
Leading practitioner	0.7%
Classroom teacher not ECT	73.9%
Classroom teacher ECT year 2	4.3%
Classroom teacher ECT year 1	4.5%
Unqualified teacher	2.8%
Gender	
Female	75.6%
Male	24.4%
Other	0.0%
Ethnicity	
White	82.4%
Mixed	1.4%
Asian	4.7%
Black	2.2%
Other	0.6%
Unknown	8.8%

Table 6.2 Module weighting targets

7. Logistic regression models

Two hierarchical logistic regressions were conducted to identify reasons for considering leaving a school. The dependent variables were:

- whether considering leaving the state education sector (excluding retirement) survey question M1_4
- whether considering moving to another state school (either at the same level or on promotion) – survey question M1_2-3

A hierarchical logistic regression describes the impact of independent variables on a binary dependent variable. This type of regression was chosen as it provides a relatively simple framework to summarise what is driving the dependent variable, especially when there are lots of predictors (independent variables) being entered into the model.

It is hierarchical in nature as the independent variables are grouped together into separate blocks, rather than all loaded into the model at the same time. The variables used for this analysis were grouped into the following four blocks, according to the type of variable, and loaded into the models in the following order:

- 1. Employment characteristics
- 2. School characteristics
- 3. Demographic information
- 4. Attitudinal information these measures have a negative impact on the model, meaning that a negative score meant a higher likelihood of considering leaving the state education sector

The decision to load the blocks in this order was to first establish which characteristics (employment characteristics, school characteristics and demographic information in this case) are associated with the behaviours we were testing – consideration of leaving state education or moving to a different state school. By first controlling for these behaviours in the model, the attitudinal predictors which are shown to be significant in the model can be said to be contributing something over and above what can be explained using the other variables alone. Where a factor is shown as significant in the model, we can therefore be confident that the effect of this is real and not due to a correlation with another variable loaded in previous blocks. We determined that this was the most useful approach for explaining why teachers and leaders may seek to move on from their current schools.

The full list of variables chosen to be loaded into the models (see Table 7.1) was compiled by looking at the questionnaire and key sample variables to consider a) which were likely to contribute towards considerations of leaving/moving and b) which we held data for all respondents. It was preferable to have data for all respondents so that we did not have to remove any respondents from the analysis or derive their missing data based on data from other respondents. This explains why variables asked only of certain groups, such as primary teachers, senior leaders, or those with teaching responsibilities were not included in the analysis. In practice this meant almost all variables (either from sample or survey) for which data was held for all respondents were loaded into the models.

All variables that were included in the models are shown in Table 7.1 overleaf, which shows: whether variables were from survey or sample; question number (if variable from survey); variable type (from above bullets); the order in which the variable was loaded into the models ('loading block'); and whether each variable appeared in the final models. Categorical variables were dummy coded, with a reference category included in each variable.

Table 7.1 Hierarchical logistic regression model – starting variables

Predictor (independent variable)	Survey/Sample	Question number (if from survey)	Variable type	Loading block	'leave'	Variable in final 'move' model?
Phase	Survey	Sx2/Sx3	Employment characteristic	-	Yes	Yes
ECT status	Sample (DTTP/SWC)	-	Employment characteristic		No	No
Length of time at current school	Survey	A3	Employment characteristic	-	No	Yes
Job role	Survey	B1	Employment characteristic	1	No	No
Additional responsibilities	Survey	B3	Employment characteristic	-	Yes	Yes
Whether moved up a job role since April 2021	Survey	B4 / B1	Employment characteristic	1	Yes	No
Teaching responsibilities (Y/N)	Survey	B1 / B3	Employment characteristic	-	No	No
Key stage taught	Survey	C1	Employment characteristic	1	No	No
Hours worked	Survey	D1	Employment characteristic	1	Yes	Yes
CPD undertaken	Survey	H2	Employment characteristic	1	Yes	Yes
Whether received pay increase since April 2021	Survey	J2	Employment characteristic	-	No	No
Whether work flexibly (Y/N)	Survey	K1	Employment characteristic	-	No	No
Types of flexible working	Survey	K1	Employment characteristic	-	No	No
Employment situation 2019/2020 academic year	Survey	L1	Employment characteristic		No	No

Predictor (independent variable)	Survey/Sample	Question number (if from survey)		Loading block		Variable in final 'move' model?
Whether faced bullying or discrimination	Survey	N3	Employment characteristic	1	Yes	Yes
Full time / part time	Survey	K1	Employment characteristic	1	Yes	No
Years qualified	Sample (SWC)/Survey	G3	Employment characteristic	1	Yes	Yes
Qualified teacher status	Sample (SWC)	-	Employment characteristic	1	No	No

Predictor (independent variable)	Survey/ Sample	Question number (if from survey)	Variable type	Loading block	Variable in final 'leave' model?	Variable in final 'leave' model?
LA maintained vs. academy	Sample (SWC)	-	School characteristi c	2	No	No
Region	Sample (SWC)	-	School characteristi c	2	No	No
Ofsted rating	Sample (SWC)	-	School characteristi c	2	No	No
Proportion of pupils eligible for Free School Meals	Sample (SWC)	-	School characteristi c	2	No	No
Whether have physical or mental health condition	Survey	01	Demographi c/protected characteristi c	3	Yes	No
Sex	Survey	O3	Demographi c/protected characteristi c	3	No	No

Predictor (independent variable)	Survey/ Sample	Question number (if from survey)	Variable type	Loading block		Variable in final 'leave' model?
Sexual orientation	Survey	O5	Demographi c/protected characteristi c	3	No	No
Ethnicity	Survey	O6	Demographi c/protected characteristi c	3	No	No
Religion	Survey	07	Demographi c/protected characteristi c	3	Yes	No
Parent/guardian status	Survey	O8	Demographi c/protected characteristi c	3	No	No
Caring responsibilities	Survey	O9	Demographi c/protected characteristi c	3	No	No
Age	Sample	-	Demographi c/protected characteristi c	3	Yes	No
Views on control over workload	Survey	D4_1	Attitudinal statement	4	Yes	No
Views on whether have acceptable workload	Survey	D4_2	Attitudinal statement	4	Yes	No
Views on school	Survey	E1 bank	Attitudinal statement	4	Yes	Yes
Views on manager	Survey	E2 bank	Attitudinal statement	4	Yes	Yes
Views on governance	Survey	E4 bank	Attitudinal statement	4	Yes	No

Predictor (independent variable)	Survey/ Sample	Question number (if from survey)	Variable type	Loading block		Variable in final 'leave' model?
Views on pupil behaviour	Survey	F1	Attitudinal statement	4	No	No
Impact of CPD	Survey	H3	Attitudinal statement	4	Yes	No
Views on pay	Survey	J1 bank	Attitudinal statement	4	Yes	No
Views on flexible working	Survey	K2	Attitudinal statement	4	No	No
Satisfaction with current job	Survey	M1	Attitudinal statement	4	No	No
Extent to which know what to do to progress in career	Survey	M4	Attitudinal statement	4	No	Yes
Views on wellbeing / anxiety	Survey	N1 bank, N2	Attitudinal statement	4	Yes	Yes

The contribution of each variable loaded into the model was determined multivariately using a combination of forward and backward stepwise entry regression combined with a measure of parsimony (simplicity) called Bayesian Information Criterion (BIC). The reason for using BIC in addition to forward and backward entry was because with big samples, as we had for this survey, stepwise entry can retain too many predictors with small effects, overcomplicating models and meaning that the model can overfit the sample.

Where attitudinal statements were used in the model, which were typically measured on a five-point scale, the models measured the likelihood of reporting the two most positive points on the scale (e.g., 'strongly agree' and 'agree') against the remaining three points (e.g., 'neither agree nor disagree', 'disagree' and 'strongly disagree'). Where 10-point scales were used, the approach was similar, with the likelihood of reporting the four most positive points on the scale (7-10) measured against the remaining points (0-6).

Each model provided two measures to indicate the impact and effect of predictors on likelihood to leave the state sector or to move to a different state school.

 Overall impact of a predictor: this measure is called the Johnson's Relative Weights method (Johnson, J.W. (2000), 'A Heuristic Method for Estimating the Relative Weight of Predictor Variables in Multiple Regression', *Multivariate Behavioural Research*, 35(1), pp. 1-19). It uses a very similar method to Kruskal analysis and Shapley Value in linear regression and is a method used for avoiding extreme multicollinearity and providing a simple output, while not placing a limit on the number of predictors in the model (as opposed to Shapley Value regression).

The method produces a measure (presented in the Working Lives of Teachers and Leaders report as the 'importance' measure) which estimates the % of the variance ('importance score') in decisions to leave / move accounted for by each predictor in a similar way to R^2 values do in OLS regression.

2) The effect size for each category of a predictor: this shows the overall effect for that category, relative to a reference category, but does not take account of its relative incidence in the population (unlike the overall impact measure above), which might be small. This is described in the core report in terms of differences in overall odds of the behaviour of interest. This measure provides important information about the magnitude of impact of one category (even if small) relative to others. This measure is the conventional output from a logistic regression.

Appendix A – Post-to-web letter

Dear <CONTACT>,

Working Lives of Teachers and Leaders

Longitudinal Study of Teachers and Leaders in English Schools

We are writing to you about the new Working Lives of Teachers and Leaders study, which is being conducted by IFF Research and the Institute of Education (IoE), on behalf of the Department for Education (DfE). The study aims to collect robust evidence about the experiences of classroom teachers and school leaders in England. Questions will cover a range of areas about your working life, from workload and wellbeing to career reflections and future ambitions. We have selected a sample of teachers and leaders to take part – and this includes you.

We recognise the substantial pressure that teachers and leaders have been under and are enormously grateful to you for your continued efforts, resilience, and service throughout the COVID-19 pandemic. We have designed this survey to be as easy as possible to complete, and it is entirely voluntary to take part – however, we very much hope you will be able to contribute to this valuable research.

Your contribution to the survey will be crucial in helping us to understand the experiences you are facing at this time, and your views of teaching and leadership. By taking part, you will be supporting our aim to design policies that better support teachers and leaders, and help to shape the future of the teaching profession.



How to take part:

1. Go to this website: <u>www.iffresearch.com/WorkingLives</u>

- 2. Enter your login ID: <IFF ID>
- 3. Complete the Year 1 survey

PLEASE NOTE:

The survey will last roughly 20 - 25 minutes, depending on what you have to say

You can stop and start as much as you like (just click the above link to pick up where you left off)

The survey will remain open until 13th May

It is the longitudinal nature of this study that makes it so important. Nevertheless, taking part now does not commit you to taking part in future years

Participation is entirely voluntary and you can choose to opt out at any time

For more information about the survey – including participant anonymity, data linking and GDPR – please visit the survey website <u>www.workinglivesofteachersandleaders.co.uk</u>

We (IFF Research) may also try and reach you over the phone. If you would actively prefer this – or if you have any other queries at all – please do let us know by contacting IFF on <redacted> or DfE on <redacted>

Loma Alann

Kind Regards,

Lorna Adams

Project Director at IFF Research

MAK

Caroline Pusey

Director of Teaching Workforce at the Department for Education

Appendix B – Contact details email

SUBJECT LINE: DfE: Working Lives of Teachers and Leaders Survey

Dear [NAME],

DfE - Working Lives of Teachers and Leaders Survey

I understand you were recently contacted by a representative of IFF Research about providing the contact details of your school's staff for a research survey being carried out on behalf of the Department for Education (DfE). I am writing to provide some background to the research.

The DfE have commissioned IFF Research and the Institute of Education (IoE) to conduct the Working Lives of Teachers and Leaders survey. This is a new and important longitudinal study designed to help DfE better understand trends in the education sector over time. The survey will collect robust data regarding the experiences and opinions of classroom teachers and school leaders in England.

The questions cover a range of areas, from teacher workloads and wellbeing to career reflections and future ambitions. The findings of the research will help the DfE to design policies that better support teachers and leaders and help to shape the future of the teaching profession.

By providing us with the work email address and work telephone number of the staff who have been selected to take part in the research, you will be helping us to contact the relevant individuals in order to carry out this important research.

To enter the details of the nominated teachers and leaders please follow the link:

[INSERT LINK]

If this link does not work, please visit [INSERT LINK] and enter your school's unique ID: [INSERT ID]

Please be assured that any details collected will be treated with confidence and in line with the Code of Conduct of the Market Research Society and GDPR and no individuals nor schools will be identifiable to the DfE throughout the research.

If you have any questions about the research, please contact James Taylor on <redacted> or email <redacted> Alternatively, if you wish to discuss the research with DfE, please email <redacted>

If you would like further information about the research, you can access the survey FAQs at <u>workinglivesofteachersandleaders.com</u>.

Thank you in advance for your help.

Yours faithfully

Loma Alanna.

Lorna Adams,

Director, IFF Research

Appendix C – Email invite

SUBJECT LINE: DfE: Working Lives of Teachers and Leaders Survey

Dear <CONTACT>,

We are emailing you about the new Working Lives of Teachers and Leaders study, which is being conducted by IFF Research and the Institute of Education (IoE), on behalf of the Department for Education (DfE). You may recently have seen the survey mentioned in newsletters from DfE and from other external organisations who have been supporting us to promote this important study.

The study aims to collect robust evidence about the experiences of classroom teachers, middle leaders, and senior leaders in England. Questions will cover a range of areas about your working life, from workload and wellbeing to career reflections and future ambitions.

Your contribution will help shape the future of the profession and, by taking part, you will be contributing to DfE's aim to design policies that better support teachers and leaders.

We have selected a sample of teachers and leaders to take part – and this includes you. Please click the link **below** to take part.

<COMPLETE SURVEY BUTTON – TAKES TO CLOSED LINK>

If the above button doesn't work, please go to <u>www.iffresearch.com/WorkingLives</u> and enter your reference number, which is at the top of this email.

We recognise the substantial pressure that [IF TEACHER: teachers; IF LEADER: school leaders] like yourself have been under, so are very grateful for any time you can spare for this research. Your contribution to the survey will be crucial in helping DfE to understand the experiences you are facing at this time.

PLEASE NOTE:

The survey will last roughly 20 - 25 minutes, depending on what you have to say. You can stop and start as much as you like (just click the **above** link to pick up where you left off)

Participation is entirely voluntary

For more information about the survey – including participant anonymity, data linking and GDPR – please visit the survey website: <u>www.workinglivesofteachersandleaders.com</u>

We (IFF Research) may also try and reach you over the phone. If you would actively prefer this – or if you have any other queries (or you would like to opt out)– please do let us know by contacting IFF on <redacted> or DfE on <redacted>

Kind Regards,

Loma Alams

Lorna Adams

Project Director at IFF Research



© Department for Education 2023

This publication is licensed under the terms of the Open Government Licence v3.0 except where otherwise stated. To view this licence, visit nationalarchives.gov.uk/doc/open-government-licence/version/3.

Where we have identified any third-party copyright information you will need to obtain permission from the copyright holders concerned.

Reference: RR1340

ISBN: 978-1-83870-448-3

For any enquiries regarding this publication, contact us at: <u>workinglives.teachers-leaders@education.gov.uk</u> or <u>www.education.gov.uk/contactus</u>

This document is available for download at www.gov.uk/government/publications